



# **First Quarter 2022 Groundwater Monitoring, Operations and Maintenance Report**

**Phillips 66 Renton Terminal  
2423 Lind Avenue Southwest  
Renton, Washington  
Agreed Order No. DE 11313  
Facility Site I.D. No. 2070**

Phillips 66

April 21, 2022

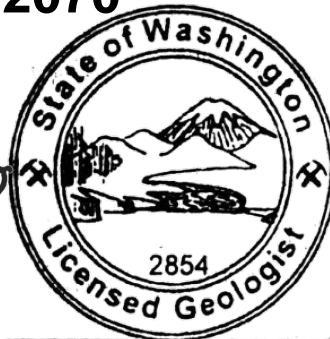
**→ The Power of Commitment**

# First Quarter 2022 Groundwater Monitoring, Operations and Maintenance Report

Phillips 66 Renton Terminal  
2423 Lind Avenue Southwest  
Renton, Washington  
Agreed Order No. DE 11313  
Facility Site I.D. No. 2070

*Matthew Davis*

Matthew Davis, LG



MATTHEW DAVIS

*Rosemary Bier*

Rosemary Bier

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

## GHD

9725 3rd Avenue NE, Suite 204

Seattle, Washington 98115, United States

T +1 425 563 6500 | F +1 425 563 6599 | E info-northamerica@ghd.com | [ghd.com](http://ghd.com)

<b>Printed date</b>	4/21/2022
<b>Last saved date</b>	April 21, 2022
<b>File name</b>	https://projects-northamerica.ghd.com/sites/uswest3/p66rentonterminal202/ProjectDocs/1Q22 Quarterly Report/12572873-RPT1-1Q22 REPORT.docx
<b>Author</b>	Matthew Davis
<b>Project manager</b>	Eric Maise
<b>Client name</b>	Phillips 66
<b>Project name</b>	P66 Renton Terminal
<b>Document title</b>	First Quarter 2022 Groundwater Monitoring, Operations and Maintenance Report   Phillips 66 Renton Terminal
<b>Revision version</b>	Rev [00]
<b>Project number</b>	12572873

## Document status

Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
S3		Rose Bier	Matthew Davis		J. Gilbert		04/21/2022
[Status code]							
[Status code]							
[Status code]							
[Status code]							

© GHD 2022

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorized use of this document in any form whatsoever is prohibited.

# Contents

<b>1. Introduction</b>	<b>1</b>
<b>2. Description of Remediation System and Operational Status</b>	<b>1</b>
<b>3. First Quarter 2022 Remediation Activities</b>	<b>2</b>
<b>4. Summary of Compliance Sampling</b>	<b>2</b>
<b>5. Summary of System Performance</b>	<b>3</b>
<b>6. System Operation Conclusions</b>	<b>4</b>
<b>7. First Quarter 2022 Groundwater Monitoring Field Activities</b>	<b>4</b>
7.1 Hydraulic Monitoring	4
7.2 Groundwater Sampling	4
<b>8. Groundwater Monitoring Results</b>	<b>5</b>
8.1 Groundwater Elevation and LNAPL Thickness Data	5
8.1.1 Intermediate Well Elevation Data, Flow Direction, and Gradient	5
8.1.2 LNAPL Thicknesses	5
8.2 Groundwater Quality Data	6
<b>9. Groundwater Monitoring Conclusions</b>	<b>6</b>
<b>10. Other Agreed Order Items</b>	<b>6</b>

## Table Index

Table 1	Groundwater Extraction System Analytical Data
Table 2	Groundwater Extraction System Operational Data
Table 3	Soil Vapor Extraction System Analytical Data
Table 4	Soil Vapor Extraction System Operational Data
Table 5	Groundwater Elevation Data
Table 6	Groundwater Analytical Data

## Figure Index

Figure 1	Vicinity Map
Figure 2A	Site Plan with Monitoring Locations
Figure 2B	Site Plan with Active Remediation Locations
Figure 3	TPHg Mass Removal vs. Time Graph
Figure 4	Benzene Mass Removal vs. Time Graph
Figure 5	LNAPL Mass Removal vs. Time Graph
Figure 6	Groundwater Contour and Chemical Concentration Map – March 1-4, 2022

## Appendices

Appendix A	O&M Laboratory Analytical Reports
Appendix B	King County Self-Monitoring Reports
Appendix C	Groundwater Monitoring Field Data Sheets
Appendix D	Groundwater Sampling Analytical Report
Appendix E	Data Validation Memo

# 1. Introduction

GHD has prepared this *First Quarter 2022 Groundwater Monitoring and Operations and Maintenance Report* on behalf of Phillips 66 Company (P66) and BP for the P66 Renton Terminal located at 2423 Lind Avenue Southwest, Renton, Washington (Site, Figure 1).

On September 28, 2015, ExxonMobil, P66, and the Washington State Department of Ecology (Ecology) entered into an Agreed Order (DE 11313) to implement remedial actions presented in the *Final Cleanup Action Report (CAP)*. The remedial actions included installation of a new Dual-Phase Extraction (DPE) system and compound, Operations and Maintenance (O&M), and performance monitoring. The new DPE system was completed in May 2015, followed by a period of approximately one year of operation when it was shut down until October 2016 to implement system modifications. The modified DPE system operated intermittently between October 2016 and May 2017 and has been operating nearly continuously from May 2017 until the present.

The purpose of this quarterly report is to present the remediation system monitoring results and evaluate the performance of the remedial action during the reporting period from January 1, 2022 to March 31, 2022. Additionally, this report includes groundwater monitoring results from the reporting period. The monitoring locations are presented on Figure 2A. Groundwater monitoring and remediation activities are being conducted in accordance with GHD's *Compliance Monitoring Plan (CMP)* dated October 19, 2016, *Final Cleanup Action Report* dated September 28, 2015, and the *Operations and Maintenance Manual* dated October 2015 (revised January 2017). The groundwater monitoring scope of work was modified beginning with the first quarter 2019 in accordance with the scope approved by Ecology in an email dated February 28, 2019.

## 2. Description of Remediation System and Operational Status

Groundwater, light non-aqueous phase liquid (LNAPL), and soil vapor are extracted from DPE wells and treated by a series of unit processes. The groundwater treatment system originally consisted of an oil-water separator (OWS), equalization (EQ) tank, air stripper, sediment filters, and carbon vessels. As part of a system improvement plan to increase operational up-time of the system, the air stripper was bypassed on May 4, 2020, and sediment filter bags were removed on May 22, 2020. In July 2019, select DPE wells were retrofitted with skimmer pumps to emphasize recovery of LNAPL while minimizing groundwater recovery necessary to maintain designed hydraulic control. In mid-2020, all the DPE extraction wells with skimmer pumps were converted back to total fluid pumps to enable full operation of the DPE system. Recovered LNAPL, skimmed from the top of the OWS, flows by gravity into a nearby 150-gallon temporary holding tank (PST-5201). A transfer pump (either manually engaged or float-actuated) conveys LNAPL from PST-5201 to a 10,000-gallon holding tank (PST-5202) for storage pending periodic off-Site disposal and/or recycling. The 10,000-gallon tank was a former fuel additive tank located within the terminal tank farm that had been permanently out of service for several years. This tank serves to increase the capacity of recovered LNAPL that can be temporarily stored on-Site. Groundwater separated from the recovered LNAPL in the OWS is pumped to the EQ tank where it is stored temporarily before being batch-treated by the carbon vessels. The treated water effluent is discharged to the sanitary sewer system under King County Discharge Authorization Permit 7910-02. Soil vapor is extracted from the DPE wells under vacuum using four rotary claw blowers. The soil vapor extracted from the DPE wells is treated by the thermal oxidizer. Effluent from the oxidizer is discharged to the atmosphere as authorized by the Puget Sound Clean Air Agency (PSCAA) discharge permit No. 11102.

During the current reporting period, the DPE system operated for approximately 1,869 hours between January 1, 2022 and March 31, 2022 with an up-time of approximately 95%. The following are the notable system shutdowns

accounting for approximately 174 hours of down-time (152 hours were planned and 22 hours were unplanned) that occurred during the reporting period:

- January 12, 2022 unplanned shutdown due to an oil water separator high level alarm.
- January 13, 2022 planned shutdown due to an oil water separator high level alarm.
- February 3, 2022 planned shutdown due to an oil water separator high level alarm that was triggered due to operator error.
- February 24, 2022 to March 2, 2022 planned shutdown for clean out of the system tanks.
- March 24, 2022 to March 25, 2022 planned shutdown for additional tank cleanout.
- March 28, 2022 to March 31, 2022 planned shutdown due to excessive backpressure in the effluent line.

During the first quarter 2022, the system processed groundwater, soil vapor and LNAPL extracted from a minimum of two to a maximum of four remediation wells (DPE-40, DPE-41 DPE-54, and DPE-57). Wells were brought on and offline as needed to optimize system operations. The active remediation wells are presented on Figure 2B. Groundwater extraction (GWE) system sampling analytical data are provided in Table 1. Groundwater extraction operational data are provided in Table 2. Soil vapor extraction system sampling analytical data are provided in Table 3. Soil vapor extraction operational data is provided in Table 4.

### **3. First Quarter 2022 Remediation Activities**

Remediation activities for the DPE system consist of maintenance, monitoring, monthly compliance sampling, troubleshooting, and repairs. Scheduled visits for routine O&M and monitoring are made once to twice weekly. A summary of the operational data collected for the DPE system is presented in Table 2 and Table 4.

The following routine system maintenance and repair activities were completed during the current reporting period on an as-needed basis:

- Cleaning of valves and transfer pumps
- Cleaning and servicing of well pumps
- Cleaning of process tanks
- Air compressor maintenance
- Blower maintenance and cleaning
- Totalizer and process water piping cleaning
- Effluent line clearing and cleaning

### **4. Summary of Compliance Sampling**

The King County Wastewater Treatment Division (King County) discharge permit for the DPE system requires monthly compliance sampling and reporting. Monthly effluent compliance samples were collected during this operational period on January 17, 2022, February 10, 2022, and March 9, 2022. Each effluent compliance sample was analyzed for total petroleum hydrocarbons as gasoline (TPHg) per Ecology Method NWTPH-Gx, total petroleum hydrocarbons as diesel (TPHd) and total petroleum hydrocarbons as motor oil (TPHo) per Ecology Method NWTPH-Dx, benzene, toluene, ethylbenzene, and xylenes (BTEX) per U.S. Environmental Protection Agency (EPA) Method 8260, and fats, oils, and grease (FOG) per EPA Method 1664A. The point of compliance for the discharge permit is located at the treated water effluent after all GWE treatment unit processes. Results of analyses of effluent compliance samples during the reporting period demonstrated compliance with the permit conditions. Laboratory analytical reports are presented in

Appendix A. Treated groundwater compliance data for this and previous reporting periods are summarized on Table 1. Sampling results were submitted to King County on a monthly basis under King County Permit 7910-02. Copies of the January, February, and March King County Industrial Waste Monthly Self-Monitoring Reports are presented in Appendix B. Annual flow meter calibration was completed on March 11, 2022. Flow meter calibrations records are included in Appendix B.

The PSCAA air discharge permit for the DPE system requires monthly compliance sampling and analyses of oxidizer influent and effluent for TPHg and BTEX per EPA Method TO-15. Compliance samples were collected on January 17, 2022, February 10, 2022, and March 9, 2022. Laboratory analytical reports are presented in Appendix A. Results of analyses of oxidizer effluent samples collected during the reporting period demonstrate compliance with PSCAA permit conditions. Air compliance sampling and analytical data are summarized on Table 3. The data summarized on Table 4 confirm that oxidizer compliance monitoring results were within the permit limits for operating at a flow rate less than 1,500 standard cubic feet per minute (SCFM), maintaining a minimum operating temperature of 1,400 degrees F, and achieving a destruction efficiency of greater than 97% when laboratory analyzed inlet concentrations are greater than 200 parts per million (ppm).

## 5. Summary of System Performance

Total combined petroleum mass removal for the DPE system as LNAPL, vapor and groundwater dissolved phases during the reporting period was 509 pounds. The first quarter 2022 mass removal is lower than the fourth quarter 2021 mass removal due to the seasonal groundwater table being higher and exposing less of the smear zone for vapor phase recovery. The total LNAPL removed during the reporting period was 23 gallons. Estimated total mass removal rates and total mass removed during the reporting period and the cumulative mass removed since remediation using DPE began on May 8, 2015, are summarized on Table 2 and Table 4 and are shown graphically on Figure 3 and Figure 4. Cumulative LNAPL mass removal and removal rates from July 2019 to March 31, 2022, are shown graphically on Figure 5. LNAPL removal rates were not calculated prior to implementing the focused LNAPL recovery strategy in July 2019.

During the reporting period, the DPE system operated nearly continuously except for the shutdowns noted in Section 2.0. The process volumes and estimated mass removed for the reporting period are as follows:

Period	Gallons of Water extracted (From Totalizer)	Pounds of LNAPL Removed (OWS)	Pounds of TPH Removed (Dissolved Liquid Phase)	Pounds of TPH Removed (Vapor Phase)	Total Pounds of TPH Removed
First Quarter 2022 Operation (Using lab data from December 8, 2021 to March 9, 2022)	1,118,270*	144**	205	160	509
Cumulative Operation (May 8, 2015 to March 9, 2022 ***)	13,425,248*	51,241**	6,194	111,449	168,884
<p>*Totalizer readings are from January 1, 2022 through March 31, 2022  ** Pounds of LNAPL Removed from December 8, 2021 through March 9, 2022  ***Previous DPE and GWE system data prior to May 2015 submitted in previous reports  Note: density of free product assumed to be density of vehicle gasoline (6.14 lbs/gallon  <a href="https://www.epa.gov/sites/production/files/2014-01/gallonspoundsconversion.xls">https://www.epa.gov/sites/production/files/2014-01/gallonspoundsconversion.xls</a>)</p>					

The primary purpose of the DPE remediation system is to remove hydrocarbon mass from the subsurface while maintaining hydraulic control of the hydrocarbon-impacted groundwater plume to prevent migration of dissolved-phase petroleum hydrocarbons off-Site. Hydraulic control monitoring was performed during the groundwater gauging



activities and is discussed in Section 7. Procedures for monitoring and evaluating the effectiveness of hydraulic control are included in the CMP.

GHD was unable to operate in enhanced high vacuum SVE mode due to the seasonal groundwater table rise. Between two and four DPE wells operated in low vacuum DPE mode during the first quarter 2022, limiting mass removal during the reporting period. GHD plans to increase the number of operational wells, switch to DPE wells with higher levels of LNAPL and dissolved phase concentrations and increase the vacuum enhanced operation of the DPE system entering into the drier season. GHD will continue to evaluate ways to optimize groundwater recovery and efficient operation of the DPE system. Dissolved phase concentrations have increased slightly from fourth quarter 2021, which is typical during the winter months. However, concentrations overall, are down significantly from this time last year.

## **6. System Operation Conclusions**

The DPE system operated at nearly continuous (approximately 95%) up-time during the first quarter 2022 except for the shutdowns noted in Section 2.0. One unplanned shutdown and five planned shutdowns occurred during the reporting period as described in Section 2.0.

The following activities are planned for the second quarter 2022:

- Continue with DPE operation and adjust vacuum as necessary with the seasonal groundwater table fluctuations
- Continue increased groundwater recovery and treatment by maintaining groundwater pumps and system components
- Redevelop DPE wells as needed to prevent pump clogging caused by sediment in the wells
- Begin extracting from extraction wells where more LNAPL is present (i.e., DPE-43 and DPE-45).

## **7. First Quarter 2022 Groundwater Monitoring Field Activities**

### **7.1 Hydraulic Monitoring**

First quarter 2022 hydraulic monitoring activities were conducted on March 1, 2022. Hydraulic monitoring activities consisted of measuring and recording depth to LNAPL, if present, and depth-to-groundwater from below the top of the well casing for seventeen groundwater monitoring wells and sixteen remediation wells. Hydraulic monitoring activities were conducted in accordance with the procedures outlined in Section 4.1 of the CMP and the modifications approved by Ecology in an email correspondence dated February 28, 2019. Wells used in hydraulic monitoring are presented on Table 5. A copy of the field data sheet documenting the hydraulic monitoring data is presented in Appendix C.

### **7.2 Groundwater Sampling**

Groundwater sampling activities were conducted on March 3 and 4, 2022. Groundwater samples were collected from fourteen wells using low flow sampling procedures. Wells used in the groundwater quality monitoring are presented on Table 6. In addition to the groundwater samples, one field duplicate sample was collected for quality assurance purposes. Trip blanks provided by the subcontracting laboratory were included in each cooler. Samples collected during the event were placed immediately on ice and transported to Eurofins Calscience via courier under chain-of-custody. Sample analyses included: TPHg per Ecology Method NWTPH Gx; TPHd and TPHo per Ecology Method NWTPH Dx; and BTEX per EPA Method 8260B.

## 7.3 Investigation Derived Waste

No investigation derived waste was generated during the first quarter 2022 event, with the exception of personal protective equipment (PPE). All PPE was properly decontaminated and/or disposed in an appropriate trash receptacle onsite.

# 8. Groundwater Monitoring Results

## 8.1 Groundwater Elevation and LNAPL Thickness Data

The purpose of the hydraulic monitoring is to evaluate the effects of the DPE system on groundwater flow direction(s) and gradient(s) and to monitor the presence and changing thicknesses of LNAPL on the water table. Current groundwater elevation data and LNAPL thicknesses are presented on Table 5.

Groundwater flow direction(s) are presented on Figure 6.

Historically, monitoring wells have been grouped for evaluation based on screened intervals. The wells are grouped as follows:

- Shallow – Wells screened in the fill material in the top 10 feet below ground surface (bgs)
- Intermediate – Wells screened from 5 to 20 feet bgs
- Deep – Wells screened deeper than 20 feet bgs

Currently, only two of the wells gauged (B-4, and B-6) are considered shallow wells because they are screened entirely within the fill material, and do not span the silt/clay layer at approximately 10 feet bgs. Groundwater elevations in these two wells were consistent with historical data. None of the deep wells were gauged. Groundwater elevation data is presented in Table 5 and on Figure 6.

### 8.1.1 Intermediate Well Elevation Data, Flow Direction, and Gradient

Data collected during the first quarter 2022 indicate that groundwater flows toward the operating extraction wells located north and east of the loading rack from all directions. An inward gradient is a good indication that hydraulic control of the groundwater plume is occurring. Groundwater flow to the east and south is present in areas outside of the influence of the extraction system. Groundwater elevation contours interpreted from the monitoring data are illustrated on Figure 6.

### 8.1.2 LNAPL Thicknesses

During the first quarter 2022 sampling event, LNAPL was observed in three of the remediation wells gauged. An LNAPL thickness of 0.49 feet was detected in well DPE-43, 0.49 feet in well DPE-45, and 0.18 feet in well DPE-57. No LNAPL was detected in the remaining wells that were gauged. In-well LNAPL gauging is used to confirm the presence of LNAPL and evaluate mobility by comparing these measurements over time. The maximum LNAPL thickness has reduced significantly since increased LNAPL recovery was initiated, and further so after reinitiating DPE with enhanced SVE. Since the fourth quarter 2021, LNAPL thickness has increased in inactive extraction wells west of the loading rack (DPE-43 and DPE-45). Extraction at these wells will be recommended for the second quarter 2022. The presence (or absence) of LNAPL will continue to be monitored to evaluate trends in LNAPL occurrence and mobility.

## 8.2 Groundwater Quality Data

The purpose of the groundwater sampling program for this Site is to evaluate groundwater concentration trends to monitor DPE system performance over time and to demonstrate that the plume is contained and is not migrating. While focusing on LNAPL recovery, only the Site perimeter wells are being sampled to confirm lack of plume migration. The laboratory analytical report for the first quarter 2022 event is presented in Appendix D. The analytical data validation memo is presented in Appendix E.

Laboratory analytical results from the first quarter 2022 event indicate concentrations of one or more analyzed constituents were above MTCA Method A cleanup levels for the following:

- Benzene – Well MW-15

None of the other wells sampled contained concentrations above MTCA Method A cleanup levels. A maximum benzene concentration of 12 µg/L was detected in well MW-15.

The current groundwater quality data are consistent with historical groundwater data for the Site. During the fourth quarter 2021, TPHd and TPHo were detected in MW-13 but have since decreased to non-detect levels. The results were likely an outlier and not associated with the P66 site as TPHd and TPHo had not historically been detected in well MW-13. To the north, wells MW-12 and MW-16 remain below MTCA Method A cleanup levels indicating potential migration of dissolved contaminants to the vicinity of these wells has not occurred.

Monitoring wells MW-3 through MW-6 were installed along the eastern perimeter to delineate the eastern boundary of the plume and to determine if migration of contaminants is occurring. The concentrations in samples collected from wells MW-3, MW-4 and MW-6 continued to be below MTCA Method A cleanup levels. These wells will continue to be monitored to verify that impacts are not migrating from the site.

The concentrations in the samples collected from wells MW-1 and MW-2 along the southern perimeter, were below MTCA Method A cleanup levels indicating plume migration is not likely to be occurring to the south.

## 9. Groundwater Monitoring Conclusions

The system wells operating during the sampling event created an inward gradient toward the extraction wells indicating capture of the groundwater plume is occurring.

The monitoring well network will continue to be monitored and sampled per the CMP to assess the effectiveness of the DPE system. GHD will continue to gauge wells on a quarterly basis to determine groundwater elevations and monitor LNAPL thickness and will continue to sample select wells on a semi-annual frequency. The next scheduled monitoring event is during the second quarter 2022.

## 10. Other Agreed Order Items

No Agreed Order items occurred during the first quarter 2022.

# Tables



Table 1  
Groundwater Extraction System Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington

**Notes and Abbreviations:**

- mm/dd/yy = month/day/year
  - Conc. = concentration
  - TPHg = total petroleum hydrocarbons quantified as gasoline
  - TPHd = total petroleum hydrocarbons quantified as diesel
  - TPHmo = total petroleum hydrocarbons quantified as motor oil
  - FOG = fats, oil, and grease
  - µg/L = micrograms per liter
  - <XX = not detected at or below the detection limit indicated
  - NM = no measured
  - TBD = Sample taken during this time and are awaiting results
- TPHg analyzed by Method NWTPHd-X.  
TPHg analyzed by Method NWTPHg-X.  
Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B.  
FOG analyzed by Method 1664 HEM.
- a = pH measured in the field.
  - b = The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits. (D6)
  - c = The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low. (CL)
  - d = Analyte concentration exceeded the calibration range. The reported results is estimated. (E)
  - e = Laboratory adjusted pH to 2. (1M)
  - f = Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery. (M1)
  - g = Analyte recovery in the matrix spike was outside QC limits for one or more of the constituents analytes used in the calculated result. (MS)
  - h = Post-analysis pH measurements indicates insufficient VOA sample preservation. (pH)
  - i = Result confirmed by second analysis. (C0)

Groundwater Extraction System Operational Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington

Date (mm/dd/yy)	SV-3102 (hrs)	Total Uptime*	Water Extraction				Average Flow Rate (gpm)	LNAPL Cumulative recovery (gallons)	Influent Conc. (µg/L)	TPHg Removal (ppd)	Cumulative Recovery (pounds)	Influent Conc. (µg/L)	Benzene Removal Rate (ppd)	Cumulative Recovery (pounds)
			Totalizer Reading (gallons)	Cumulative Flow (gallons)	Average Flow Rate (gpd)	Average Flow Rate (gpm)								
05/08/15		NA	0	0	NA	NA	0	393,000	NM	0	13,000	NM	0	
05/28/15		NM	42,164	42,164	2,108	1.5	0	153,000	6.91	0	10,200	0.229	0	
06/01/15		NM	119,025	119,025	16,694	11.6	90	NM	21.3	0	NM	1.42	0	
06/02/15		NM	130,343	130,343	11,186	7.8	90	NM	14.3	0	NM	0.95	0	
06/03/15		NM	143,175	143,175	12,213	8.5	90	NM	15.6	56	NM	1.04	3.5	
06/04/15		100%	174,111	174,111	32,517	22.6	90	NM	41.5	98	NM	2.77	6.3	
06/05/15		69%	190,602	190,602	19,529	13.6	90	NM	24.9	112	NM	1.66	7.3	
06/08/15		83%	248,551	248,551	18,324	12.7	95	NM	23.4	174	NM	1.56	11.4	
06/09/15		58%	260,576	260,576	12,025	8.4	97	NM	15.4	183	NM	1.02	12.0	
06/10/15		23%	267,688	267,688	8,001	5.6	97	NM	10.2	185	NM	0.68	12.1	
06/11/15		5%	NM	NM	NM	NM	100	NM	NM	NM	NM	NM	NM	
06/15/15		21%	295,654	295,654	6,645	4.6	105	NM	8.5	193	NM	0.57	12.6	
06/16/15		38%	304,658	304,658	10,373	7.2	125	660,000	57.1	212	22,100	1.91	13.3	
09/02/15		1%	329,320	329,320	316	0.2	135	NM	1.7	213	NM	0.06	13.3	
09/03/15		0%	333,120	333,120	4,800	3.3	135	145,000	5.8	213	8,150	0.33	13.3	
09/08/15		2%	337,021	337,021	747	0.5	151	NM	0.9	214	NM	0.05	13.3	
09/09/15		22%	343,401	343,401	6,586	4.6	156	NM	8.0	215	NM	0.45	13.4	
09/10/15		97%	366,411	366,411	31,557	21.9	160	NM	38.2	242	NM	2.15	14.9	
09/16/15		NM	368,733	368,733	374	0.3	160	107,000	0.3	NM	8,440	0.03	NM	
09/17/15		18%	394,204	394,204	23,288	16.2	188	NM	20.8	269	NM	1.64	17.1	
09/18/15		NM	407,869	407,869	15,869	11.0	204	NM	14.2	NM	NM	1.12	NM	
09/22/15		NM	409,896	409,896	486	0.3	219	NM	0.4	NM	NM	0.03	NM	
09/24/15		NM	423,762	423,762	7,006	4.9	224	NM	6.3	NM	NM	0.49	NM	
09/25/15		35%	430,097	430,097	6,693	4.6	224	NM	6.0	288	NM	0.47	18.5	
09/28/15		101%	468,461	468,461	12,962	9.0	254	NM	11.6	323	NM	0.91	21.3	
09/28/15		97%	NM	NM	NM	NM	254	NM	NM	NM	NM	NM	NM	
11/04/15		NM	472,794	NM	NM	NM	254	NM	NM	NM	NM	NM	NM	
11/04/15		NM	472,814	NM	NM	NM	254	NM	NM	NM	NM	NM	NM	
01/14/16		NM	472,820	NM	NM	NM	254	NM	NM	NM	NM	NM	NM	
01/15/16		NM	475,012	470,653	1,948	1.4	254	NM	NM	NM	NM	NM	NM	
01/19/16		NM	476,154	NM	NM	NM	254	NM	NM	NM	NM	NM	NM	
01/20/16		NM	477,419	471,918	1,080	0.8	254	NM	NM	NM	NM	NM	NM	
01/21/16		NM	489,519	484,018	12,410	8.6	264	80,800	8.4	343	1,540	0.16	21.7	
01/26/16		NM	537,500	531,999	10,028	7.0	264	NM	6.8	NM	NM	0.13	NM	
01/27/16		100%	549,300	543,799	10,554	7.3	279	NM	7.1	385	NM	0.14	22.5	
01/28/16		98%	566,046	560,545	18,722	13.0	284	NM	12.6	396	NM	0.24	22.7	
02/01/16		100%	NM	NM	NM	NM	284	NM	NM	NM	NM	NM	NM	
02/02/16		100%	649,526	644,025	16,375	11.4	284	NM	11.0	453	NM	0.21	23.8	
02/08/16		99%	718,614	713,113	11,628	8.1	284	8,500	0.8	458	762	0.07	24.2	
02/10/16		98%	738,027	732,526	9,541	6.6	284	NM	0.7	460	NM	0.06	24.3	
02/17/16		68%	779,343	773,842	5,873	4.1	284	NM	0.4	462	NM	0.04	24.5	
02/18/16		100%	783,228	777,727	3,872	2.7	284	NM	0.3	462	NM	0.02	24.5	
02/19/16		100%	787,922	782,421	5,082	3.5	284	NM	0.4	462	NM	0.03	24.5	
02/24/16		100%	800,538	795,037	2,499	1.7	284	NM	0.2	463	NM	0.02	24.6	
02/29/16		100%	811,196	805,695	2,162	1.5	284	NM	0.2	464	NM	0.01	24.7	
03/03/16		100%	818,810	813,309	2,468	1.7	284	NM	0.2	464	NM	0.02	24.7	
03/04/16		98%	822,699	817,198	4,148	2.9	284	69,200	2.4	467	7,730	0.27	25.0	
03/08/16		100%	836,974	831,473	3,541	2.5	284	NM	2.0	475	NM	0.23	25.9	
03/14/16		99%	858,572	853,071	3,596	2.5	284	NM	2.1	487	NM	0.23	27.3	
03/21/16		74%	874,773	869,272	2,313	1.6	284	NM	1.3	494	NM	0.15	28.1	
03/31/16	1,637	100%	905,470	899,969	3,057	2.1	284	NM	1.8	512	NM	0.20	30.1	
04/07/16	1,948	100%	924,033	918,532	2,668	1.9	284	NM	1.5	523	NM	0.17	31.3	
04/11/16	0.841	101%	931,356	925,855	1,812	1.3	NM	16,300	NM	NM	1,400	NM	0.23	31.3
04/18/16		98%	935,543	930,042	620	0.4	284	NM	0.1	524	NM	0.01	31.3	
04/19/16		87%	935,960	930,459	417	0.3	284	NM	0.1	524	NM	0.00	31.3	
04/21/16		94%	939,503	934,002	1,890	1.3	286	NM	0.3	524	NM	0.02	31.4	
04/25/16		100%	945,414	939,913	1,478	1.0	286	NM	0.2	525	NM	0.02	31.4	
05/03/16		90%	960,595	955,094	2,094	1.5	294	NM	0.3	527	NM	0.02	31.6	
05/04/16		30%	961,300	955,799	2,820	2.0	294	NM	0.4	527	NM	0.03	31.6	
05/10/16		100%	968,802	963,301	1,217	0.8	295	13,400	0.1	528	998	0.01	31.7	
05/13/16		100%	972,250	966,749	1,166	0.8	295	NM	0.1	528	NM	0.01	31.7	
05/17/16		100%	975,853	970,352	901	0.6	295	NM	0.1	529	NM	0.01	31.8	
05/20/16		100%	979,324	973,823	1,190	0.8	295	NM	0.1	529	NM	0.01	31.8	
05/23/16		100%	982,934	977,433	1,155	0.8	295	NM	0.1	529	NM	0.01	31.8	
05/24/16		100%	984,358	978,857	1,799	1.2	295	NM	0.2	530	NM	0.01	31.8	
05/26/16		100%	986,561	981,060	979	0.7	295	NM	0.1	530	NM	0.01	31.8	
07/14/16		NA	988,514	983,013	15,624	10.9	NM	NM	1.7	530	NM	0.13	31.9	
08/01/16		NA	988,514	983,013	NA	NA	NM	NM	NM	NM	NM	NM	NM	
10/10/16		NA	990,903	985,402	NA	NA	295	91,400	NM	NM	6,820	NM	NM	
10/24/16		NA	992,031	986,530	NA	NA	295	NM	NM	NM	NM	NM	NM	
10/25/16		33%	996,053	990,552	12,066	8.4	295	NM	9.2	533	NM	0.69	32.1	
10/26/16	3,154	100%	1,012,766	1,007,265	18,232	12.7	295	NM	13.9	546	NM	1.04	33.0	
11/02/16	--	--	--	--	--	--	--	123,000	NM	NM	4,660	NM	NM	
11/08/16	3,453	95%	1,173,110	1,167,609	12,870	8.9	595	NM	13.2	711	NM	0.50	39.3	
11/11/16	3,484	52%	1,190,561	1,185,060	13,510	9.4	600	NM	13.9	728	NM	0.53	40.0	
11/17/16	3,552	47%	1,218,771	1,213,270	9,956	6.9	623	NM	10.2	757	NM	0.39	41.0	
11/18/16	3,569	71%	1,225,541	1,220,040	9,558	6.6	655	NM	9.8	764	NM	0.37	41.3	
11/23/16	3,588	16%	1,234,871	1,229,370	11,785	8.2	665	NM	12.1	774	NM	0.46	41.7	
11/28/16	3,711	100%	1,249,041	1,243,540	2,765	1.9	670	NM	2.8	788	NM	0.11	42.2	
12/02/16	3,780	72%	1,280,241	1,274,740	10,852	7.5	810	NM	11.1	820	NM	0.42	43.4	
12/05/16	3,813	46%	1,294,611	1,289,110	10,451	7.3	863	NM	10.7	835	NM	0.41	44.0	
12/06/16	3,834	88%	1,294,871	1,289,370	297	0.2	863	168,000	0.4	836	12,200	0.03	44.0	
12/15/16	3,869	16%	1,301,001	1,295,500	4,203	2.9	1003	NM	5.9	844	NM	0.43	44.6	
12/19/16	3,947	81%	1,328,511	1,323,010	8,465	5.9	1003	NM	11.9	883	NM	0.86	47.4	
02/07/17	3,951	0%	1,330,662	1,325,161	12,906	9.0	1003	NM	17.6	886	NM	1.02	47.6	

Groundwater Extraction System Operational Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington

Date (mm/dd/yy)	SV-3102 (hrs)	Total Uptime*	Water Extraction				Average Flow Rate (gpm)	LNAPL recovery (gallons)	Influent Conc. (µg/L)	TPHg Removal (ppd)	Cumulative Recovery (pounds)	Influent Conc. (µg/L)	Benzene Removal (ppd)	Cumulative Recovery (pounds)
			Totalizer Reading (gallons)	Cumulative Flow (gallons)	Average Flow Rate (gpd)	Average Flow Rate (gpm)								
02/10/17	4,011	83%	1,336,888	1,331,387	2,490	1.7	1003	NM	3.4	894	NM	0.20	48.1	
02/13/17	4,022	15%	1,341,190	1,335,689	9,386	6.5	1003	NM	12.8	900	NM	0.74	48.4	
02/15/17	4,068	96%	1,357,847	1,352,346	8,691	6.0	1023	NM	11.8	923	NM	0.69	49.8	
02/27/17	4,162	33%	1,377,574	1,372,073	5,037	3.5	1173	163,000	6.9	949	9,450	0.40	51.3	
03/06/17	4,284	73%	1,415,527	1,410,026	7,466	5.2	1173	NM	7.4	987	NM	1.01	56.4	
03/07/17	4,310	100%	1,425,028	1,419,527	8,770	6.1	1173	NM	8.6	996	NM	1.19	57.7	
03/13/17	4,346	25%	1,443,676	1,438,175	12,432	8.6	1173	NM	12.2	1,015	NM	1.68	60.3	
03/22/17	4,523	82%	1,506,046	1,500,545	8,457	5.9	1173	NM	8.3	1,076	NM	1.14	68.7	
03/27/17	4,632	91%	1,542,554	1,537,053	8,038	5.6	1203	118,000	7.9	1,112	16,200	1.09	73.6	
03/31/17	4,730	100%	1,571,505	1,566,004	7,090	4.9	1250	NM	7.0	1,140	NM	0.96	77.5	
04/03/17	4,797	93%	1,593,739	1,588,238	7,964	5.5	1267	NM	9.6	1,167	NM	1.08	80.6	
04/17/17	5,122	97%	1,660,630	1,655,129	4,940	3.4	1472	NM	5.9	1,248	NM	0.67	89.7	
04/20/17	5,193	99%	1,683,196	1,677,695	7,628	5.3	1472	144,000	9.2	1,275	16,300	1.04	92.7	
04/25/17	5,310	98%	1,725,915	1,720,414	8,763	6.1	1532	NM	10.5	1,326	NM	1.19	98.5	
05/02/17	5,419	65%	1,786,988	1,781,487	13,447	9.3	1815	NM	10.4	1,373	NM	0.66	101.5	
05/11/17	5,633	99%	1,837,690	1,832,189	5,686	3.9	1825	92,900	4.4	1,413	5,870	0.28	104.0	
05/17/17	5,770	95%	1,879,057	1,873,556	7,247	5.0	1825	NM	5.6	1,445	NM	0.35	106.0	
05/30/17	6,068	96%	1,934,549	1,929,048	4,469	3.1	1825	NM	3.5	1,488	NM	0.22	108.8	
06/05/17	6,192	86%	1,958,982	1,953,481	4,729	3.3	1825	NM	2.0	1,498	NM	0.10	109.3	
06/09/17	6,283	95%	1,972,708	1,967,207	3,620	2.5	1825	49,900	1.5	1,504	2,530	0.08	109.6	
06/20/17	6,524	91%	2,010,460	2,004,959	3,760	2.6	1825	NM	1.6	1,519	NM	0.08	110.4	
06/26/17	6,662	96%	2,024,580	2,019,079	2,456	1.7	1825	NM	1.0	1,525	NM	0.05	110.7	
7/6/17 12:00	6,900	100%	2,048,780	2,043,279	2,440	1.7	1825	NM	0.5	1,530	NM	0.03	111.0	
7/10/17 10:00	6,994	100%	2,056,292	2,050,791	1,918	1.3	1825	25,000	0.4	1,532	1,530	0.02	111.1	
7/17/17 11:20	7,156	99%	2,085,700	2,080,199	4,357	3.0	1825	NM	0.9	1,538	NM	0.06	111.4	
7/21/17 12:00	7,252	100%	2,105,609	2,100,108	4,977	3.5	1825	NM	1.0	1,542	NM	0.06	111.7	
7/31/17 9:00	7,483	99%	2,180,003	2,174,502	7,729	5.4	1825	NM	1.6	1,558	NM	0.10	112.6	
8/7/17 7:30	7,559	46%	2,218,824	2,213,323	12,259	8.5	1825	NM	4.9	1,573	NM	0.70	114.9	
8/23/17 8:50	7,570	3%	2,223,756	2,218,255	10,761	7.5	1825	47,700	4.3	1,575	6,880	0.62	115.1	
8/30/17 14:15	7,737	99%	2,300,587	2,295,086	11,042	7.7	1825	NM	4.4	1,606	NM	0.63	119.6	
9/7/17 8:00	7,870	97%	2,352,720	2,347,219	9,407	6.5	1825	NM	1.1	1,611	NM	0.09	120.0	
9/20/17 9:52	8,013	88%	2,411,690	2,406,189	9,897	6.9	1825	13,500	1.1	1,618	1,120	0.09	120.6	
9/29/17 9:35	8,183	82%	2,480,603	2,475,102	9,729	6.8	1825	NM	1.1	1,626	NM	0.09	121.2	
10/2/17 14:20	8,255	99%	2,504,617	2,499,116	8,005	5.6	1825	NM	1.5	1,630	NM	0.07	121.5	
10/10/17 16:30	8,396	78%	2,560,141	2,554,640	9,451	6.6	1825	NM	1.8	1,641	NM	0.09	122.0	
10/16/17 9:30	8,535	100%	2,569,277	2,563,776	1,577	1.1	1825	22,500	0.3	1,643	1,080	0.01	122.5	
10/20/17 6:30	8,621	92%	2,582,580	2,577,349	3,788	2.6	1825	NM	0.7	1,645	NM	0.03	122.2	
11/1/17 14:45	8,860	97%	2,616,164	2,610,663	3,345	2.3	1825	NM	1.1	1,656	NM	0.06	122.8	
11/7/17 8:00	8,993	97%	2,638,991	2,633,490	4,119	2.9	1825	NM	1.4	1,664	NM	0.07	123.2	
11/20/17 14:25	9,267	88%	2,695,549	2,690,048	4,954	3.4	1825	40,400	1.7	1,683	2,110	0.09	124.1	
11/29/17 13:45	9,425	99%	2,725,691	2,720,190	4,579	3.2	1825	NM	1.5	1,693	NM	0.08	124.7	
12/4/17 9:15	9,540	100%	2,742,200	2,736,699	3,445	2.4	1825	NM	0.8	1,697	NM	0.04	124.9	
12/7/17 11:30	9,612	100%	2,749,640	2,744,139	2,480	1.7	1825	NM	0.6	1,699	NM	0.03	125.0	
12/11/17 14:05	9,711	100%	2,759,399	2,753,898	2,366	1.6	1825	28,000	0.6	1,701	1,560	0.03	125.1	
12/13/17 8:23	9,754	100%	2,763,143	2,757,642	2,090	1.5	1825	NM	0.5	1,702	NM	0.03	125.2	
12/18/17 10:15	9,846	100%	2,770,770	2,765,269	1,990	1.4	1825	NM	0.5	1,704	NM	0.03	125.3	
12/20/17 13:30			System off for winterization											
2/9/18 13:00	9,962	100%	2,800,314	2,794,813	6,113	4.2	1825	NM	2.5	1,716	NM	0.31	126.8	
2/16/18 13:00	9,978	23%	2,807,927	2,802,426	11,420	7.9	1825	49,800	4.7	1,719	6,050	0.58	127.1	
3/1/18 8:10	10,191	99%	2,873,717	2,868,216	7,413	5.1	1825	NM	1.1	1,729	NM	0.01	127.2	
3/5/18 9:10	10,279	98%	2,900,156	2,894,655	7,211	5.0	1825	NM	1.1	1,733	NM	0.01	127.3	
3/15/18 9:00	10,478	87%	2,990,663	2,985,162	10,915	7.6	1825	18,400	1.7	1,747	186	0.02	127.4	
3/19/18 8:00	10,566	100%	3,024,765	3,019,264	9,301	6.5	1825	NM	1.4	1,752	NM	0.01	127.5	
4/2/18 7:30	10,723	47%	3,089,084	3,083,583	9,832	6.8	1825	NM	2.3	1,767	NM	0.17	128.6	
4/6/18 9:40	10,723	0%	3,091,545	3,086,044	0	0.0	1825	NM	0.0	1,767	NM	0.00	128.6	
4/12/18 14:40	10,814	61%	3,122,115	3,116,614	8,062	5.6	1825	NM	1.9	1,774	NM	0.14	129.1	
4/17/18 10:15	10,923	94%	3,141,330	3,135,829	4,231	2.9	1825	27,600	1.0	1,779	2,020	0.07	129.4	
4/23/18 13:00	11,047	84%	3,166,938	3,161,437	4,956	3.4	1825	NM	1.1	1,785	NM	0.08	129.8	
4/30/18 8:00	11,209	99%	3,239,670	3,234,169	10,775	7.5	1825	NM	2.5	1,801	NM	0.18	131.1	
5/7/18 8:00	11,348	91%	3,293,595	3,288,094	9,311	6.5	1825	NM	2.2	1,814	NM	0.08	131.5	
5/16/18 9:00	11,497	69%	3,349,042	3,343,541	8,931	6.2	1825	27,800	2.1	1,827	1,030	0.08	132.0	
5/23/18 15:30	11,667	99%	3,398,479	3,392,978	6,979	4.8	1825	NM	1.6	1,838	NM	0.06	132.4	
5/30/18 8:55	11,827	99%	3,434,241	3,428,740	5,364	3.7	1825	NM	1.2	1,847	NM	0.05	132.7	
6/6/18 6:30	11,985	95%	29,067	3,457,807	4,415	3.1	1825	NM	1.7	1,858	NM	0.08	133.3	
6/8/18 7:20	12,032	96%	46,829	3,475,569	9,070	6.3	1825	NM	3.5	1,864	NM	0.17	133.6	
6/13/18 7:30	12,055	97%	52,217	3,480,957	5,622	3.9	1825	45,600	2.1	1,866	2,260	0.11	133.7	
6/18/18 9:00	12,177	100%	81,976	3,510,716	5,854	4.1	1825	NM	2.2	1,878	NM	0.11	134.3	
6/25/18 8:45	12,340	97%	111,917	3,540,657	4,408	3.1	1825	NM	1.7	1,889	NM	0.08	134.8	
7/3/18 6:50	12,526	98%	226,867	3,655,607	14,832	10.3	1825	NM	8.1	1,952	NM	0.72	140.4	
7/17/18 9:45	12,853	96%	302,917	3,731,657	5,582	3.9	1962	65,300	3.0	1,993	5,800	0.27	144.1	
7/31/18 11:20	13,183	98%	386,950	3,815,690	6,111	4.2	2175	NM	3.3	2,039	NM	0.30	148.2	
8/6/18 14:00	13,327	98%	456,417	3,885,157	11,578	8.0	2175	NM	2.2	2,052	NM	0.20	149.4	
8/13/18 8:00	13,444	99%	506,417	3,935,157	10,256	7.1	2175	22,500	1.9	2,061	2,070	0.18	150.2	
8/20/18 10:05	13,548	100%	545,407	3,974,147	8,998	6.2	2175	NM	1.7	2,069	NM	0.16	150.9	
8/23/18 11:00	13,618	96%	574,198	4,002,938	9,871	6.9	2175	NM	1.9	2,074	NM	0.17	151.4	
8/30/18 13:30	13,783	100%	611,177	4,039,917	5,379	3.7	2175	NM	1.0	2,081	NM	0.09	152.0	
9/5/18 15:00	13,922	99%	653,168	4,081,908	7,250	5.0	2175	NM	1.1	2,088	NM	0.06	152.4	
9/12/18 8:00	13,989	100%	682,666	4,111,406	10,566	7.3	2175	19,000	1.7	2,092	963	0.08	152.6	
9/24/18 8:20	14,249	90%	774,327	4,203,067	8,461	5.9	2175	NM	1.3	2,107	NM	0.07	153.3	
10/8/18 10:00	14,572	96%	856,389	4,285,129	6,097	4.2	2175	12,700	0.81	2,123	1,540	0.06	154.2	
10/16/18 11:00	14,686	62%	882,900	4,311,640	5,581	3.9	2175	NM			NM			
10/25/18 9:00	14,885	93%	903,167	4,331,907	2,444	1.7	2175	NM			NM			
10/30/18 12:30	14,991	86%	918,400	4,347,140	3,449	2.4	2175	NM			NM			







Soil Vapor Extraction System Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington

Date (mm/dd/yy)	Influent					Effluent				
	TPHg Conc. (ppmv)	Benzene Conc. (ppmv)	Toluene Conc. (ppmv)	Ethylbenzene Conc. (ppmv)	Xylenes Conc. (ppmv)	TPHg Conc. (ppmv)	Benzene Conc. (ppmv)	Toluene Conc. (ppmv)	Ethylbenzene Conc. (ppmv)	Xylenes Conc. (ppmv)
05/08/15	1,500	26.2 a	49.0	5.4	29.3	1.4	0.014 a	0.042	0.008	0.049
05/28/15	2,890	40.2 a	54.4	5.3	48.0	4.0	<0.019 a	0.045	<0.019	0.163
06/10/15	830	12.2 a	35.7	2.3	19.8	2.3	<0.018 a	0.049	<0.018	0.143
09/03/15	3,000	84.8 a	68.8	8.7	52.8	2.0	0.035 a	0.081	0.032	0.246
09/16/15	1,310	37.5 a	29.3	3.1	18.5	<1.7	<0.020 a	<0.020	<0.020	<0.040
01/27/16	2.3	0.080 a	0.17	0.019	0.16	<1.4	<0.017 a	<0.017	<0.017	<0.034
02/08/16	8.1	<0.10 a	0.49	0.11	1.13	<8.4	0.067 a	0.50	0.13	1.23
07/14/16	1.1	0.025 a	0.040	<0.0084	<0.0254	2.7	<0.0084 a	<0.0084	<0.0084	<0.0254
10/25/16	3,600	56.2 a	215	34.8	174.9	31.8	0.39 a	1.4	0.22	1.09
11/02/16	<213	<4.5 a	9.5	<1.8	13.0	<0.92	<0.019 a	<0.019	<0.0077	0.02
12/06/16	77.5	1.7 a	8.5	1.7	8.9	1.7	0.0011 a	0.0029	<0.00071	0.0016
01/01/17			SYSTEM OFF					SYSTEM OFF		
02/27/17	64.1	33.4 a	28.5	3.3	21.8	<20.3	<0.085 a	<0.170	<0.170	<0.510
03/27/17	30.7	0.56 a	2.2	0.15	1.35	0.89	0.0032	0.0046	<0.00077	0.0038
04/25/17	712	20.3 a	37.9	4.3	27.6	0.72	0.0084	0.015	0.0016	0.0094
05/11/17	34.3	0.44 a	1.6	0.19	1.76	0.89	0.0007	0.020	<0.00056	0.00248
06/08/17	174	<0.0037 a	9.8	0.89	17.3	4.2	0.0059	0.028	0.021	0.127
07/10/17	318	4.9 a	10.1	2.3	17.8	1.5	0.0051	0.013	0.0042	0.036
08/23/17	143	3.3 a	4.1	0.7	5.1	2.4	0.0060	0.015	0.0034	0.0272
09/22/17	452	4.3 a	3.1	1.2	13.4	2.7	0.0047	0.80	0.0033	0.0225
10/16/17	409	3.7 a	5.4	0.93	7.7	<0.19	0.0035	0.0056	0.0017	0.0094
11/20/17	89.3	1.3 a	2.2	0.32	3.56	2	0.0030	0.0098	0.0043	0.1370
12/11/17	183	15.7 a	16.5	1.2	5.6	0.52	0.011	0.0065	0.00053	0.0025
01/01/18			SYSTEM OFF					SYSTEM OFF		
02/16/18	41.5	7 a	16.2	0.51	11.97	2	0.0048	0.038	0.003	0.0121
03/13/18	61.7	2.1 a	3.5	0.54	3.5	0.87	0.0017	0.0016	<0.00039	0.00167
04/17/18	760	13 a	38.9	12.9	71.8	0.6	0.011	0.04	0.0031	0.0139
05/16/18	423	6.5 a	13.2	4.5	32.8	0.53	0.0038	0.0053	0.017	0.086
06/13/18	929	27.3 a	65.8	11.9	79.3	0.83	0.0066	0.0083	0.0011	0.0055
07/17/18	164	2.12 a	3.17	0.971	9.26	0.751	0.003	0.198	0.0011	0.005
08/13/18	<6.64	0.433 a	0.831	0.132	0.958	<0.241	0.0196	0.0545	0.0103	0.0972
09/12/18	1,880	17 a	20.1	5.66	45.4	1.2	0.0128	0.0114	0.0021	0.015
10/08/18	371	10.1 a	13	2.51	18.96	1.3	0.0118	0.0224	0.0082	0.0658
11/08/18	70.3	4.72 a	3.29	0.823	7.79	0.321	0.003	0.0019	0.00065	0.0048
12/10/18	67.1	1.97 a	4.35	0.716	6.93	0.544	0.00097	0.0021	0.00062	0.0049
01/09/19	19.3	0.415 a	1.23	0.187	1.06	0.642	0.0029	0.0031	<0.00042	0.00232
02/13/19	613	11 a	36.1	5.46	38.58	0.743	0.0014	0.0047	0.0011	0.008
03/22/19	1,190	24.8 a	37.5	7.51	50.4	0.588	0.0027	0.0034	0.0007	0.0045
04/03/19			SYSTEM OFF FOR OXIDIZER REPAIR					SYSTEM OFF FOR OXIDIZER REPAIR		
05/22/19	115	2.3 a	6.2	1.06	7.51	0.693	0.0039	0.0068	0.0013	0.0041
06/13/19	136	0.819 a	3.67	1.10	7.14	2.68	0.0447	0.0434	0.0262	0.0838
07/23/19	104	1.08 a	2.14	0.768	5.15	0.9	0.0018	0.0063	0.00074	0.0056
08/16/19	42.3	0.759 a	0.877	0.187	1.268	2.05	0.004	0.0037	0.001	0.0049
09/16/19	97.1	1.12 a	1.31	0.352	1.893	0.67	0.0032	0.0060	0.00094	0.0073
10/11/19	13.3	0.196 a	0.471	0.155	0.990	1.09	0.0008	0.0171	<0.0004	<0.0012
11/08/19	113	1.610 a	7.17	1.39	9.22	0.093	0.0041	0.0059	0.00075	0.00363
12/16/19	3.01	0.0758 a	0.106	0.0131	0.0825	0.207	0.00071	0.0016	0.00046	0.0019
01/16/20	5.69	0.174	0.175	0.0338	0.2238	<0.0402	0.00029	0.0005	<0.00034	0.00081
02/06/20	7.25	0.133	0.206	0.0371	0.256	0.270	0.0003	0.00048	<0.00035	<0.00106
03/16/20	31.5	0.696	1.240	0.174	1.047	0.124	0.0027	0.0027	<0.00036	0.00167
04/09/20	25.6	0.638	1.140	0.133	0.819	0.259	0.0074	0.0059	<0.00035	0.00171

Soil Vapor Extraction System Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington

Date (mm/dd/yy)	Influent					Effluent				
	TPHg Conc. (ppmv)	Benzene Conc. (ppmv)	Toluene Conc. (ppmv)	Ethylbenzene Conc. (ppmv)	Xylenes Conc. (ppmv)	TPHg Conc. (ppmv)	Benzene Conc. (ppmv)	Toluene Conc. (ppmv)	Ethylbenzene Conc. (ppmv)	Xylenes Conc. (ppmv)
05/19/20	34.9	0.783	1.110	0.172	1.003	0.372	0.0054	0.0038	0.00051	0.00314
06/08/20	102	2.620	2.960	0.340	1.976	<0.0816	0.0028	0.0018	<0.00034	0.00072
07/15/20	80.7	3.250	3.520	0.305	1.859	3.50	0.0101	0.0256	0.0042	0.0259
08/10/20	1,300	40.60	50.80	5.720	48.0	10.50	0.126	0.267	0.047	0.479
08/17/20	2,080	59.0	99.30	7.670	60.5	-	-	-	-	-
09/04/20	342	9.530	13.40	1.070	10.48	-	-	-	-	-
09/15/20	1,280	37.90	54.30	3.560	40.91	2.14	0.0301	0.0621	0.0097	0.1172
10/13/20	1,430	65.70	67.10	5.460	61.0	0.496	0.0235	0.0179	0.0033	0.0373
10/21/20	980	32.70	43.10	4.810	74.3	-	-	-	-	-
11/11/20	1,310	10.60	16.60	2.170	37.8	1.770	0.0183	0.0140	0.0014	0.0248
12/09/20	23	0.195	0.478	0.0730	0.632	1.240	0.573	0.0895	0.0025	0.0331
01/18/21	11	0.130	0.427	0.0585	0.457	0.341	0.00062	0.0020	0.00061	0.0054
02/18/21	38.2	0.874	1.970	0.300	2.404	0.500	0.0022	0.0039	0.00045	0.00301
03/10/21	73.8	1.270	3.100	0.396	2.801	0.133	0.0015	0.0037	0.00076	0.0066
04/21/21	70.8	1.350	2.890	0.459	3.261	0.979	0.0067	0.0285	0.0116	0.1064
05/13/21	114	2.000	3.410	0.356	3.970	1.640	0.0059	0.0169	0.0037	0.0523
06/30/21	21.2	0.321	0.460	0.0719	0.797	1.280	0.4190	0.0494	0.00078	0.0144
07/20/21	245	5.090	9.210	0.705	13.26	0.514	0.0063	0.0067	0.00070	0.0074
08/05/21	612	9.540	15.10	1.710	22.69	3.070	0.0302	0.0524	0.01400	0.1602
09/14/21	800	14.0	19.0	1.90	24.0	2.2	0.039	0.06	0.010	0.017
10/13/21	490	6.2	11.0	1.20	16.0	3.2	0.017	0.02	0.0018	0.020
11/03/21	140	0.8	1.2	0.10	1.8	<1.0	0.0056	0.0081	0.00063	0.0083
12/08/21	9	0.1	0.2	0.04	0.3	<1.0	0.0006	0.0012	<0.0005	0.0042
01/17/21	9	0.1	0.2	0.03	0.2	1.6	0.0006	0.0018	<0.0005	<0.0025
02/10/22	11	0.1	0.1	0.04	0.2	<1.0	0.0006	0.0016	<0.0005	<0.0025
03/09/22	3.7	0.1	0.3	0.05	0.4	<1.0	0.0006	0.0009	<0.0005	<0.0025
<b>Regulatory Limits (ppmv):</b>			<b>N/A</b>					<b>N/A</b>		

**Notes and Abbreviations:**

mm/dd/yy = month/day/year

Conc. = concentration

N/A = not applicable

TPHg = total petroleum hydrocarbons quantified as gasoline

µg/L = micrograms per liter

&lt;X.X = not detected at or below the detection limit indicated

ppmv = parts per million by volume

TBD = Sample taken during this time and are awaiting results

TPHg analyzed by Method TO-14M.

Benzene, toluene, ethylbenzene, and total xylenes analyzed by Method TO-14M.

a = Sample was transferred from a sampling bag into a Summa Canister within 48 hours of collection.













Soil Vapor Extraction System Operational Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington

Date (mm/dd/yy)	Oxidizer Hour Meter Reading	Total Uptime	Soil Vapor Extraction											TPHg				Benzene		
			SVE Influent Vacuum (in. Hg)	SVE Influent Vacuum (in. WC)	Knock Out Vacuum (in. Hg)	Influent-2 Differential Pressure (in. WC)	Influent-2 Flow (scfm)	Influent-2 Pressure (in. WC)	Influent-2 Temperature (°F)	Influent-2 Concentration (Field) (ppmv)	TPHg Influent Concentration (Lab) (ppmv)	Oxidizer Temperature (°F)	Stack Temperature (°F)	Removal rate (ppd)	Cumulative Recovery (pounds)	Emission rate (ppd)	Destruction efficiency (%)	Removal rate (ppd)	Cumulative Recovery (pounds)	Emission rate (ppd)
09/28/21	35,569	99%	14.5	197	15.0	0.35	495	175	352.6	NM	1,432	841								
10/06/21	35,752	95%	15.0	204	15.0	0.40	519	200	NM	NM	NM	NM								
10/13/21	35,920	100%	15.0	204	15.0	0.40	531	170	284.0	490	1,406	841	127	109,429	0.53	100%	1.55	1,777	0.00431	
10/22/21	36,139	100%	15.0	204	15.0	0.40	531	170	181.4	NM	1,406	841								
10/27/21	36,264	100%	14.5	197	14.0	0.40	531	170	178.0	NM	1,415	846								
11/03/21	36,434	100%	12.6	171	12.0	0.40	535	160	79.6	140	1,402	847	63	110,768	0.42	99%	0.54	1,788	0.00175	
11/16/21	36,683	80%	7.5	102	7.5	0.50	608	140	NM	NM	1,406	863								
11/24/21	36,878	100%	8.0	109	8.0	0.45	575	145	4.9	NM	1,403	843								
12/01/21	37,047	100%	8.3	112	8.0	0.45	575	145	6.5	NM	1,410	842								
12/08/21	37,218	100%	8.0	109	7.5	0.45	575	145	3.6	9	1,409	850	16	111,289	0.21	99%	0.07	1,790	0.00052	
12/21/21	37,504	92%	7.5	102	7.0	0.50	608	140	8.1	NM	1,407	838								
01/05/22	37,870	100%	8.0	109	7.5	0.45	577	140	6.5	NM	1,407	836								
01/17/22	38,149	97%	6.0	82	5.8	0.50	608	140	2.4	9	1,407	854	2	111,367	0.29	86%	0.01	1,791	0.00010	
01/28/22	38,417	100%	4.0	54	4.0	0.50	608	140	2.3	NM	1,413	848								
02/03/22	38,562	100%	4.0	54	4.0	0.40	544	140	17.3	NM	1,407	848								
02/10/22	38,734	100%	5.0	68	5.0	0.38	529	135	2.8	11	1,410	850	2	111,419	0.28	87%	0.01	1,791	0.00010	
02/16/22	38,879	100%	5.0	68	5.0	0.40	544	140	4.9	NM	1,410	851								
03/04/22	39,122	63%	5.0	68	4.5	0.35	511	135	4.3	NM	1,412	849								
03/09/22	39,242	100%	5.5	75	5.0	0.38	527	140	3.8	4	1,407	849	1	111,449	0.20	86%	0.01	1,791	0.00010	
03/22/22	39,561	100%	6.0	82	5.0	0.35	505	150	6.2	NM	1,404	847								

**Regulatory Limits (ppmv):**

<1,500

>1,400

>97% when inlet concentrations exceed 200 ppmv

<0.085

**Abbreviations and Notes:**

(mm/dd/yy) = Month/day/year

ALS = Air liquid separator

SVE = Soil vapor extraction

conc = Concentration

TPPH = Total Purgeable Petroleum Hydrocarbon analyzed by method NWTPHg-X

°F = Degrees Fahrenheit

NA = Not applicable

NM = not measured

NS = Not sampled

L = liter

gpm = gallon per minute

µg/L = micrograms per liter

g = grams

cc = cubic centimeter

lb = pound

All readings and data are field collected excluding influent concentrations

\* = not actual analytical data. These value was estimated by taking 70% of the extrapolated value using historical PID vs. analytical data. This was done to estimate removal rate after air sweep was implemented.

Density: = 0.73 g/cc TPHg

= 0.88 g/cc Benzene

*Italics* = referenced laboratory concentration is non-detect. 50% of reporting limit value used in the equation

Molecular weight of TPHg = 100 lb/lb-mole

Molecular weight of benzene = 78 lb/lb-mole

Molecular weight of toluene = 92

Molecular weight of ethylbenzene 106

Molecular weight of xylene = 106

Table 4

Soil Vapor Extraction System Operational Data  
 Phillips 66 Company  
 Renton Terminal  
 Renton, Washington

Date (mm/dd/yy)	Oxidizer Hour Meter Reading	Total Uptime	Soil Vapor Extraction											TPHg				Benzene		
			SVE Influent Vacuum (in. Hg)	SVE Influent Vacuum (in. WC)	Knock Out Vacuum (in. Hg)	Influent-2 Differential Pressure (in. WC)	Influent-2 Flow (scfm)	Influent-2 Pressure (in. WC)	Influent-2 Temperature (°F)	Influent-2 Concentration (Field) (ppmv)	TPHg Influent Concentration (Lab) (ppmv)	Oxidizer Temperature (°F)	Stack Temperature (°F)	Removal rate (ppd)	Cumulative Recovery (pounds)	Emission rate (ppd)	Destruction efficiency (%)	Removal rate (ppd)	Cumulative Recovery (pounds)	Emission rate (ppd)

Table 5

**Groundwater Elevation Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

<i>Well</i>	<i>Date</i>	<i>Top of Casing Elevation (feet)</i>	<i>Depth to Free Product (feet BTOC)</i>	<i>Elevation of Free Product (feet)</i>	<i>Product Thickness In Well (feet)</i>	<i>Depth to Groundwater (feet BTOC)</i>	<i>Groundwater Elevation (feet)</i>	<i>Potentiometric Elevation</i>
B-4	2/24/2020	21.28	--	--	--	3.71	17.57	--
B-4	6/12/2020	21.28	--	--	--	5.35	15.93	--
B-4	12/2/2020	21.28	--	--	--	4.67	16.61	--
B-4	3/16/2021	21.28	--	--	--	4.30	16.98	--
B-4	5/24/2021	21.28	--	--	--	6.09	15.19	--
B-4	12/20/2021	21.28	--	--	--	3.18	18.10	--
B-4	3/1/2022	21.28	--	--	--	3.27	18.01	--
B-6	2/24/2020	21.00	--	--	--	3.96	17.04	--
B-6	6/12/2020	21.00	--	--	--	5.29	15.71	--
B-6	12/2/2020	21.00	--	--	--	4.77	16.23	--
B-6	3/16/2021	21.00	--	--	--	4.42	16.58	--
B-6	5/24/2021	21.00	--	--	--	6.01	14.99	--
B-6	12/20/2021	21.00	--	--	--	2.82	18.18	--
B-6	3/1/2022	21.00	--	--	--	2.36	18.64	--
D-1R	2/26/2020	20.13	--	--	--	7.32	12.81	--
D-1R	6/12/2020	20.13	--	--	--	7.93	12.20	--
D-1R	9/17/2020	20.13	--	--	--	9.68	10.45	--
D-1R	12/2/2020	20.13	--	--	--	7.51	12.62	--
D-1R	3/16/2021	20.13	--	--	--	7.68	12.45	--
D-1R	5/24/2021	20.13	--	--	--	8.68	11.45	--
D-1R	9/16/2021	20.13	--	--	--	10.20	9.93	--
D-1R	12/20/2021	20.13	--	--	--	6.96	13.17	--
D-1R	3/1/2022	20.13	--	--	--	3.79	16.34	--
DPE-1	9/16/2020	25.66	--	--	--	12.10	13.56	--
DPE-3	2/24/2020	25.16	--	--	--	8.89	16.27	--
DPE-6	9/16/2020	--	--	--	--	13.63	--	--
DPE-7	9/16/2020	--	--	--	--	14.72	--	--
DPE-8	9/16/2020	--	--	--	--	12.64	--	--
DPE-11	9/16/2020	25.08	13.90	11.18	0.17	14.07	11.15	--
DPE-12	9/16/2020	24.72	--	--	--	11.40	13.32	--
DPE-25	2/24/2020	--	--	--	--	5.32	--	--
DPE-25	6/12/2020	--	7.12	--	0.39	7.51	--	--
DPE-25	9/16/2020	--	10.46	--	0.5	10.96	--	--
DPE-25	5/24/2021	--	--	--	--	9.50	--	--
DPE-25	12/20/2021	--	--	--	--	4.55	--	--
DPE-26	2/24/2020	--	6.27	--	1.45	7.72	--	--
DPE-26	6/12/2020	--	7.66	--	0.54	8.20	--	--
DPE-26	9/16/2020	--	10.32	--	0.23	10.55	--	--
DPE-26	12/2/2020	--	--	--	--	7.53	--	--
DPE-26	3/16/2021	--	9.17	--	0.04	9.21	--	--
DPE-26	5/24/2021	--	--	--	--	10.03	--	--
DPE-26	9/14/2021	--	--	--	--	11.38	--	--
DPE-26	12/20/2021	--	7.42	--	0.06	7.48	--	--
DPE-26	3/1/2022	--	--	--	--	5.24	--	--
DPE-27	2/24/2020	--	7.04	--	0.07	7.11	--	--
DPE-27	6/12/2020	--	7.75	--	0.1	7.85	--	--
DPE-27	9/16/2020	--	--	--	--	10.13	--	--

Table 5

**Groundwater Elevation Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

DPE-27	12/2/2020	--	--	--	--	7.17	--	--
DPE-27	3/16/2021	--	9.08	--	0.01	9.09	--	--
DPE-27	5/24/2021	--	--	--	--	9.97	--	--
DPE-27	9/14/2021	--	--	--	--	11.18	--	--
DPE-27	12/20/2021	--	--	--	--	7.13	--	--
DPE-27	3/1/2022	--	--	--	--	5.18	--	--
DPE-28	2/24/2020	--	--	--	--	6.36	--	--
DPE-28	6/12/2020	--	--	--	--	7.51	--	--
DPE-28	9/16/2020	--	--	--	--	9.61	--	--
DPE-28	12/2/2020	--	--	--	--	6.58	--	--
DPE-28	3/16/2021	--	--	--	--	8.50	--	--
DPE-28	5/24/2021	--	--	--	--	9.40	--	--
DPE-28	12/20/2021	--	--	--	--	6.17	--	--
DPE-28	3/1/2022	--	--	--	--	5.30	--	--
DPE-29	3/16/2021	20.93	--	--	--	7.90	13.03	--
DPE-29	5/24/2021	20.93	--	--	--	8.88	12.05	--
DPE-29	3/1/2022	20.93	--	--	--	3.02	17.91	--
DPE-30	12/2/2020	22.67	--	--	--	9.22	13.45	--
DPE-30	3/16/2021	22.67	--	--	--	10.86	11.81	--
DPE-30	5/24/2021	22.67	--	--	--	11.81	10.86	--
DPE-30	3/1/2022	22.67	--	--	--	7.32	15.35	--
DPE-31	12/2/2020	--	--	--	--	7.41	--	--
DPE-31	3/16/2021	--	--	--	--	10.07	--	--
DPE-31	9/14/2021	--	--	--	--	12.73	--	--
DPE-31	12/20/2021	--	--	--	--	8.58	--	--
DPE-32	2/24/2020	--	7.42	--	1.31	8.73	--	--
DPE-32	6/12/2020	--	8.17	--	0.78	8.95	--	--
DPE-32	12/2/2020	--	--	--	--	8.19	--	--
DPE-32	12/20/2021	--	--	--	--	6.48	--	--
DPE-33	2/24/2020	21.05	--	--	--	7.18	13.87	--
DPE-33	6/12/2020	21.05	--	--	--	8.41	12.64	--
DPE-33	12/2/2020	21.05	--	--	--	7.67	13.38	--
DPE-33	3/16/2021	21.05	--	--	--	9.43	11.62	--
DPE-33	5/24/2021	21.05	--	--	--	10.36	10.69	--
DPE-33	12/20/2021	21.05	--	--	--	5.93	15.12	--
DPE-33	3/1/2022	21.05	--	--	--	3.48	17.57	--
DPE-34	2/24/2020	20.62	--	--	--	5.04	15.58	--
DPE-34	6/12/2020	20.62	--	--	--	--	--	--
DPE-34	12/2/2020	20.62	--	--	--	--	--	--
DPE-34	3/16/2021	20.62	--	--	--	7.07	13.55	--
DPE-34	5/24/2021	20.62	--	--	--	9.81	10.81	--
DPE-34	12/20/2021	20.62	--	--	--	--	--	--
DPE-34	3/1/2022	20.62	--	--	--	4.43	16.19	--
DPE-35	2/24/2020	--	7.06	--	2.34	9.40	--	--
DPE-35	6/12/2020	--	7.87	--	1.88	9.75	--	--
DPE-35	12/2/2020	--	--	--	--	7.77	--	--
DPE-35	12/20/2021	--	--	--	--	8.09	--	--
DPE-36	2/24/2020	--	--	--	--	7.12	--	--
DPE-36	6/12/2020	--	7.79	--	0.02	7.81	--	--
DPE-36	12/2/2020	--	--	--	--	7.52	--	--
DPE-36	9/14/2021	--	--	--	--	11.54	--	--
DPE-36	12/20/2021	--	--	--	--	8.00	--	--
DPE-37	12/2/2020	20.80	--	--	--	--	--	--
DPE-37	3/16/2021	20.80	--	--	--	8.54	12.26	--

Table 5

**Groundwater Elevation Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

DPE-37	5/24/2021	20.80	--	--	--	9.02	11.78	
DPE-37	3/1/2022	20.80	--	--	--	4.83	15.97	
DPE-38	2/24/2020	20.28	--	--	--	5.05	15.23	--
DPE-38	6/12/2020	20.28	--	--	--	--	--	--
DPE-38	12/2/2020	20.28	--	--	--	--	--	--
DPE-38	3/16/2021	20.28	--	--	--	5.46	14.82	
DPE-38	5/24/2021	20.28	--	--	--	--	--	
DPE-38	12/20/2021	20.28	--	--	--	3.60	16.68	
DPE-38	3/1/2022	20.28	--	--	--	3.63	16.65	
DPE-39	2/24/2020	20.96	7.13	13.83	2.86	9.99	13.26	--
DPE-39	6/12/2020	20.96	8.07	12.89	1.58	9.65	12.57	--
DPE-39	12/2/2020	20.96	--	--	--	8.14	12.82	--
DPE-39	5/24/2021	20.96	--	--	--	--	--	
DPE-39	9/14/2021	20.96	--	--	--	11.78	9.18	
DPE-39	12/20/2021	20.96	--	--	--	6.73	14.23	
DPE-40	2/24/2020	--	6.62	--	3.42	10.04	--	--
DPE-40	6/12/2020	--	7.71	--	1.34	9.05	--	--
DPE-40	12/2/2020	--	--	--	--	7.56	--	--
DPE-41	2/24/2020	--	7.58	--	0.02	7.60	--	--
DPE-41	6/12/2020	--	8.30	--	0.06	8.36	--	--
DPE-41	12/2/2020	--	--	--	--	7.79	--	--
DPE-42	3/16/2021	20.94	--	--	--	8.82	12.12	
DPE-42	5/24/2021	20.94	--	--	--	--	--	
DPE-42	3/1/2022	20.94	--	--	--	4.80	16.14	
DPE-43	2/24/2020	21.15	4.07	17.08	0.25	4.32	17.03	--
DPE-43	6/12/2020	21.15	5.71	15.44	0.42	6.13	15.36	--
DPE-43	12/2/2020	21.15	4.96	16.19	0.29	5.25	16.13	--
DPE-43	3/16/2021	21.15	4.72	16.43	0.54	5.26	16.32	
DPE-43	5/24/2021	21.15	6.34	14.81	0.5	6.84	14.71	
DPE-43	12/20/2021	21.15	3.58	17.57	0.16	3.74	17.54	
DPE-43	3/1/2022	21.15	3.14	18.01	0.49	3.63	17.91	
DPE-44	3/16/2021	--	--	--	--	4.58	--	
DPE-45	2/24/2020	21.10	6.36	14.74	0.35	6.71	14.67	--
DPE-45	6/12/2020	21.10	7.43	13.67	0.35	7.78	13.60	--
DPE-45	12/2/2020	21.10	6.92	14.18	0.38	7.30	14.10	--
DPE-45	3/16/2021	21.10	6.67	14.43	0.44	7.11	14.34	
DPE-45	5/24/2021	21.10	8.05	13.05	0.44	8.49	12.96	
DPE-45	12/20/2021	21.10	5.54	15.56	0.43	5.97	15.47	
DPE-45	3/1/2022	21.10	3.22	17.88	0.49	3.71	17.78	
DPE-46	2/24/2020	--	5.70	--	0.03	5.73	--	--
DPE-46	6/12/2020	--	8.38	--	0.01	8.39	--	--
DPE-46	12/2/2020	--	--	--	--	8.11	--	--
DPE-46	3/16/2021	--	--	--	--	8.14	--	
DPE-46	5/24/2021	--	--	--	--	10.45	--	
DPE-46	12/20/2021	--	--	--	--	8.04	--	
DPE-47	12/2/2020	21.06	--	--	--	4.92	16.14	--
DPE-47	3/16/2021	21.06	--	--	--	4.74	16.32	
DPE-47	5/24/2021	21.06	--	--	--	6.22	14.84	
DPE-47	3/1/2022	21.06	--	--	--	2.96	18.10	
DPE-48	2/24/2020	--	--	--	--	8.60	--	--
DPE-48	6/12/2020	--	--	--	--	9.42	--	--
DPE-48	12/2/2020	--	--	--	--	9.01	--	--
DPE-48	3/16/2021	--	--	--	--	9.42	--	

Table 5

**Groundwater Elevation Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

DPE-48	5/24/2021	--	--	--	--	10.36	--	
DPE-48	12/20/2021	--	--	--	--	8.42	--	
DPE-49	2/24/2020	--	7.80	--	1.2	9.00	--	--
DPE-49	6/12/2020	--	8.54	--	1.01	9.55	--	--
DPE-49	12/2/2020	--	--	--	--	8.27	--	--
DPE-49	3/16/2021	--	--	--	--	10.20	--	
DPE-49	5/24/2021	--	--	--	--	10.22	--	
DPE-49	12/20/2021	--	--	--	--	9.07	--	
DPE-50	2/24/2020	--	--	--	--	7.98	--	--
DPE-50	6/12/2020	--	--	--	--	8.98	--	--
DPE-50	12/2/2020	--	--	--	--	8.80	--	--
DPE-50	3/16/2021	--	--	--	--	10.26	--	
DPE-50	5/24/2021	--	--	--	--	11.28	--	
DPE-50	9/14/2021	--	--	--	--	12.68	--	
DPE-50	12/20/2021	--	--	--	--	8.72	--	
DPE-51	2/24/2020	--	--	--	--	6.92	--	--
DPE-51	6/12/2020	--	--	--	--	9.25	--	--
DPE-51	12/2/2020	--	--	--	--	8.93	--	--
DPE-51	3/16/2021	--	--	--	--	9.65	--	
DPE-51	12/20/2021	--	--	--	--	8.43	--	
DPE-52	2/24/2020	--	8.21	--	0.23	8.44	--	--
DPE-52	6/12/2020	--	8.90	--	0.6	9.50	--	--
DPE-52	12/2/2020	--	8.38	--	0.55	8.93	--	--
DPE-52	3/16/2021	--	9.96	--	0.31	10.27	--	
DPE-52	5/24/2021	--	10.97	--	0.44	11.41	--	
DPE-52	12/20/2021	--	--	--	--	9.55	--	
DPE-54	2/24/2020	--	8.11	--	1.06	9.17	--	--
DPE-54	6/12/2020	--	--	--	--	9.16	--	--
DPE-54	12/2/2020	--	8.25	--	1.6	9.85	--	--
DPE-54	3/16/2021	--	8.47	--	0.01	8.48	--	
DPE-54	5/24/2021	--	9.82	--	0.76	10.58	--	
DPE-55	3/16/2021	21.62	--	--	--	7.82	13.80	
DPE-55	5/24/2021	21.62	--	--	--	8.49	13.13	
DPE-55	3/1/2022	21.62	--	--	--	5.18	16.44	
DPE-56	3/16/2021	--	--	--	--	8.58	--	
DPE-56	5/24/2021	--	10.00	--	0.01	10.01	--	
DPE-56	12/20/2021	--	--	--	--	9.43	--	
DPE-57	3/16/2021	21.46	8.35	13.11	0.67	9.02	12.98	
DPE-57	5/24/2021	21.46	9.14	12.32	0.61	9.75	12.20	
DPE-57	9/14/2021	21.46	10.75	10.71	0.1	10.85	10.69	
DPE-57	12/20/2021	21.46	--	--	--	--	--	
DPE-57	3/1/2022	21.46	5.38	16.08	0.18	5.56	16.04	
LAI-13	9/16/2020	21.53	--	--	--	8.15	13.38	--
LAI-13	3/16/2021	21.53	--	--	--	5.09	16.44	--
LAI-13	9/16/2021	21.53	--	--	--	8.36	13.17	
LAI-14	9/16/2020	21.69	--	--	--	8.34	13.35	--
LAI-14	3/16/2021	21.53	--	--	--	4.92	16.61	--
LAI-14	9/16/2021	21.53	--	--	--	8.52	13.01	
RW-1	9/16/2020	24.60	--	--	--	7.93	16.67	--
RWX-2	9/16/2020	26.20	--	--	--	13.29	12.91	--
RW-3	9/16/2020	22.03	--	--	--	9.08	12.95	--

Table 5

**Groundwater Elevation Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

RW-4	9/16/2020	23.02	--	--	--	9.03	13.99	--
MW-1	6/12/2020	20.51	--	--	--	8.52	11.99	--
MW-1	9/17/2020	20.51	--	--	--	9.87	10.64	--
MW-1	12/2/2020	20.51	--	--	--	7.76	12.75	--
MW-1	3/16/2021	20.51	--	--	--	6.24	14.27	--
MW-1	5/24/2021	20.51	--	--	--	8.72	11.79	--
MW-1	9/14/2021	20.51	--	--	--	10.42	10.09	--
MW-1	12/20/2021	20.51	--	--	--	7.38	13.13	--
MW-1	3/1/2022	20.51	--	--	--	4.27	16.24	--
MW-2	6/12/2020	20.29	--	--	--	7.95	12.34	--
MW-2	9/17/2020	20.29	--	--	--	9.62	10.67	--
MW-2	12/2/2020	20.29	--	--	--	7.58	12.71	--
MW-2	3/16/2021	20.29	--	--	--	7.69	12.60	--
MW-2	5/24/2021	20.29	--	--	--	8.41	11.88	--
MW-2	9/14/2021	20.29	--	--	--	10.16	10.13	--
MW-2	12/20/2021	20.29	--	--	--	7.20	13.09	--
MW-2	3/1/2022	20.29	--	--	--	3.37	16.92	--
MW-3	3/16/2021	21.21	--	--	--	6.22	14.99	--
MW-3	5/24/2021	21.21	--	--	--	8.53	12.68	--
MW-3	9/14/2021	21.21	--	--	--	10.34	10.87	--
MW-3	12/20/2021	21.21	--	--	--	5.51	15.70	--
MW-3	3/1/2022	21.21	--	--	--	5.37	15.84	--
MW-4	3/16/2021	20.44	--	--	--	5.38	15.06	--
MW-4	5/24/2021	20.44	--	--	--	7.77	12.67	--
MW-4	9/14/2021	20.44	--	--	--	9.36	11.08	--
MW-4	12/20/2021	20.44	--	--	--	4.28	16.16	--
MW-4	3/1/2022	20.44	--	--	--	4.08	16.36	--
MW-5	6/12/2020	21.32	--	--	--	8.30	13.02	--
MW-5	12/2/2020	21.32	--	--	--	7.69	13.63	--
MW-5	3/16/2021	21.32	--	--	--	7.98	13.34	--
MW-5	12/20/2021	21.32	--	--	--	7.23	14.09	--
MW-5	3/1/2022	21.32	--	--	--	5.15	16.17	--
MW-6	6/12/2020	22.30	--	--	--	9.34	12.96	--
MW-6	9/17/2020	22.30	--	--	--	10.51	11.79	--
MW-6	12/2/2020	22.30	--	--	--	8.82	13.48	--
MW-6	3/16/2021	22.30	--	--	--	9.12	13.18	--
MW-6	5/24/2021	22.30	--	--	--	9.74	12.56	--
MW-6	9/15/2021	22.30	--	--	--	10.93	11.37	--
MW-6	12/20/2021	22.30	--	--	--	8.44	13.86	--
MW-6	3/1/2022	22.30	--	--	--	6.23	16.07	--
MW-8	2/24/2020	21.54	--	--	--	8.05	13.49	--
MW-8	6/12/2020	21.54	--	--	--	8.67	12.87	--
MW-8	9/16/2020	21.54	--	--	--	10.27	11.27	--
MW-8	12/2/2020	21.54	--	--	--	8.12	13.42	--
MW-8	3/16/2021	21.54	--	--	--	9.80	11.74	--
MW-8	5/24/2021	21.54	--	--	--	10.50	11.04	--
MW-8	12/20/2021	21.54	--	--	--	9.03	12.51	--
MW-8	3/1/2022	21.54	--	--	--	5.55	15.99	--
MW-9	9/16/2020	20.82	--	--	--	8.23	12.59	--
MW-9	3/16/2021	20.82	--	--	--	4.84	15.98	--
MW-10	2/25/2020	21.12	--	--	--	8.25	12.87	--
MW-10	6/12/2020	21.12	--	--	--	9.01	12.11	--
MW-10	9/17/2020	21.12	--	--	--	10.68	10.44	--
MW-10	12/2/2020	21.12	--	--	--	8.59	12.53	--



Table 5

**Groundwater Elevation Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

MW-10	3/16/2021	21.12	--	--	--	8.78	12.34	--
MW-10	5/24/2021	21.12	--	--	--	9.79	11.33	--
MW-10	9/16/2021	21.12	--	--	--	11.22	9.90	--
MW-10	12/20/2021	21.12	--	--	--	7.96	13.16	--
MW-10	3/1/2022	21.12	--	--	--	5.03	16.09	--
MW-11	2/25/2020	16.80	--	--	--	4.08	12.72	--
MW-11	6/12/2020	16.80	--	--	--	9.70	7.10	--
MW-11	9/17/2020	16.80	--	--	--	6.51	10.29	--
MW-11	12/2/2020	16.80	--	--	--	4.35	12.45	--
MW-11	3/16/2021	16.80	--	--	--	4.52	12.28	--
MW-11	5/24/2021	16.80	--	--	--	5.21	11.59	--
MW-11	9/15/2021	16.80	--	--	--	7.21	9.59	--
MW-11	12/20/2021	16.80	--	--	--	3.72	13.08	--
MW-11	3/1/2022	16.80	--	--	--	0.50	16.30	--
MW-12	2/25/2020	19.59	--	--	--	6.35	13.24	--
MW-12	6/12/2020	19.59	--	--	--	7.18	12.41	--
MW-12	9/17/2020	19.59	--	--	--	8.69	10.90	--
MW-12	12/2/2020	19.59	--	--	--	6.72	12.87	--
MW-12	3/16/2021	19.59	--	--	--	6.97	12.62	--
MW-12	5/24/2021	19.59	--	--	--	7.87	11.72	--
MW-12	9/15/2021	19.59	--	--	--	9.14	10.45	--
MW-12	12/20/2021	19.59	--	--	--	6.35	13.24	--
MW-12	3/1/2022	19.59	--	--	--	3.96	15.63	--
MW-13	2/25/2020	21.24	--	--	--	4.51	16.73	--
MW-13	6/12/2020	21.24	--	--	--	7.63	13.61	--
MW-13	9/17/2020	21.24	--	--	--	9.72	11.52	--
MW-13	12/2/2020	21.24	--	--	--	6.73	14.51	--
MW-13	3/16/2021	21.24	--	--	--	5.24	16.00	--
MW-13	5/24/2021	21.24	--	--	--	8.90	12.34	--
MW-13	9/15/2021	21.24	--	--	--	10.26	10.98	--
MW-13	12/20/2021	21.24	--	--	--	4.45	16.79	--
MW-13	3/1/2022	21.24	--	--	--	4.28	16.96	--
MW-15	2/26/2020	20.52	--	--	--	7.12	13.40	--
MW-15	6/12/2020	20.52	--	--	--	8.00	12.52	--
MW-15	9/17/2020	20.52	--	--	--	9.53	10.99	--
MW-15	12/2/2020	20.52	--	--	--	8.15	12.37	--
MW-15	3/16/2021	20.52	--	--	--	6.51	14.01	--
MW-15	5/24/2021	20.52	--	--	--	8.22	12.30	--
MW-15	9/16/2021	20.52	--	--	--	10.07	10.45	--
MW-15	12/20/2021	20.52	--	--	--	6.71	13.81	--
MW-15	3/1/2022	20.52	--	--	--	0.00	20.52	--
MW-16	2/25/2020	21.24	--	--	--	5.95	15.29	--
MW-16	6/12/2020	21.24	--	--	--	7.83	13.41	--
MW-16	9/17/2020	21.24	--	--	--	9.34	11.90	--
MW-16	12/2/2020	21.24	--	--	--	7.31	13.93	--
MW-16	3/16/2021	21.24	--	--	--	6.52	14.72	--
MW-16	5/24/2021	21.24	--	--	--	8.58	12.66	--
MW-16	9/15/2021	21.24	--	--	--	9.67	11.57	--
MW-16	12/20/2021	21.24	--	--	--	6.42	14.82	--
MW-16	3/1/2022	21.24	--	--	--	4.93	16.31	--
WS-2	11/21/2014	12.03						DRY
WS-3	11/21/2014	14.11	--	--	--	1.15	12.96	--
WS-4	11/21/2014	14.92	--	--	--	0.39	14.53	--
EX-1	2/24/2020	21.54	7.20	14.34	1.27	8.47	14.09	--
EX-1	6/12/2020	21.46	7.92	13.54	0.2	8.12	13.50	--

**Table 5**

**Groundwater Elevation Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

<b>EX-1</b>	12/2/2020	21.54	--	--	--	7.54	14.00	--
<b>EX-1</b>	5/24/2021	21.54	--	--	--	10.91	10.63	
<b>EX-1</b>	9/14/2021	21.54	--	--	--	12.81	8.73	
<b>EX-1</b>	12/20/2021	21.54	--	--	--	7.67	13.87	
<b>EX-1</b>	3/1/2022	21.54	--	--	--	7.00	14.54	

Notes:

All measurement are recorded in feet.

-- = Not Applicable, no data

NM = Not Measured

Groundwater elevations adjusted for the presence of separate phase hydrocarbons using a factor of 0.73

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES		
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --	
MTCA Method A Screening Levels:		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
HB-1	12/7/1993	61	--	--	<0.50	<0.50	0.14	0.12	--	--	
HB-2	12/7/1993	68	--	--	0.092	<0.50	0.17	0.13	--	--	
R-1	9/17/1997	3,360,000	206,000	23,500	7,620	3,460	1,460	9,460	--	--	
W-1	5/23/2000	190,000	160,000	<100,000	34,000	42,000	3,600	23,000	--	--	
W-1	5/24/2001				LPH Encountered						
W-1	6/5/2002	130,000	79,000	<9,400	17,000	27,000	2,700	19,000	--	--	
W-1	11/25/2002	155,000	16.7	0.500	17,600	24,800	2,950	19,500	--	--	
W-1	5/29/2003	170,000	79,000	<4,800	20,000	25,000	3,400	23,000	--	--	
W-1	6/16/2004				LPH Encountered						
W-1	6/20/2005	93,000	120,000	<11,000	12,000	13,000	1,600	12,000	--	--	
W-1	6/7/2006	69,500	7,500	337	8,680	6,260	726	8,240	--	--	
W-1	10/23/2006	91,700	9,070	<183	14,500	8,400	2,420	20,800	--	--	
W-1	3/14/2007	70,300	16,100	<740	8,920	2,800	1,010	17,600	--	--	
W-1 (DUP)	3/14/2007	63,200	11,000	<370	9,340	3,010	1,130	19,200	--	--	
W-1	9/11/2007				Insufficient Groundwater to Sample						
W-1	6/4/2008	81,900	23,900	1,370	14,600	697	1,510	17,100	--	--	
W-1	8/25/2008				Insufficient Groundwater to Sample						
W-1	3/24/2010	76,400	2,510	<381	22,300	7,190	2,640	16,900	6.9	<250	
W-1	8/27/2010	56,200	8,170	<400	16,500	2,550	2,270	14,400	<1.0	<250	
W-1	2/9/2011	74,200	2,960	<377	12,000	1,210	1,650	13,700	58.7	--	
W-1	5/24/2011	80,400	2,800	<450	11,400	1,570	1,670	15,500	74	--	
W-1	8/16/2011	58,400	184,000	<6700	16,300	804	1,600	16,000	25.4 J	--	
W-1	2/23/2012	179,000	2,700	<380	9,850	530	2,120	41,600	13.7	--	
W-1	5/10/2012	46,600	10,000	<380	6,310	158	936	11,700	50.9	--	
W-1	8/24/2012	51,500 <sup>10</sup>	1,600	<380	3,550	280	266	10,300	25.4	--	
W-1	1/31/2013	29,400	10,300	<430	5,350	91	197	5,470	<50.0	--	
W-1	4/30/2013	51,800	1,200 J	<200	7,040	208	505	9,270	60.4	--	
W-1 (DUP)	4/30/2013	50,800	2,200 J	<200	7,220	191	477	9,320	50.9	--	
W-1	11/19/2013	34,000	3,700	<400	5,650	83.4	652	6,410	<50.0	--	
W-1	2/5/2014	29,600	4,300	<400	3,190	30.3	274	3,650	37	--	
W-1	5/6/2014	39,000	4,400	<28	4,930	163	552	4,630	<3.4	--	
W-1 (DUP)	5/6/2014	36,600	4,200	<29	4,730	166	551	4,850	<8.4	--	
W-2	9/18/1997	393,000	85,200	19,200	19,400	11,700	3,550	18,000	--	--	
W-2	7/29/1999	110,000	36,000	<10,000	12,000	11,000	1,900	13,000	--	--	
W-2	5/23/2000	85,000	50,000	<20,000	15,000	19,000	1,500	10,000	--	--	
W-2	5/24/2001	25,000	30,000	13,000	7,600	3,000	420	4,400	--	--	
W-2	6/5/2002				LPH Encountered						
W-2	11/25/2002	104,000	14.7	1.91	15,300	15,800	1,960	11,700	--	--	
W-2	5/28/2003	98,000	28,000	7,800J	16,000	15,000	2,200	12,000	--	--	
W-2	6/15/2004	85,000	460,000	<50,000	21,000	5,700	2,800	8,700	--	--	
W-2	6/22/2005	50,000	73,000	<4,000	11,000	2,000	1,800	6,900	--	--	
W-2	6/6/2006	34,400	5,880	283Ju	6,640	1,660	464	4,760	--	--	
W-2	10/23/2006	53,000	5,800	<183	12,500	3,470	1,710	8,220	--	--	
W-2 (DUP)	10/23/2006	60,800	5,890	<183	12,000	2,840	1,650	7,420	--	--	
W-2	3/14/2007	51,800	12,400	<370	9,060	1,840	2,010	10,500	--	--	
W-2	9/11/2007	42,900	5,780	<100	14,000	572	1,610	3,040	--	--	
W-2	6/3/2008	51,900	46,300	3,330J	15,100	215	2,250	3,510	--	--	
W-2	8/27/2008	49,000 <sup>1</sup>	5,050 <sup>1,3</sup>	363 <sup>1</sup>	18,700 <sup>1</sup>	147 <sup>1</sup>	1,970 <sup>1</sup>	3,630 <sup>1</sup>	24 <sup>1</sup>	74.4 <sup>1</sup>	
W-2	3/23/2010	48,300	2,150	<381	14,100	691	3,090	10,400	6.1	<250	
W-2	8/27/2010	30,700	4,570	502	12,500	253	2,730	7,580	10.8	<250	
W-2	2/9/2011	11,500	19,200	3,530	9,010	74.4	2,090	3,820	10.7	--	
W-2	8/15/2011	13,400	940	<380	10,200	169 J	1,110	1,180	19.5 J	--	
W-2	3/1/2012	57,500	1,900	<380	18,500	--	5,330	3,050	--	--	
W-2	8/29/2012	21,900 <sup>10</sup>	1,500	<380	9,590	406	2,070	1,740	12.6	--	
W-2	2/4/2013	16,800	3,200	<440	10,200	116	2,050	1,500	<50.0	--	
W-2	8/13/2013	21,300	3,400	540	10,100	70.4 J	1,720	766	<50.0	--	
W-2	2/12/2014	27,100	2,700	450	6,730	89.6	2,330	1,070	<25.0	--	
W-3	4/14/1993	91,000	--	--	2,000	4,800	2,700	15,000	--	--	

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES		
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --	
W-3	12/15/1993	45,000	--	--	670	1,300	580	8,300	--	--	
W-3	11/4/1994	39,000	--	--	520	190	630	5,100	--	--	
W-3	9/17/1997	105,000	15,000	<500	2,820	8,730	1,570	11,500	--	--	
W-3	4/29/1998	54,000	18,000	<5,000	920	850	2,000	10,000	--	--	
W-3	7/30/1999	48,000	48,000	<10,000	2,900	1,900	1,800	6,900	--	--	
W-3	5/23/2000	34,000	19,000	<10,000	910	180	1,400	4,900	--	--	
W-3	5/22/2001	19,000	28,000	<10,000	890	36	1,100	2,200	--	--	
W-3	6/4/2002	17,000	36,000	<4,800	1,900	45	640	2,300	--	--	
W-3	11/26/2002	14,100	4.89	0.500	455	156	463	1,570	--	--	
W-3	5/28/2003	16,000	55,000	<4,800	500	32	600	740	--	--	
W-3	6/16/2004				LPH Encountered						
W-3	6/21/2005	9,100	10,000	<980	790	15	470	490	--	--	
W-3	6/6/2006	13,400	3,090	153u	1,880	25.1	640	821	--	--	
W-3	10/24/2006	12,200	2,300	<35.2	933	21.3	293	638	--	--	
W-3 (DUP)	10/24/2006	9,520	2,050	<36.9	877	18.3	301	535	--	--	
W-3	3/14/2007	9,370	2,200	<185	687	18.9	286	446	--	--	
W-3	9/12/2007	9,180	2,940	40.0J	614	13.1	397	437	--	--	
W-3	6/4/2008	13,000	2,210	46.9J	727	149	576	724	--	--	
W-3 (DUP)	6/4/2008	12,400	1,980	42.2J	753	230	519	686	--	--	
W-3	8/26/2008	14,600 <sup>1</sup>	3,240 <sup>1,3</sup>	46.8 <sup>1</sup>	763 <sup>1</sup>	176	564	1,450 <sup>1</sup>	0.42 <sup>1</sup>	74.4 <sup>1</sup>	
W-3	3/25/2010	67.9	<76.9	<385	3.1	<1.0	5.0	<3.0	<1.0	<250	
W-3 (DUP)	3/25/2010	322	<76.9	<385	11.3	<1.0	33.3	5.5	<1.0	<250	
W-3 (DUP)	3/25/2010	272	<78.4	<392	11.9	<1.0	34.3	5.6	<1.0	<250	
W-3	8/27/2010				Insufficient Groundwater to Sample						
W-4	4/14/1993	130,000	--	--	2,600	7,800	2,800	20,000	--	--	
W-4	12/15/1993	180,000	--	--	3,200	2,700	11,000	18,000	--	--	
W-4	9/17/1997	114,000	276,000	<500	1,750	<100	1,480	8,490	--	--	
W-4	4/29/1998	84,000	250,000	<20,000	2,400	120	1,600	8,000	--	--	
W-4	7/30/1999	53,000	42,000	<10,000	2,100	100	1,900	6,300	--	--	
W-4	5/23/2001				LPH Encountered						
W-4	6/4/2002	35,000	59,000	6,800J	2,300	32	1,800	3,500	--	--	
W-4	11/25/2002	39,900	19.2	0.648	1,830	38.2	2,550	4,220	--	--	
W-4	5/28/2003	32,000	26,000	1,600J	800	22	1,500	1,000	--	--	
W-4	6/15/2004				LPH Encountered						
W-4	6/21/2005	23,000	110,000	<19,000	1,200	11	1,400	200	--	--	
W-4	6/6/2006	9,180	4,620	411	1,230	18.4	1,010	67.4	--	--	
W-4	10/24/2006	17,200	5,570	<70.5	1,520	8.34	1,490	18.9	--	--	
W-4	3/14/2007	10,100	4,820	<185	422	11.0	456	148	--	--	
W-4	9/12/2007				Insufficient Groundwater to Sample						
W-4	6/4/2008	10,600	4,870	110J	941	34.3	714	58.0	--	--	
W-4	8/26/2008	11,700 <sup>1</sup>	15,100 <sup>1,4</sup>	1,810 <sup>1,4</sup>	1,370 <sup>1</sup>	20.1 <sup>1</sup>	750 <sup>1</sup>	39.5 <sup>1</sup>	1.21 <sup>1</sup>	74.4 <sup>1</sup>	
W-4	3/24/2010	1,940	256	<385	212	16.3	139	182	<1.0	<250	
W-4	8/27/2010				Insufficient Groundwater to Sample						
B-1	4/14/1993	18,000	--	--	1,300	17	450	2,200	--	--	
B-1	12/15/1993	7,800	--	--	590	76	15	370	--	--	
B-1	9/17/1997	475	9,980	25,500	84.6	2.63	6.43	21.8	--	--	
B-1	5/1/1998	560	5,500	13,000	300	10	24	94	--	--	
B-1	5/23/2000	1,800	23,000	52,000	1,000	14	170	160	--	--	
B-1	5/24/2001	2,800	5,500	6,300	1,300	25	410	220	--	--	
B-1	6/5/2002	86J	17,000	29,000	37	0.66J	6.6	6.9	--	--	
B-1	5/29/2003	1,100J	4,700	8,300	760	26	180	65	--	--	
B-1	6/15/2004	1,600	8,700	18,000	890	10	180	110	--	--	
B-1	6/20/2005	550J	2,700J	5,300J	540	5.5	79	45	--	--	
B-1	6/6/2006	3,300J	1,570	553	602	5.87	137	43.9	--	--	
B-1	10/24/2006	3,770	884	800	363	6.65	113	26.8	--	--	
B-1	3/14/2007	2,420	1,720	<185	118	4.35	188	21.3	--	--	
B-1	9/12/2007	3,610	--	--	664	9.88	155	43.6	--	--	
B-1	6/4/2008	2,570	2,990	7,770	355	3.54	54.7	37.3	--	--	
B-1	8/27/2008	4,330 <sup>1</sup>	-- <sup>1</sup>	-- <sup>1</sup>	741 <sup>1</sup>	8.4 <sup>1</sup>	75.1 <sup>1</sup>	139 <sup>1</sup>	<0.42 <sup>1</sup>	74.4 <sup>1</sup>	
B-1	3/24/2010	1,580	105	<381	297	8.5	34.3	41.1	<1.0	<250	
B-1	8/27/2010				Unable to Purge						
B-1	5/18/2011	903 J	120	<380	311 J	6.6 J	18.9 J	23.8 J	<1.0 J	--	
B-1	8/17/2011	576	<76	<380	591	5.4	4.5	32	<1.0	--	

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol
B-1	2/22/2012	1,200	200	440	82.2	3.1	19.3	10.9	<1.0	--
B-1	5/9/2012	1,480	130	<380	18.5	<1.0	1	<3.0	<1.0	--
B-1	8/23/2012	606	330	890	759	5.6	6.3	26.9	<1.0	--
B-1	11/6/2012	2,140	190	140	257	<5.0	6.7	<15.0	<5.0	--
B-1	1/29/2013	310	1,700	<480	13.9	<1.0	3.2	<3.0	<1.0	--
B-1	4/30/2013	<100	<200	<200	8.3	<1.0	<1.0	<3.0	<1.0	--
B-1	8/13/2013	307	2,500	2,800	283	1.7 J	1.4	5.3	<1.0	--
B-1	11/19/2013	196 J	<400	<400	56.8	2.4	3.7	<6.0	<2.0	--
B-1	2/5/2014	226 J	<400	<400	127	<2.0	2.1	<6.0	<2.0	--
B-1	5/6/2014	<50	<50	<29	2.2	<0.22	<0.33	<0.81	<0.34	--
B-2	9/18/1997	1,980,000	74,200	7,890	11,200	10,600	1,310	22,200	--	--
B-2	4/29/1998	83,000	19,000	4,300	16,000	13,000	600	11,000	--	--
B-2	7/30/1999	66,000	18,000	<2.0	11,000	7,900	700	9,700	--	--
B-2	5/23/2000	59,000	32,000	<5.0	16,000	6,200	670	9,300	--	--
B-2	5/24/2001				LPH Encountered					
B-2	6/5/2002				LPH Encountered					
B-2	11/25/2002	60,500	13.2	<0.5	9,850	1,780	1,280	9,220		
B-2	5/29/2003	59,000	36,000	2,700J	8,800	2,200	900	9,600	--	--
B-2	6/15/2004	57,000	68,000	<9,700	8,700	510	1,300	8,700	--	--
B-2	6/20/2005				LPH Encountered					
B-2	6/6/2006				LPH Encountered					
B-2	10/23/2006	47,000	10,700	<180	7,120	179	289	5,280	--	--
B-2	3/14/2007	40,700	11,900	<370	7,740	138	280	6,150	--	--
B-2	9/11/2007	35,600	8,190	<103	7,760	71.1	635	4,670	--	--
B-2	6/4/2008	30,300	5,450	369J	5,980	45.8	539	3,240	--	--
B-2	8/27/2008	22,200 <sup>1</sup>	4,820 <sup>1,3</sup>	<100 <sup>1,7</sup>	4,280 <sup>1</sup>	47.8 <sup>1</sup>	243 <sup>1</sup>	2,270 <sup>1</sup>	4.1 <sup>1</sup>	<74.4 <sup>1</sup>
B-2 (DUP)	8/27/2008	22,100	3,340	129J	4,030	42.2	277	2,360	--	--
B-2	3/24/2010	32,000	2,430	<385	5,190	33.8	203	2,810	6.3	<250
B-2	8/27/2010	12,300	3,240	<396	5,250 E	47.4	284	2,110	10.2	<250
B-2	2/10/2011	13,800	3200J	<377	5,010	29	269	1,450	9	--
B-2	5/18/2011	16,500	--	--	4,830	27.8	258	1,000	17.3	--
B-2	8/16/2011	16,900 J	1,300	<380	5,800 J	25.2	254 J	909 J	16.6	--
B-2	3/1/2012	11,700	1,800	<380	1,400	7.8	78.8	499	4.6	--
B-2	8/27/2012	9,450 <sup>10</sup>	1,600	<380	6,440	21.5	306	882	12.4	--
B-2	2/4/2013	5,150	2,400	<420	1,420	<10.0	70.3	222	<10.0	--
B-2	8/21/2013	9,000	3,700	<420	7,670 J	18.5 J	286 J	293 J	14.7 J	--
B-2	2/6/2014	8,820	2,500	<400	4,850	<20.0	216	205	<20.0	--
B-3	5/24/2001				LPH Encountered					
B-3	6/5/2002				LPH Encountered					
B-3	11/25/2002	--	--	--	--	--	--	--	--	--
B-3	5/27/2003				LPH Encountered					
B-3	6/15/2004				LPH Encountered					
B-3	6/20/2005				LPH Encountered					
B-3	6/6/2006				LPH Encountered					
B-3	10/23/2006				LPH Encountered					
B-3	3/14/2007				LPH Encountered					
B-3	9/11/2007				LPH Encountered					
B-3A	6/4/2008	200,000	8,410	275J	40,800	38,800	2,840	16,400	--	--
B-3A	8/27/2008	171,000 <sup>1</sup>	11,200 <sup>1,3</sup>	790 <sup>1</sup>	47,500 <sup>1</sup>	34,000 <sup>1</sup>	2,470 <sup>1</sup>	15,800 <sup>1</sup>	93.6 <sup>1</sup>	<74.4 <sup>1</sup>
B-3A	3/24/2010	153,000	9,850	<381	42,000	48,000	3,400	20,300	94.2	<250
B-3A	8/25/2010				LPH Encountered					
B-3A	5/18/2011	155,000 J	2,300	<380	30,300 J	29,000 J	2,410 J	14,900 J	60 J	--
B-3A	8/15/2011	117,000	1,300	<380	41,400	29,800	2,090	11,500	70 J	--
B-3A	2/28/2012	153,000 J	10,000	1,600	32,900 J	33,500	4,010 J	17,300 J	67.2 J	--
B-3A	8/29/2012	114,000 <sup>10</sup>	2,700	<380	19,100	19,800	2,030	12,100	63.5	--
B-3A	2/4/2013	141,000	5,500	<420	32,400	32,100	2,260	14,800	<100	--
B-3A	8/13/2013	175,000	10,000	890	23,200	19,400	1,730	11,200	<200	--
B-3A	2/5/2014	200,000	3,200	<400	28,400	28,300	2,790	18,400	<50.0	--
B-3A	11/18/2016	88,200	9,500	<380	30,600	7,000	2,700	18,500	---	---
B-3A	5/25/2017	108,000	5,900	<400	28,600	2,980	2,760	20,500	---	---
B-3A	12/14/2017	71,000	14,400 J	<400 J	11,100	326	751	19,100	---	---
B-3A	3/1/2018	81,300	31,200	700	6,140	247	727	15,000	---	---

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES		
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --	
B-4	9/18/1997	1,170,000	99,600	<20,500	2,590	8,520	4,340	26,600	--	--	
B-4	7/29/1999	70,000	90,000	<20,000	1,800	1,600	2,300	13,000	--	--	
B-4	5/23/2000	76,000	51,000	<20,000	1,500	3,500	2,600	13,000	--	--	
B-4	5/23/2001	52,000	49,000	<20,000	600	2,300	2,500	10,000	--	--	
B-4	6/5/2002				LPH Encountered						
B-4	11/25/2002	41,700	5.46	<0.5	519	295	2,180	10,500	--	--	
B-4	5/29/2003	38,000	34,000	5,200J	280	570	1,400	5,900	--	--	
B-4	6/15/2004				LPH Encountered						
B-4	6/20/2005				LPH Encountered						
B-4	6/6/2006				LPH Encountered						
B-4	10/23/2006				LPH Encountered						
B-4	3/14/2007				LPH Encountered						
B-4	9/11/2007	22,100	3,460	48.5J	543	67.9	1,520	3,640	--	--	
B-4	6/3/2008	30,200	3,560	217	336	258	1,260	4,590	--	--	
B-4	8/27/2008	25,200 <sup>1</sup>	3,450 <sup>1,3</sup>	199 <sup>1</sup>	604 <sup>1</sup>	192 <sup>1</sup>	1,130 <sup>1</sup>	4,630 <sup>1</sup>	<0.42 <sup>1</sup>	<74.4 <sup>1</sup>	
B-4	3/22/2010				LPH Encountered						
B-4	8/25/2010				LPH Encountered						
B-4	5/18/2011	33,100	3,900	520	357	164	1,450	2,270	<1.0	--	
B-4	8/16/2011	19,800	7,000	670	397	114	1,060	1,440	<1.0	--	
B-4	2/23/2012	7,310	1,500	<380	159	10.9	169	544	<1.0	--	
B-4	8/29/2012	14,600 <sup>10</sup>	1,300	<400	240	80.2	470	1,230	<1.0	--	
B-4 (DUP)	8/29/2012	14,500 <sup>10</sup>	7,400	1,400	226	54.6	423	1,090	<1.0	--	
B-4	2/4/2013	9,210	5,800	430	322	17.6	470	363	<5.0	--	
B-4	8/21/2013	19,300	5,500	450	466 J	51 J	1,010 J	1,510 J	<5.0 J	--	
B-4	2/11/2014	17,200	3,800	<400	110 J	8.6 J	218 J	229 J	<1.0	--	
B-4	11/17/2016	7,270	7,100	<360	213	<10.0	288	<30.0	---	---	
B-4	12/14/2017	4,600	28,500	1,200	12.5	1.3	117	6.3	---	---	
B-4	3/1/2018	2,780	13,500	540	34.5	<1.0	90.7	5.3	---	---	
B-4	8/29/2018	4,870	10,600	810	133	5.4	164	6.7	---	---	
B-5	9/17/1997	38,900	28,100	8,980	2,810	3,750	631	5,180	--	--	
B-5	4/29/1998	28,000	81,000	17,000	1,600	1,100	460	4,600	--	--	
B-5	7/29/1999	21,000	18,000	<2,000	1,200	240	330	2,600	--	--	
B-5	5/23/2000	11,000	15,000	4,000J	690	59	230	960	--	--	
B-5	5/23/2001	10,000	13,000	3,500J	2,000	120	320	2,100	--	--	
B-5	6/5/2002	4,300	16,000	4,800J	940	23	230	560	--	--	
B-5	11/25/2002	2,270	1.06	<0.5	126	4.31	37.4	67.4	--	--	
B-5	5/29/2003	3,300	4,300	1,600J	440	26	260	260	--	--	
B-5	6/15/2004	2,600	100,000	25,000	830	23	110	310	--	--	
B-5	6/22/2005	980J	36,000	17,000J	630	6.7	70	140	--	--	
B-5	6/6/2006	4,540j	2,860	271u	944	14.4	214	507	--	--	
B-5	10/23/2006	9,010	6,440	605	1,950	23.8	372	904	--	--	
B-5	3/14/2007	11,000	3,100	339	1,790	21.4	494	909	--	--	
B-5 (DUP)	3/14/2007	10,500	3,500	475	1,920	21.5	497	914	--	--	
B-5	9/11/07	2,740	5,580	1,530	689	9.89	72.2	191	--	--	
B-5	6/3/2008	12,400	2,640	648	2,480	24.8	311	656	--	--	
B-5	8/27/2008	6,990 <sup>1</sup>	5,700 <sup>1,4</sup>	909 <sup>1</sup>	1,330 <sup>1</sup>	14.2 <sup>1</sup>	103 <sup>1</sup>	180 <sup>1</sup>	<0.42 <sup>1</sup>	<74.4 <sup>1</sup>	
B-5	3/24/2010	8,510	2,260	<381	1,740	34.3	1,720	530	1.8	<250	
B-5	8/25/2010				LPH Encountered						
B-5	8/16/2011	10,400	7,300	850	1,240	21.1	815	171	<1.0	--	
B-5	2/29/2012	17,700	20,000	1,700	2,720	23.3	1,440	261	<1.0	--	
B-5	9/5/2012	9,590 <sup>10</sup>	22,200	1,700	772	7.3	149	71.4	<1.0	--	
B-5	2/4/2013	4,480	2,100	<440	596	<5.0	72	19.1	<5.0	--	
B-5	8/21/2013	4,520	4,800	630	318 J	<5.0 J	67.1 J	<15.0 J	<5.0 J	--	
B-5	2/6/2014	4,850	7,900	1,000	442	<5.0	88	<15.0	<5.0	--	
B-6	5/17/1996	--	--	1,230	6.86	6.6	2.19	13.1	--	--	
B-6	9/17/1997	194,000	102,000	61,700	2,850	7,070	1,270	7,860	--	--	
B-6	4/29/1998	160,000	51,000	6,900	7,500	16,000	2,600	18,000	--	--	
B-6	7/29/1999	97,000	23,000	<10,000	8,300	13,000	2,200	13,000	--	--	
B-6	5/24/2001	69,000	44,000	25,000	6,900	4,300	980	7,200	--	--	
B-6	6/5/2002				LPH Encountered						
B-6	11/26/2002	43,000	5.31	2.51	5,230	5,410	525	5,460	--	--	
B-6 (DUP)	11/26/2002	43,500	7.04	3.63	4,850	5,010	464	5,430	--	--	

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol
B-6	5/29/2003	35,000	7,700	4,500J	4,600	4,000	450	4,800	--	--
B-6	6/15/2004	48,000	210,000	100,000	5,900	8,500	760	6,400	--	--
B-6	6/22/2005	22,000	100,000	45,000	3,800	3,600	200	2,200	--	--
B-6	6/6/2006	33,500	5,420	528	2,540	4,560	664	4,590	--	--
B-6	10/23/2006	37,400	7,050	371J	2,660	5,280	566	4,650	--	--
B-6	3/14/2007	41,200	4,740	532	1,780	5,230	603	7,220	--	--
B-6	9/11/2007	38,900	6,270	1,030	2,560	3,370	494	5,460	--	--
B-6	6/4/2008	52,000	7,350	4,460	5,320	8,210	483	7,740	--	--
B-6	8/27/2008	37,600 <sup>1</sup>	14,800 <sup>1,3</sup>	17,400 <sup>1,2</sup>	3,670 <sup>1</sup>	6,140 <sup>1</sup>	604 <sup>1</sup>	4,820 <sup>1</sup>	0.77 <sup>1</sup>	<74.4 <sup>1</sup>
B-6	3/23/2010	60,000	1,380	<381	8,200	10,200	1,300	10,600	4.1	<250
B-6	8/27/2010	49,400	2,710	528	4,800	7,280	1,140	8,490	<1.0	<250
B-6	2/10/2011	63,900	3,050	1,020	2,310	4,700	717	6,410	<1.0	--
B-6	5/24/2011	78,000	1,500	<390	6,000	9,030	1,900	10,800	<1.0	--
B-6	8/15/2011	38,100	3,000	1,800	6,280 J	5,830 J	740 J	4,580 J	3	--
B-6	11/23/2011	61,100	3,100	1,400	1,300	3,560	1,430	9,180	<1.0	--
B-6	2/29/2012	45,200	1,700	850	7,120	10,400	1,830	13,500	<1.0	--
B-6	5/10/2012	39,600	2,500	810	4,250	5,190	670	8,410	<50.0	--
B-6	8/27/2012	39,200 <sup>10</sup>	1,500	430	5,080	4,060	671	7,380	2.1	--
B-6	11/16/2012	28,300	6,600	2,000	1,930	924	201	6,340	<20	--
B-6	2/7/2013	29,600	7,800	<450	1,900	1,080	224	6,000	<20.0	--
B-6	4/30/2013	28,000	510	<200	2,150	1,550	302	6,570	<25.0	--
B-6	8/20/2013	19,900	2,600	910	1,900	359	171	3,970	<10.0	--
B-6 (DUP)	8/20/2013	19,500	2,000	640 J	1,770	356	133	3,690	<20.0	--
B-6	11/19/2013	30,400	1,300	<400	6,490 J	1,920	319	5,820	<10.0	--
B-6	2/11/2014	28,600	1,100	440	3,390	1,740	298	5,770	<10.0	--
B-6	5/1/2014	26,800	1,200	2,200	3,590	1,280	321	5,630	<1.7	--
B-6	11/17/2016	28,800	2,900	1,200	6,790	59.7	1,440	4,770	---	---
B-6	5/25/2017	16,000	1,700	530	3,690	19.5	816	2,280	---	---
B-6	12/14/2017	2,540	2,000	470	414	<5.0	111	83.7	---	---
B-6	3/1/2018	2,230	1,400	<390	289	3.1	119	111	---	---
B-6	8/29/2018	4,480	4,600	1,500	886	9.5	242	77.1	---	---
D-1	4/14/1993	190	--	--	200	0.62	13	1.2	--	--
D-1	12/15/1993	83	--	--	7.1	<0.50	<0.50	1.3	--	--
D-1	11/4/1994	52	--	--	2	<0.50	<0.50	<1.0	--	--
D-1					Undocumented - Well Was Abandoned					
D-1	11/26/2002	185	0.434	1.01	<0.5	1.12	<0.5	2.16	--	--
D-1R	11/17/2011	192	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-1R	2/21/2012	436	77	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-1R	5/11/2012	176	130	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-1R	8/31/2012	224	80	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-1R	11/9/2012	<100	<130	<110	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-1R	2/1/2013	220	<450	<450	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-1R	4/30/2013	262	<200	<200	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-1R	8/20/2013	226	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-1R	11/19/2013	199	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-1R	2/7/2014	388	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-1R	5/1/2014	460	<48	<28	<0.15	<0.11	<0.16	<0.40	<0.17	--
D-1R	8/12/2014	324	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-1R	11/25/2014	196	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-1R (DUP)	11/25/2014	196	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-1R	2/13/2015	341	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	---
D-1R	11/16/2016	319	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
D-1R	2/16/2017	279	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
D-1R	5/24/2017	541	<530	<530	<1.0	<1.0	<1.0	<3.0	---	---
D-1R	9/28/2017	683	<430	<430	<1.0	<1.0	<1.0	<3.0	---	---
D-1R	12/14/2017	593	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
D-1R	3/1/2018	690 J	450	<370	<1.0 J	<1.0 J	<1.0 J	<3.0 J	---	---
D-1R	6/27/2018	818	630	<420	<1.0	<1.0	<1.0	<3.0	---	---
D-1R	8/28/2018	651	470	<390	<1.0	<1.0	<1.0	<3.0	---	---
D-1R	12/19/2018	539	<430	<430	<1.0	<1.0	<1.0	<3.0	---	---
D-1R (DUP)	12/19/2018	585	<430	<430	<1.0	<1.0	<1.0	<3.0	---	---
D-1R	3/14/2019	778	<430	<430	<1.0	<1.0	<1.0	<3.0	---	---
D-1R	9/25/2019	345	<417	<417	<1.0	<1.0	<1.0	<3.0	---	---

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
D-1R	2/26/2020	565	<435 J	<435 J	<1.0	<1.0	<1.0	<3.0	---	---
D-1R	9/17/2020	268	<385	<385	<1.00	<1.00	<1.00	<3.00	---	---
D-1R	3/18/2021	534	<392 J	<392 J	<1.00	<1.00	<1.00	<3.00	---	---
D-1R	9/16/2021	300	340	<94	<0.50	<1.0	<1.0	<2.0	---	---
D-1R	3/4/2022	340	310	<94	<0.50	<1.0	<1.0	<2.0	---	---
D-1R (DUP)	3/4/2022	340	290	<96	<0.50	<1.0	<1.0	<2.0	---	---
D-2	11/4/1994	<50	--	--	3.0	<0.50	<0.50	<1.0	--	--
D-2		Undocumented - Well Was Abandoned								
D-4	11/4/1994	450	--	--	<0.50	2.1	0.78	4.7	--	--
D-4	6/21/2005	Insufficient Groundwater to Sample								
D-4	6/7/2006	101	2,760	2,840	<0.290	<0.280	<0.340	<0.820	--	--
D-4	3/15/2007	92.3J	--	--	0.430J	0.460J	0.430J	0.750J	--	--
D-4	9/11/2007	Insufficient Groundwater to Sample								
D-4	6/2/2008	Insufficient Groundwater to Sample								
D-4	8/26/2008	76.2 <sup>1</sup>	268 <sup>1.5</sup>	441 <sup>1.5</sup>	<0.27 <sup>1</sup>	1.6 <sup>1</sup>	0.58 <sup>1</sup>	1.45 <sup>1</sup>	<0.42 <sup>1</sup>	<74.4 <sup>1</sup>
D-4	3/23/2010	Insufficient Groundwater to Sample								
D-4	8/25/2010	Insufficient Groundwater to Sample								
D-4	5/26/2011	<50.0	1,400	1,800	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-4R	11/15/2011	<50.0 J	<76	<380	<1.0 J	<1.0 J	<1.0 J	<3.0 J	<1.0 J	--
D-4R	2/22/2012	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-4R	5/9/2012	<100	110	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-4R	8/23/2012	<50.0	<79	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-4R	11/6/2012	<100	<110	<110	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-4R	1/29/2013	<100	<450	<450	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-4R (DUP)	1/29/2013	<100	<450	<450	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-4R	4/29/2013	<100	<200	<200	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-4R	8/13/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-4R	11/18/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-4R	2/4/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-4R	4/28/2014	129	48	<28	<0.15	<0.11	<0.16	<0.40	<0.17	--
D-4R	11/16/2016	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
D-4R	2/16/2017	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
D-4R	5/24/2017	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
D-4R	9/27/2017	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	---	---
D-4R	12/13/2017	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
D-4R	3/1/2018	<100	<370	<370	<1.0	<1.0	<1.0	<3.0	---	---
D-4R	6/27/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
D-4R	8/29/2018	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
D-4R	12/19/2018	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
D-5	12/15/1993	260	--	--	14	<0.50	1.7	2.1	--	--
D-5	11/4/1994	170	--	--	15	3	<0.50	4	--	--
D-5	9/11/2007	Insufficient Groundwater to Sample								
D-5	6/2/2008	Insufficient Groundwater to Sample								
D-5	8/25/2008	Insufficient Groundwater to Sample								
D-5	3/23/2010	Insufficient Groundwater to Sample								
D-5	8/25/2010	Insufficient Groundwater to Sample								
D-5R	11/15/2011	160	<77	<380	1	1.4	<1.0	4.6	<1.0	--
D-5R	2/22/2012	74.4 J	<77	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-5R	5/9/2012	380	96	<410	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-5R	8/23/2012	55.2	<82	<410	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-5R	11/6/2012	427	<110	<110	<1.0	<1.0	<1.0	1.0	<1.0	--
D-5R	1/29/2013	128	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-5R	4/29/2013	<100	<200	<200	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-5R	8/13/2013	103	<410	<410	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-5R	11/18/2013	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-5R (DUP)	11/18/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-5R	2/4/2014	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	<1.0	--
D-5R	4/28/2014	<50	48	<28	<0.15	<0.11	<0.16	<0.40	<0.17	--
D-5R	11/17/2016	136	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
D-5R	11/17/2016	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	---	---



Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPH <sub>g</sub> 800	TPH <sub>d</sub> 500	TPH <sub>o</sub> 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
D-5R	2/16/2017	<100	<360	<360	8.2	<1.0	<1.0	<3.0	---	---
D-5R	5/24/2017	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	---	---
D-5R	9/27/2017	253	<410	<410	<1.0 J	<1.0 J	<1.0 J	<3.0 J	---	---
D-5R	12/13/2017	191	<480	<480	<1.0	<1.0	<1.0	<3.0	---	---
D-5R	2/28/2018	<100	<380	<380	<1.0 J	<1.0 J	<1.0 J	<3.0 J	---	---
D-5R	6/27/2018	149	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
D-5R (DUP)	6/27/2018	142	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
D-5R	8/29/2018	306	<390	<390	<1.0	<1.0	<1.0	4.1	---	---
D-5R (DUP)	8/29/2018	296	<440	<440	<1.0	<1.0	<1.0	4.2	---	---
D-5R	12/18/2018	168	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
D-6	4/30/1998	<50	14,000	86,000	11	2	0.2	1.4	--	--
D-6	5/23/2000	59J	<2,000	<5,000	200	5.6	1.0J	3.6	--	--
D-6	5/23/2001	10J	1,400	3,800	200	9.1	4.2	5.2	--	--
D-6	6/5/2002	87J	900	2,600	120	9.6	2.3	5.8	--	--
D-6	11/26/2002	385	<0.25	<0.5	121	10.7	1.20	5.59	--	--
D-6	5/27/2003	<48	7,600J	37,000	7.2	1.1	0.3J	0.9J	--	--
D-6	6/15/2004	59J	1,300J	5,800	78.0	4.3	1.7	3.6	--	--
D-6	6/22/2005	160J	3,700	4,000J	130	14.0	2.5	8.4	--	--
D-6	6/7/2006	342	1,580	1,050	22.2	0.960J	0.580J	<0.820	--	--
D-6	10/23/2006	445	1,490	4,160	111	19.0	4.97	22.7	--	--
D-6	3/14/2007	487	792	604	150	3.32	2.24	3.12	--	--
D-6	9/11/2007	425	--	--	160	6.32	2.56	5.78	--	--
D-6	6/3/2008	497	391	520	100	2.38	0.620J	1.64J	--	--
D-6	8/27/2008	559 <sup>1</sup>	1,840 <sup>1,2</sup>	4,810 <sup>1,3</sup>	145 <sup>1,6</sup>	4.09 <sup>1</sup>	1.65 <sup>1</sup>	3.62 <sup>1</sup>	0.6 <sup>1</sup>	<74.4 <sup>1</sup>
D-6	3/23/2010	<79.5	<76.2	<381	268	4.3	1.8	<3.0	<1.0	<250
D-6	8/27/2010	71.4	<78.4	<392	144	4.1	1.6	<3.0	<1.0	<250
D-6	2/10/2011	50	89.1	<385	91	1.8	<1.0	<3.0	<1.0	--
D-6	5/25/2011	<50.0	1,300	250	13	<1.0	<1.0	<3.0	<1.0	--
D-6	8/16/2011	<50.0	<76	<380	42.5	1.2	<1.0	<3.0	<1.0	--
D-6	11/22/2011	<50.0	<76	<380	29.5	<1.0	<1.0	<3.0	<1.0	--
D-6	3/1/2012	<50.0	<77	<380	21.9	<1.0	<1.0	<3.0	<1.0	--
D-6	5/10/2012	139	95	<380	28.2	<1.0	<1.0	<3.0	<1.0	--
D-6 (DUP)	5/10/2012	141	<120	<620	25.3	<1.0	<1.0	<3.0	<1.0	--
D-6	8/27/2012	75.2	<84	<420	17.0	2.1	1.4	8.8	<1.0	--
D-6	11/12/2012	<100	<110	<110	14.3J	<1.0	<1.0	<3.0	<1.0	--
D-6 (DUP)	11/12/2012	<100	<120	<120	15.3	<1.0	<1.0	<3.0	<1.0	--
D-6	2/1/2013	<100	<420	<420	2.5	<1.0	<1.0	<3.0	<1.0	--
D-6	8/20/2013	<100	<420	<420	7.1	<1.0	<1.0	<3.0	<1.0	--
D-6	11/19/2013	<100	<400	<400	4.9	<1.0	<1.0	<3.0	<1.0	--
D-6	2/11/2014	<100	<400	530	1.7	<1.0	<1.0	<3.0	<1.0	--
D-6	5/1/2014	<50	<52	890	1.6	<0.11	<0.16	<0.40	<0.17	--
D-7	4/14/1993	77	--	--	1,300	21	420	2,200	--	--
D-7	11/4/1994	210	--	--	88	2.1	4.7	13	--	--
D-7	9/17/1997	453	7,990	22,400	150	13.5	7.04	35.5	--	--
D-7	4/30/1998	170	3,300	6,200	63	5.0	0.9	7	--	--
D-7	5/23/2000	120J	4,600J	19,000	480	7.2	1.6	13	--	--
D-7	5/23/2001	130J	4,100J	17,000	410	8.7	1.6	18	--	--
D-7	6/4/2002	70J	9,300	31,000	180	6.7	0.72J	8.1	--	--
D-7	11/26/2002	<50	0.435	1.26	2.82	0.614	<0.5	1.12	--	--
D-7	6/15/2004	88J	15,000	51,000	190	18.0	0.5J	3.8	--	--
D-7	6/22/2005	140J	11,000	36,000	83	5.7	0.9J	9.0	--	--
D-7	6/7/2006	281	3,760	9,490	70.4	2.94	<0.340	<0.820	--	--
D-7	10/24/2006	56.2J <sub>u</sub>	913J	37,200	6.98	0.630J	<0.230	<0.440	--	--
D-7	3/14/2007	76.3J	762	2,830	5.57	0.580 J	<0.420	<0.450	--	--
D-7	9/12/2007	70.7J	897	3,130	10.6	1.39	<0.420	<0.450	--	--
D-7	6/3/2008	452	1,760	3,220	33.4	0.470J	<0.240	2.33J	--	--
D-7	8/27/2008	762 <sup>1</sup>	-- <sup>1</sup>	-- <sup>1</sup>	96.6 <sup>1</sup>	4.96 <sup>1</sup>	1.04 <sup>1</sup>	7.08 <sup>1</sup>	<0.42 <sup>1</sup>	<74.4 <sup>1</sup>
D-7	3/23/2010	176	<76.2	<381	278	5.4	1.1	10.3	<1.0	<250
D-7	8/27/2010	84.2	--	--	156	1.1	<1.0	6.8	<1.0	<250
D-7	2/9/2011	65.7	554	3,470	20.2	2	<1.0	<3.0	<1.0	--
D-7	8/16/2011	<50.0	200	1,500	75	<1.0	<1.0	<3.0	<1.0	--
D-7	2/22/2012	<50.0	<77	<380	3.1	<1.0	<1.0	<3.0	<1.0	--
D-7	8/27/2012	109	2,100	10,600	150	3.6	2.0	12.8	<1.0	--



Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
HA-2	11/13/2012	43,200	5,100	660	7,280	2,190	2,290	9,400	<50.0	--
HA-2	2/7/2013	63,700	5,300	<430	5,920	2,810	2,230	13,300	<50.0	--
HA-2	5/2/2013	73,700	3,400	470	5,760	2,480	2,700	15,000	<50.0	--
HA-2	8/23/2013	56,400	1,700	<480	5,210	1,040	2,210	6,670	<50.0	--
HA-2	11/21/2013	57,100	2,200 J	<400	5,440	1,010	2,460	8,710	<50.0	--
HA-2	2/10/2014	72,400	3,000	650	5,050	802	2,500	12,300	<50.0	--
HA-2	5/2/2014	67,000	1,800	<29	4,850	794	2,690	14,400	<8.4	--
HA-3	4/14/1993	770	--	--	73	12	6.2	37	--	--
HA-3	12/15/1993	140	--	--	19	0.58	1.5	3.8	--	--
HA-3	11/4/1994	380	--	--	26	6.0	2.0	8.7	--	--
HA-3	9/18/1997	<50	2,350	1,280	<0.50	<0.50	<0.50	<1.0	--	--
HA-3	4/30/1998	310	1,200	1,400	84	9.0	2.0	7.0	--	--
HA-3	5/23/2000	480	590	1,100	87	8.1	2.2	7.4	--	--
HA-3	5/23/2001	330	--	--	37	0.63J	0.42J	3.5	--	--
HA-3	6/4/2002	480	5,900	710J	120	16.0	4.2	23.0	--	--
HA-3	5/27/2003	<24	--	--	230	4.6J	3.8J	8.9J	--	--
HA-3	6/22/2005	63J	--	--	140	0.7J	1.4	3.9	--	--
HA-3	6/7/2006	531	755	470	80.8	6.59	0.620J	0.880J	--	--
HA-3	3/15/2007	3,400	1,050	547	569	7.16	6.50	12.4	--	--
HA-3	9/12/2007				Insufficient Groundwater to Sample					
HA-3	6/2/2008				Insufficient Groundwater to Sample					
HA-3	8/25/2008				Insufficient Groundwater to Sample					
HA-3	3/25/2010				Insufficient Groundwater to Sample					
HA-3	8/25/2010	383	--	--	569 C0,E	11.4	13.5	41.6	<1.0	<250
HA-3	2/9/2011	238	591	<851	113	2.1	2.4	8.3	<1.0	--
HA-3	5/17/2011	145 J	<480	<2400	121 J	2.2 J	2.2 J	7.2 J	<1.0 J	--
HA-3	8/11/2011	124	--	--	245	3.2	3.2	6.2	<1.0	--
HA-3	11/18/2011	51.4 J	<120	<590	20.6 J	<1.0 J	<1.0 J	3.1 J	<1.0 J	--
HA-3	2/24/2012	<50.0	<83	<420	1.1	<1.0	<1.0	<3.0	<1.0	--
HA-3	5/16/2012	152	<130	<630	8.8	3	2.4	16.8	<1.0	--
HA-3	8/29/2012	138	--	--	111	10.3	3.7	11.4	<1.0	--
HA-3	11/13/2012	1,880	<130	<130	2.0	6.3	<1.0	<3.0	<1.0	--
HA-3	2/7/2013	272	<430	<430	9.4	60.2	1.7	9.7	<1.0	--
HA-3	5/2/2013	149	<200	230	16.8	19	1.4	6.9	<1.0	--
HA-3	8/23/2013	<200	<400	<400	201	7.2 J	<5.0	<15.0	<5.0	--
HA-3	11/21/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
HA-3	2/10/2014	315	<400	<400	4.5 J	5.3 J	10.2 J	67.8 J	<1.0 J	--
HA-3	5/2/2014	149	<50	<29	3.6	<0.22	4.2	24.7	<0.34	--
HA-4	4/14/1993	230	--	--	<0.50	1.7	4.5	12	--	--
HA-4	12/15/1993	<50	--	--	<0.50	<0.50	<0.50	<1.0	--	--
HA-4	11/4/1994	<50	--	--	<0.50	<0.50	<0.50	<1.0	--	--
HA-4	9/18/1997	3,980	610	797	193	280	68.6	503	--	--
HA-4	4/30/1998	<250	530	1,600	<1.0	<1.0	<1.0	<3.0	--	--
HA-4	5/23/2000	<48	420J	1,500	<0.2	<0.2	<0.2	<0.6	--	--
HA-4	5/23/2001	<48	550	1,900	<0.2	7.60	<0.2	<0.6	--	--
HA-4	6/4/2002	<48	230J	270J	0.22J	0.33J	<0.2	1.1J	--	--
HA-4	5/27/2003	<48	410	720	<0.2	2.3	<0.2	<0.6	--	--
HA-4	6/16/2004	70J	470	590J	<0.2	4.7	<0.2	<0.6	--	--
HA-4	6/22/2005	<48	560	1,000	<0.2	0.6J	<0.2	1.0J	--	--
HA-4	10/24/2006	275	325	672	60.6	21.0	2.92	19.2	--	--
HA-4	3/15/2007	66.5J	519	155	<0.330	<0.420	<0.420	<0.450	--	--
HA-4	9/12/2007	84.9J	--	--	<0.330	<0.420	<0.420	0.770J	--	--
HA-4	6/4/2008	131	94.0J	204	0.920J	2.95	1.65	7.44	--	--
HA-4	8/26/2008	<43 <sup>1</sup>	188 <sup>1,2</sup>	421 <sup>1,2</sup>	<0.27 <sup>1</sup>	<0.28 <sup>1</sup>	<0.24 <sup>1</sup>	<0.86 <sup>1</sup>	<0.42 <sup>1</sup>	<74.4 <sup>1</sup>
HA-4	3/25/2010				Insufficient Groundwater to Sample					
HA-4	8/25/2010	<50.0	--	--	1.6	<1.0	<1.0	<3.0	<1.0	<250
HA-4	2/8/2011	61.8	114	<404	1.4	1.3	1.8	14.7	<1.0	--
HA-4	5/17/2011	<50.0 J	<77.0	<380	<1.0 J	<1.0 J	<1.0 J	<3.0 J	<1.0 J	--
HA-4	8/11/2011	<50.0	--	--	--	--	--	--	--	--
HA-4	11/18/2011	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
HA-4	2/24/2012	<50.0	<77	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
HA-4	5/16/2012	215	<85	<430	<1.0	49.7	<1.0	<3.0	<1.0	--
HA-4	8/29/2012	<50.0	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
HA-4	11/15/2012	<100	<110	<110	<1.0	<1.0	<1.0	<3.0	<1.0	--
HA-4	2/7/2013	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	<1.0	--
HA-4	5/2/2013	121	<200	210	<1.0	43.7	<1.0	<3.0	<1.0	--
HA-4	8/23/2013	<100	<400	<400	<1.0	3.7 J	<1.0	<3.0	<1.0	--
HA-4	11/21/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
HA-4	2/10/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
HA-4	5/7/2014	963	<28	<48	<0.30	297	<0.33	<0.81	<0.34	--
HA-5	4/14/1993	<b>3,500</b>	--	--	<b>22</b>	2.2	84	210	--	--
HA-5	12/15/1993	710	--	--	<b>17</b>	18	1.2	38	--	--
HA-5	11/4/1994	250	--	--	<b>14</b>	1.5	1.6	2.9	--	--
HA-5	9/18/1997	349	<b>1,790</b>	<b>969</b>	<b>18.50</b>	2.45	1.89	6.8	--	--
HA-5	5/1/1998	<b>950</b>	<b>640</b>	<b>840</b>	<b>15</b>	3	7	5	--	--
HA-5	7/29/1999	480	240J	<200	<b>17</b>	3	0.4J	9	--	--
HA-5	5/23/2000	410	380	<b>630</b>	<b>9.1</b>	2.6	2	5.5	--	--
HA-5	5/22/2001	480	290	<200	2.5	1.7	0.23J	3.0	--	--
HA-5	6/5/2002	<b>880</b>	260	110J	<b>30.0</b>	5.3	140	16.0	--	--
HA-5	11/19/2002	223	NA	NA	3.39	5.63	0.581	5.87	--	--
HA-5	11/25/2002	236	<0.25	<0.5	2.94	1.67	<0.5	4.22	--	--
HA-5 (DUP)	11/25/2002	243	<0.25	<0.5	2.78	1.51	<0.5	3.81	--	--
HA-5	1/14/2003	<b>14,300</b>	NA	NA	<b>3,380</b>	<b>2,870</b>	43.6	151	--	--
HA-5	2/24/2003	<b>65,000</b>	0.476	<0.5	<b>8,620</b>	<b>17,200</b>	685	<b>3,260</b>	--	--
HA-5	3/25/2003	<b>54,700</b>	0.388	<0.5	<b>6,550</b>	<b>14,700</b>	657	<b>2,900</b>	--	--
HA-5	4/18/2003	<b>66,600</b>	<0.25	<0.5	<b>7,550</b>	<b>16,800</b>	<b>857</b>	<b>3,960</b>	--	--
HA-5	5/28/2003	<b>21,000</b>	310	150J	<b>2,700</b>	<b>5,200</b>	350	<b>1,700</b>	--	--
HA-5	8/11/2003	<b>2,810</b>	0.512	<0.5	<b>659</b>	232	26.7	187	--	--
HA-5	3/15/2004	708	2.38	<0.5	<b>21.2</b>	1.38	41.5	6.55	--	--
HA-5	6/16/2004	570	<b>1,400J</b>	<1,000	3.0	1.2	3.1	25	--	--
HA-5	6/22/2004	178	<0.25	<0.5	2.85	<0.5	0.559	<1	--	--
HA-5	9/21/2004	409	4.17	<0.5	<b>9.76</b>	0.657	16.5	7.84	--	--
HA-5	12/21/2004	<50	<0.25	<0.5	0.567	<0.5	<0.5	<1	--	--
HA-5	3/22/2005	<100	<0.236	<0.473	<b>17.6</b>	<1	<1	<3	--	--
HA-5	6/20/2005	86J	<b>790</b>	<94	2.7	<0.2	<0.2	0.7J	--	--
HA-5	6/24/2005	124	1.18 (d)	<0.456	<1	<1	<1	<3	<1	--
HA-5	7/28/2005	<b>870</b>	360	<95	0.9	1.7	3.2	52	<0.3	--
HA-5	9/20/2005	140	85	<94	<b>6.9</b>	11	1.9	9.7	--	--
HA-5	11/30/2005	<48	95	<94	<0.5	<0.7	<0.8	<0.8	--	--
HA-5	2/28/2006	<48	100	<100	2	<0.7	<0.8	<0.8	<0.5	--
HA-5	5/16/2006	<48	<76	<95	1.9	<0.2	<0.2	<0.6	<5	--
HA-5	6/7/2006	173	205	171	0.570J	<0.280	<0.340	<0.820	--	--
HA-5	8/17/2006	100	190	<96	<b>5</b>	<0.7	<0.8	<0.8	<0.5	--
HA-5	10/24/2006	303	178	<35.8	<b>22.7</b>	3.42	1.72	2.92J	--	--
HA-5	11/21/2006	150	590	<96	<b>15</b>	<0.7	<0.8	4.0	<0.5	--
HA-5	2/20/2007	180	--	--	<b>5</b>	<0.7	2	<0.8	<0.5	--
HA-5	3/15/2007	133	454	<37.0	3.79	<0.420	0.770J	<0.450	--	--
HA-5	5/15/2007	110	260	<95	2	<0.7	<0.8	<0.8	<0.5	--
HA-5	9/11/2007	507	<b>525</b>	76.2J	<b>78.7</b>	5.24	9.22	16.2	--	--
HA-5	9/12/2007	720	<160	<200	<b>280</b>	23	34	100	<0.5	--
HA-5	11/27/2007	100	190	<95	<b>5</b>	<0.7	2	4	<0.5	--
HA-5	2/26/2008	77	100	<93	0.7	<0.7	<0.8	1	<0.5	--
HA-5	6/4/2008	<b>999</b>	185	116	4.66	2.74	30.9	8.96	--	--
HA-5	8/26/2008	<b>1,220</b> <sup>1</sup>	360 <sup>1,4</sup>	136 <sup>1,4</sup>	<b>24.7</b> <sup>1</sup>	11.5 <sup>1</sup>	5.64 <sup>1</sup>	31.4 <sup>1</sup>	<0.42 <sup>1</sup>	<74.4 <sup>1</sup>
HA-5	3/24/2010	162	<76.2	<381	<b>5.8</b>	1.4	<1.0	6.7	<1.0	<250
HA-5	8/27/2010	571	87.1	<392	<b>31.2</b>	8.3	61.8	37.8	<1.0	<250
HA-5	2/11/2011	130	<77.7	<388	<1.0	<1.0	<1.0	<3.0	<1.0	--
HA-5	8/12/2011	<50.0	<78	<390	<1.0	<1.0	<1.0	<3.0	<1.0	--
HA-5	2/23/2012	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
HA-5	8/23/2012	<50.0	<83	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
HA-5	1/30/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
HA-5	8/22/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
HA-5	2/7/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
HA-6	4/14/1993	<b>63,000</b>	--	--	<b>1,400</b>	<b>9,300</b>	<b>1,200</b>	<b>10,000</b>	--	--
HA-6	12/15/1993	<b>59,000</b>	--	--	<b>1,400</b>	<b>1,400</b>	<b>7,400</b>	<b>10,000</b>	--	--
HA-6	11/4/1994	<b>53,000</b>	--	--	<b>960</b>	<b>2,700</b>	<b>790</b>	<b>9,500</b>	--	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
HA-6	9/17/1997	43,100	25,100	<500	934	973	922	7,670	--	--
HA-6	5/1/1998	43,000	24,000	<5,000	1,100	1,200	1,300	8,700	--	--
HA-6	7/30/1999	47,000	16,000	<2,000	950	360	1,500	8,300	--	--
HA-6	5/22/2000	37,000	10,000	<4,000	870	430	1,500	6,800	--	--
HA-6	5/22/2001	38,000	14,000	<2,000	820	370	1,600	8,000	--	--
HA-6	6/5/2002	36,000	5,800	990J	650	210	1,700	7,100	--	--
HA-6	11/25/2002	25,600	1.43	<0.5	637	181	1,320	5,620	--	--
HA-6	5/28/2003	32,000	4,100	5,400J	590	210	1,200	5,900	--	--
HA-6	6/16/2004	52,000	41,000	<2,500	590	330	1,300	8,500	--	--
HA-6	6/20/2005	18,000	11,000	<960	330	150	690	2,800	--	--
HA-6	6/7/2006	18,600	3,700j	106j	345	189	1,040	2,900	--	--
HA-6	10/24/2006	19,000	2,670j	<71.4uj	422	172	948	2,570	--	--
HA-6	3/15/2007	17,700	3,290	<74.0	409	209	1,170	4,300	--	--
HA-6	9/11/2007	19,800	2,600	52.6	471	197	1,360	2,200	--	--
HA-6	6/3/2008	24,900	2,120	165	365	304	1,550	4,330	--	--
HA-6	8/26/2008	22,800 <sup>1</sup>	1,420 <sup>1,3</sup>	48.8 <sup>1</sup>	349 <sup>1</sup>	237 <sup>1</sup>	1,320 <sup>1</sup>	2,470 <sup>1</sup>	<0.42 <sup>1</sup>	<74.4 <sup>1</sup>
HA-6	3/24/2010	14,900	908	<381	330	184	1,450	2,790	<1.0	<250
HA-6	8/27/2010	9,630	789	<392	293	98.0	1,420	413	<1.0	<250
HA-6	2/10/2011	10,100	576	<377	118	71.1	423	882	<1.0	--
HA-6	5/26/2011	11,500	510	<380	149	77.4	389	570	<1.0	--
HA-6	8/12/2011	9,440	1,900	<380	89.8	77	551	337	<1.0	--
HA-6	11/22/2011	10,300	330	<390	119	97.9	731	457	<1.0	--
HA-6	2/23/2012	12,700	710	<380	153	155	1,160	1,490	<1.0	--
HA-6	5/11/2012	12,800	900	<420	130	149	1,100	1,530	<10.0	--
HA-6	8/23/2012	12,800 <sup>10</sup>	830	<420	157	132	1,380	933	<1.0	--
HA-6	11/8/2012	11,500	3,100	<100	151	115	907	1,010	<10	--
HA-6	1/30/2013	15,900	910	<430	140	148	1,140	1,520	<5.0	--
HA-6	5/3/2013	19,100	910	350	181	180	1,680	1,930	<10.0	--
HA-6	8/22/2013	11,000	900	<430	133	85.2	907	583	<1.0	--
HA-6	11/20/2013	14,300	770	<400	194	143	1,540 J	1,490	<5.0	--
HA-6	2/7/2014	20,200	1,200	<400	161	137	1,870	1,160	<10.0	--
HA-6	5/6/2014	13,700	900	<29	106	96.7	1,190	1,150	<1.7	--
HA-7	7/29/1999	17,000	16,000	<10,000	1,200	69	890	1,200	--	--
HA-7	5/22/2000	7,000	9,200	<4,000	460	31	510	580	--	--
HA-7	5/22/2001	4,700	7,100	<2,000	290	25	350	470	--	--
HA-7	6/5/2002	8,800	4,100	<470	1,500	73	760	1,000	--	--
HA-7	11/19/2002	5,510	NA	NA	587	31.3	259	324	--	--
HA-7	11/25/2002	7,840	2.67	<0.5	811	41.1	402	580	--	--
HA-7	1/14/2003	13,700	NA	NA	421	56.2	261	2,350	--	--
HA-7	5/28/2003	11,000	9,000	<960	1,000	100	920	1,300	--	--
HA-7	6/15/2004	8,500	3,400	<490	730	48	600	1,200	--	--
HA-7	6/20/2005	740	1,500	<200	170	5	84	18	--	--
HA-7	6/7/2006	<40	14,700	1,610	0.480J	<0.280	<0.340	<0.820	--	--
HA-7	10/24/2006	537	1,040j	408j	46.9	4.32	7.86	23.5	--	--
HA-7	3/15/2007	3,880	3,270	<181	385	30.0	658	166	--	--
HA-7	9/11/2007	9,440	4,300	<41.0	777	31.8	1,540	504	--	--
HA-7	6/3/2008	13,700	4,270	357	653	70.6	1,620	1,430	--	--
HA-7	8/26/2008	6,940 <sup>1</sup>	4,410 <sup>1,3</sup>	137 <sup>1</sup>	635 <sup>1</sup>	31.7 <sup>1</sup>	1,100 <sup>1</sup>	928 <sup>1</sup>	<0.42 <sup>1</sup>	<74.4 <sup>1</sup>
HA-7	3/24/2010	4,990	458	<392	529	28.4	771	1,050	<1.0	<250
HA-7	8/27/2010	7,120	455	<388	267	24.8	505	544	<1.0	<250
HA-7	2/11/2011	5,430	369	<377	114	17.7	500	401	<1.0	--
HA-7	5/25/2011	6,540	360	<380	150	22	369	349	<1.0	--
HA-7	8/15/2011	6,820	660	<380	225	22.9	567	377	<1.0	--
HA-7	11/22/2011	3,100	200	<400	86.1	7.8	160	198	<1.0	--
HA-7	2/27/2012	5,310	360	<380	193	25.6	813	509	<1.0	--
HA-7	5/11/2012	5,130	790	<380	145	19.9	520	419	<5.0	--
HA-7	8/27/2012	4,430 <sup>10</sup>	550	<400	178	15.2	335	264	<1.0	--
HA-7	11/12/2012	3,050	880	350	130	8.0	192	237	<1.0	--
HA-7	2/1/2013	4,220	1,400	<430	98.8	14.3	339	259	<2.0	--
HA-7	5/3/2013	8,320	670	300	142	21.3	647	570	<5.0	--
HA-7	8/23/2013	4,480 J	1,200	<390	181	12 J	283	204	<2.0	--
HA-7	11/20/2013	5,060	<400	<400	82	8.9	429	357	<5.0	--
HA-7	2/7/2014	5,330	760	<400	89.2	9.6	322	226	<2.0	--
HA-7	5/7/2014	4,450	<28	<48	141	11.9	299	247	<0.17	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
HA-8	4/14/1993	8,100	--	--	140	150	200	1,100	--	--
HA-8	12/15/1993	3,200	--	--	100	68	11	390	--	--
HA-8	11/4/1994	610	--	--	25	2.9	15	54	--	--
HA-8	9/18/1997	2,840	6,760	2,360	29.2	11.9	19.8	239	--	--
HA-8	5/1/1998	4,300	14,000	19,000	110	130	190	600	--	--
HA-8	7/29/1999	6,000	2,200	<200	37	30	140	1,000	--	--
HA-8	5/22/2000	1,100	810	700	13	9.7	28	170	--	--
HA-8	5/22/2001	650	800	350J	15	3.8	26	95	--	--
HA-8	6/5/2002	1,200	3,000	1,100	6.8	4.4	31	160	--	--
HA-8	11/19/2002	135	--	--	2.07	4.11	1.76	7.42	--	--
HA-8	11/24/2002	579	<0.25	<0.5	5.78	16.9	12.6	57.8	--	--
HA-8	1/14/2003	633	--	--	4.02	16.5	16.3	207	--	--
HA-8	2/24/2003	5,720	0.767	<0.5	14.6	74.5	232	1,570	--	--
HA-8	3/25/2003	1,950	0.544	<0.5	6.17	22.0	73.0	445	--	--
HA-8	4/18/2003	3,040	<0.25	<0.5	12.1	35.9	160	708	--	--
HA-8 (DUP)	4/18/2003	3,650	0.257	<0.5	11.9	41.1	164	762	--	--
HA-8	5/28/2003	67,000	1,800	530	11,000	16,000	1,100	5,400	--	--
HA-8	6/15/2004					LPH Encountered				
HA-8	6/20/2005					LPH Encountered				
HA-8	6/6/2006					LPH Encountered				
HA-8	10/23/2006					LPH Encountered				
HA-8	3/14/2007					LPH Encountered				
HA-8	9/11/2007	4,230	31,000	1,270J	2,360	7,210	408	2,310	--	--
HA-8	6/3/2008	43,800	2,250	719	3,730	14,800	956	4,650	--	--
HA-8	8/26/2008	34,600 <sup>1</sup>	2,620 <sup>1,4</sup>	778 <sup>1,4</sup>	3,770 <sup>1</sup>	10,700 <sup>1</sup>	763 <sup>1</sup>	3,750 <sup>1</sup>	<0.42 <sup>1</sup>	<74.4 <sup>1</sup>
HA-8	3/24/2010	115	<77.7	<388	<1.0	<1.0	<1.0	15.6	<1.0	<250
HA-8	8/27/2010	54,600	434	<388	2,200	11,900	964	4,240	<1.0	<250
HA-8	2/11/2011	68.2	78.2	<377	<1.0	<1.0	<1.0	17.4	<1.0	--
HA-8	8/15/2011	3,680	170	<380	78.2	287	132	576	<1.0	--
HA-8	2/27/2012	87.3	<76	<380	<1.0	<1.0	<1.0	10.5	<1.0	--
HA-8	8/27/2012	<50.0	<82	<410	5.9	<1.0	<1.0	<3.0	<1.0	--
HA-8	2/1/2013	238	<430	<430	<1.0	<1.0	<1.0	38.2	<1.0	--
HA-8	8/23/2013	375	400	<400	15.6	7.3 J	20.1	32.1	<1.0	--
HA-8	2/7/2014	1,240	<400	<400	2	<1.0	6.4	128	<1.0	--
HA-9	4/14/1993	74,000	--	--	1,700	2,000	2,100	14,000	--	--
HA-9	12/15/1993	50,000	--	--	990	1,300	130	9,300	--	--
HA-9	11/4/1994	55,000	--	--	570	91	1,200	8,200	--	--
HA-9	9/18/1997	21,800	6,100	<1,000	142	22.8	372	2,460	--	--
HA-9	4/29/1998	32,000	44,000	<25,000	410	60	1,200	4,500	--	--
HA-9	5/24/2000	7,400	12,000	3,400	310	21	320	380	--	--
HA-9	5/23/2001	3,400	15,000	<2,000	290	15	290	490	--	--
HA-9	6/4/2002	12,000	5,300	1,000J	530	13	810	910	--	--
HA-9	11/26/2002	6,110	--	--	249	3.55	349	187	--	--
HA-9	5/28/2003	9,500	3,800	<1,100	310	6.3	610	190	--	--
HA-9	6/17/2004	4,300	--	--	250	2.1	280	6.8	--	--
HA-9	6/20/2005	4,800	15,000	1,800J	220	2.4	260	5.8	--	--
HA-9	6/6/2006	3,750J	3,220	337u	177	3.58	435	420	--	--
HA-9	10/24/2006	7,050	3,080	248	248	2.58	580	8.43	--	--
HA-9	3/15/2007	6,360	3,100	<82.2	245	5.66	468	8.72	--	--
HA-9	9/11/2007	5,600	4,290	702	399	10.1	345	50.0	--	--
HA-9	6/4/2008	5,870	1,340	165J	130	4.37	141	10.8	--	--
HA-9	8/27/2008	5,730 <sup>1</sup>	3,160 <sup>1,4</sup>	705 <sup>1,4</sup>	388 <sup>1</sup>	7.34 <sup>1</sup>	277 <sup>1</sup>	13 <sup>1</sup>	<0.42 <sup>1</sup>	<74.4 <sup>1</sup>
HA-9	3/25/2010					Insufficient Groundwater to Sample				
HA-9	8/25/2010	4,180	--	--	388	17.1	260	199	<1.0	<250
HA-9	2/8/2011	4,330	753	<379	127	6.3	115	9.8	<1.0	--
HA-9	5/17/2011	5,240	--	--	177	4.9	156	9.5	<1.0	--
HA-9	8/11/2011	6,530	950	<620	195	4.2	151	8.7	<1.0	--
HA-9	11/22/2011	6,320	1,200	<380	206	5	160	10.2	<1.0	--
HA-9	2/29/2012	4,640	860	<390	147	5.5	119	11.1	<1.0	--
HA-9	5/15/2012	4,610	980	<410	218	8.8	152	32.1	<1.0	--
HA-9	8/29/2012	4,520	2,400	790	199	3.5	160	8.6	<1.0	--
HA-9	11/14/2012	3,920	900	<110	207	3.3	74.8	7.7	<1.0	--
HA-9	2/4/2013	2,890	940	<440	110	3	60.6	7	<1.0	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location MTCA Method A Screening Levels:	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES		
		TPH <sub>g</sub> 800	TPH <sub>d</sub> 500	TPH <sub>o</sub> 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --	
HA-9	5/8/2013	4,500	560	<200	195	3.3	103	6.6	<1.0	--	
HA-9	11/21/2013	4,060	710	<400	205	5.2	118	6.7	<2.0	--	
HA-9	2/6/2014	3,020	870	<400	15.2	<1.0	5.7	<3.0	<1.0	--	
HA-9	5/2/2014	3,020	1,300	<28	77.7	2.7	47.3	<0.40	<0.17	--	
HA-10	4/14/1993	77,000	--	--	540	4,600	1,800	12,000	--	--	
HA-10	12/15/1993	24,000	--	--	430	410	1,400	3,800	--	--	
HA-10	5/23/2001				Well not sampled, bailer obstructed from reaching well bottom						
HA-10	6/6/2002	8,900	--	--	44	66	530	1,600	--	--	
HA-10	5/27/2003				Well not sampled, bailer obstructed from reaching well bottom						
HA-10	6/17/2004				Well not sampled, bailer obstructed from reaching well bottom						
HA-10	6/21/2005	3,500	--	--	23	7	170	320	--	--	
HA-10	6/6/2006	852	999	97.5	52.6	5.50J	63.7	19.1J	--	--	
HA-10	10/24/2006	2,280	--	--	36.2	<0.220	47.4	99.4	--	--	
HA-10	3/15/2007	4,590	1,610	371	49.8	13.2	332	425	--	--	
HA-10	9/12/2007				Insufficient Groundwater to Sample						
HA-10	6/4/2008	4,710	--	--	16.1	7.79	175	283	--	--	
HA-10	8/27/2008	2,160 <sup>1</sup>	2,400 <sup>1,3</sup>	510 <sup>1,2</sup>	5.61 <sup>1</sup>	5.32 <sup>1</sup>	34.4 <sup>1</sup>	39.2 <sup>1</sup>	<0.42 <sup>1</sup>	<74.4 <sup>1</sup>	
HA-10	3/24/2010				Insufficient Groundwater to Sample						
HA-10	8/25/2010	2,170	--	--	7.1	7.5	68.5	130	<1.0	<250	
HA-10	2/8/2011				Insufficient Groundwater to Sample						
HA-10	5/17/2011	508 J	1,300	<2400	<1.0 J	<1.0 J	<1.0 J	<3.0 J	<1.0 J	--	
HA-10	8/11/2011	2,210	--	--	10.1	5.7	49.9	73.5	<1.0	--	
HA-10	11/21/2011	1,430 J	140 J	<570 J	5.5 J	2.8 J	37.2 J	56.6 J	<1.0 J	--	
HA-10	2/29/2012	489	1,900	1,700	<1.0	1.5	10.3	5.3	<1.0	--	
HA-10	5/16/2012	816	--	--	1.5	3.7	15.0	10.3	<1.0	--	
HA-10	8/29/2012	1,020	--	--	3.1	3.5	24.2	18.5	<1.0	--	
HA-10	11/14/2012	286	<110	<110	<1.0	<1.0	12.5	3.5	<1.0	--	
HA-10	1/31/2013	218	<450	<450	<1.0	<1.0	9.4	<3.0	<1.0	--	
HA-10	5/2/2013	490	--	--	<1.0	3	18.3	9.3	<1.0	--	
HA-10	8/20/2013	274	--	--	<1.0	1.9 J	6.1	4	<1.0	--	
HA-10	11/27/2013	101	<950	<950	<1.0	<1.0	5.6	<3.0	<1.0	--	
HA-10	5/2/2014	<50	<48	<28	<0.15	<0.11	3.1	<0.40	<0.17	--	
HA-11	4/14/1993	29,000	--	--	910	42	820	3,700	--	--	
HA-11	12/15/1993	5,300	--	--	360	160	98	780	--	--	
HA-11	11/4/1994	13,000	--	--	610	190	300	1,900	--	--	
HA-11	4/29/1998	4,600	4,200	1,800	230	28	100	520	--	--	
HA-11	5/24/2000	13,000	3,300	1,400	710	200	450	2,300	--	--	
HA-11	5/23/2001	6,100	--	--	570	83	280	910	--	--	
HA-11	6/4/2002	3,000	--	--	660	18	100	450	--	--	
HA-11	5/27/2003	16,000	--	--	1,400	74	560	2,300	--	--	
HA-11	6/21/2005	4,100	--	--	500	6.6	150	460	--	--	
HA-11	6/7/2006	8,760	3,320j	147j	662	17.0	443	1,420	--	--	
HA-11	10/24/2006	7,410	3,560	1,370	1,510	12.2	385	710	--	--	
HA-11	3/15/2007	5,180	3,700	508	504	8.96	294	842	--	--	
HA-11	9/12/2007				Insufficient Groundwater to Sample						
HA-11	6/4/2008	4,290	--	--	602	4.46	159	415	--	--	
HA-11	8/25/2008				Insufficient Groundwater to Sample						
HA-11	3/24/2010	3,080	--	--	384	5.1	215	595	<1.0	<250	
HA-11	8/25/2010	5,350	--	--	988	18.6	430	1,230	<1.0	<250	
HA-11	2/8/2011				Insufficient Groundwater to Sample						
HA-11	5/18/2011	8,740 J	<77	<380	442 J	8.5 J	344 J	682 J	<1.0 J	--	
HA-11	8/11/2011	4,840	--	--	736	4.3	167	329	<1.0	--	
HA-11	11/21/2011	3,280 J	<180 J	<890 J	559 J	3.1 J	109 J	150 J	<1.0 J	--	
HA-11	2/29/2012	4,060	250	<480	271	3	228	459	<1.0	--	
HA-11	5/15/2012	3,890	--	--	318 <sup>(C, E)</sup>	7	198	463	<1.0	--	
HA-11	8/29/2012	5,390 <sup>10</sup>	--	--	543	28.3	276	570	<1.0	--	
HA-11	11/15/2012	1,610	--	--	302	<2.0	24.3	130	<2.0	--	
HA-11	2/4/2013	1,460	<490	<490	185	1.6	112	220	<1.0	--	
HA-11	5/2/2013	1,780	1,500	450	--	--	--	--	--	--	
HA-11	11/21/2013	1,390	620 J	<400	207	1.9	136	322	<1.0	--	
HA-11	2/13/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--	
HA-11	4/30/2014	1,660	<48	<28	202	<0.55	111	219	<0.84	--	





Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES		
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --	
HA-13	9/11/2007	47.5J	--	--	0.580J	<0.420	<0.420	0.700J	--	--	
HA-13	9/12/2007	<50	450	<200	<0.5	<0.7	<0.8	<0.8	<0.5	--	
HA-13	11/27/2007	<50	<300	<370	<0.5	<0.7	<0.8	<0.8	<0.5	--	
HA-13	2/26/2008	<50	<75	<94	<0.5	<0.7	<0.8	<0.8	<0.5	--	
HA-13	6/4/2008	52.3J	41.1J	58.9J	<0.270	<0.280	0.410J	<0.860	--	--	
HA-13	8/27/2008	57.7 <sup>1,6</sup>	34.1 <sup>1</sup>	53.9 <sup>1</sup>	<0.27 <sup>1</sup>	0.92 <sup>1</sup>	0.24 <sup>1</sup>	<0.86 <sup>1</sup>	<0.42 <sup>1</sup>	<74.4 <sup>1</sup>	
HA-13	3/24/2010	<50.0	<75.8	<379	<1.0	<1.0	<1.0	<3.0	<1.0	<250	
HA-13	8/27/2010	<50.0	--	--	<1.0	2.0	<1.0	3.0	<1.0	<250	
HA-13	2/10/2011	<50.0	<75.5	<377	<1.0	<1.0	<1.0	<3.0	<1.0	--	
HA-13	8/12/2011	<50.0	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	
HA-13	8/12/2011	<50.0	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	
HA-13	2/28/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--	
HA-13	8/23/2012	<50.0	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	
HA-13	1/29/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--	
HA-13	8/22/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--	
HA-13	2/7/2014	<100	<400	<400	<1.0	1.1	<1.0	<3.0	<1.0	--	
HA-14	4/14/1993	<b>5,300</b>	--	--	<b>400</b>	22	290	<b>1,000</b>	--	--	
HA-14	12/15/1993	<50	--	--	<0.50	<0.50	<0.50	<1.0	--	--	
HA-14	11/4/1994	180	--	--	<b>5</b>	1.8	3.9	11	--	--	
HA-14	9/18/1997	324	<b>972</b>	<b>752</b>	<b>6.45</b>	1.06	7.98	9.17	--	--	
HA-14	4/30/1998	<b>1,800</b>	460	<500	<b>210</b>	15	190	100	--	--	
HA-14	7/29/1999	<b>4,700</b>	<b>1,100</b>	<200	<b>450</b>	38	<b>710</b>	120	--	--	
HA-14	5/22/2000	<b>3,700</b>	<b>1,100</b>	<b>520J</b>	<b>470</b>	26	<b>760</b>	63	--	--	
HA-14	5/22/2001	<b>890</b>	430	230J	<b>120</b>	5.5	200	10	--	--	
HA-14	6/4/2002	<b>2,200</b>	<b>1,400</b>	<b>1,000</b>	<b>380</b>	16.0	470	32	--	--	
HA-14	11/25/2002	<b>939</b>	<0.25	<0.5	<b>141</b>	15.7	169	48.1	--	--	
HA-14	4/18/2003	<b>1,190</b>	<0.25	<0.5	<b>133</b>	8.87	228	23.7	--	--	
HA-14	5/27/2003	<b>860</b>	300	220J	<b>91</b>	2.7	140	11	--	--	
HA-14	6/16/2004	220J	<b>780</b>	280J	<b>56</b>	2.6	52	5	--	--	
HA-14	6/21/2005	<b>1,200</b>	<b>660</b>	390J	<b>260</b>	5.8	250	18	--	--	
HA-14	6/7/2006	<40	--	--	<0.290	<0.280	0.560J	<0.820	--	--	
HA-14	10/24/2006	288	--	--	<b>12.3</b>	2.06	9.60	1.42J	--	--	
HA-14	3/15/2007	121	187	50.1J	4.09	<0.420	4.99	0.610J	--	--	
HA-14	9/11/2007	628	--	--	<b>92.8</b>	1.30	157	3.45	--	--	
HA-14	6/4/2008	529	<b>1,150</b>	<b>1,820</b>	<b>30.1</b>	0.780J	67.5	1.71J	--	--	
HA-14	8/27/2008	350 <sup>1</sup>	<b>513<sup>1,5</sup></b>	<b>863<sup>1,5</sup></b>	<b>31.5<sup>1</sup></b>	2.25 <sup>1</sup>	72.1 <sup>1</sup>	2.63 <sup>1</sup>	<0.42 <sup>1</sup>	<74.4 <sup>1</sup>	
HA-14	3/24/2010	<b>1,150</b>	<b>1,030</b>	<b>2,560</b>	<b>92</b>	1.4	369	6.6	<1.0	<250	
HA-14	8/27/2010	<b>1,120</b>	--	--	<b>155</b>	6.0	321	3.5	<1.0	<250	
HA-14	2/10/2011	231	161	<377	<b>12.8</b>	<1.0	67.3	4	<1.0	--	
HA-14	5/25/2011	<b>2,250</b>	110	<380	<b>106</b>	5.6	316	12	<1.0	--	
HA-14	8/12/2011	<b>1,890</b>	--	--	<b>159</b>	10.1	281	12.4	<1.0	--	
HA-14	2/28/2012	<50.0 J	<77	<380	<1.0 J	<1.0 J	<1.0	<3.0	<1.0	--	
HA-14	8/23/2012	198	--	--	<b>42.4</b>	2.4	13.2	5.5	<1.0	--	
HA-15	1/14/2003	344	NA	NA	3.34	0.672	<0.5	2.51	--	--	
HA-15	2/24/2003	<b>1,250</b>	0	<0.5	<b>12.9</b>	5.57	9.8	69.6	--	--	
HA-15	3/25/2003	<b>910</b>	0	<0.5	<b>7.47</b>	1.55	1.12	3.99	--	--	
HA-15	4/18/2003	658	<0.25	<0.5	<b>7.21</b>	1.88	0.716	6.47	--	--	
HA-15	3/15/2004	336	1	<0.5	<b>5.85</b>	0.765	<0.5	1.34	--	--	
HA-15	12/21/2004	<b>1,350</b>	<0.25	<0.5	<b>12.2</b>	0.824	3.01	2.74	--	--	
HA-15 (DUP)	12/21/2004	<b>1,570</b>	<0.25	<0.5	<b>13.4</b>	0.952	4.02	3.11	--	--	
HA-15	3/22/2005	<100	<0.237	<0.474	<1	<1	<1	<3	--	--	
HA-15	6/24/2005	<100	<0.525(d)	<0.956	<1	<1	<1	<3	<1	--	
HA-15	2/28/2006	58	<280	<96	<b>13</b>	<0.7	<0.8	<0.8	<0.5	--	
HA-15	5/16/2006	58	360	<97	<b>16</b>	2.5	1.5	1.6	<b>50</b>	--	
HA-15	8/17/2006				Insufficient Groundwater to Sample						
HA-15	11/21/2006	360	<b>1,400</b>	<b>670</b>	<b>320</b>	20	27	9	<0.5	--	
HA-15	2/20/2007				Insufficient Groundwater to Sample						
HA-15	5/15/2007				Insufficient Groundwater to Sample						
HA-15	9/12/2007				Insufficient Groundwater to Sample						
HA-15	11/26/2007				Insufficient Groundwater to Sample						
HA-15	2/26/2008	340	<b>1,700</b>	<b>590</b>	<b>18</b>	0.9	3	2	<0.5	--	
HA-15	2/18/2009	120	<150	<770	<b>19</b>	1.5	4.7	14	<1	<400	
HA-15	8/25/2009				Insufficient Groundwater to Sample						

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
HA-15	3/24/2010	811	248	<392	127	7	34.2	68.3	<1	<250
HA-15	8/23/2010	Insufficient Groundwater to Sample								
HA-16	12/21/2004	17,900	4	2	112	533	272	1,660	--	--
HA-16	3/22/2005	17,500	2.89(d)	<0.488	100	518	253	1,521	--	--
HA-16	6/24/2005	20,400	2,200(a)	<0.479	436	760	374	2,359	<10	--
HA-16	7/28/2005	6,900	3,400	<940	180	94	80	440	<1	--
HA-16	9/20/2005	14,000	--	--	620	1,000	270	1,500	--	--
HA-16	11/30/2005	150	240	<94	7	8	2	13	--	--
HA-16 (DUP)	11/30/2005	2,100	450	<94	19	24	19	96	--	--
HA-16	3/1/2006	95	120	<95	170	1	3	11	<0.5	--
HA-16 (DUP)	3/1/2006	430	500	<95	420	2	13	19	<0.5	--
HA-16	5/16/2006	<48	94	95	120	0.6	0.4	1.7	<5	--
HA-16 (DUP)	5/16/2006	360	120	<95	150	1.9	2.8	12	<5	--
HA-16	8/17/2006	Insufficient Groundwater to Sample								
HA-16	11/21/2006	25,000	650	110	2,500	4,200	450	1,400	<3	--
HA-16	2/20/2007	18,000	970	130	3,300	2,000	560	1,600	<3	--
HA-16	5/15/2007	970	190	<96	260	53	47	120	<0.5	--
HA-16	9/12/2007	2,600	900	250	510	480	120	440	<0.5	--
HA-16	11/27/2007	2,100	1,200	<190	250	98	87	220	<0.5	--
HA-16	2/26/2008	240	<75	<94	44	3	6	20	<0.5	--
HA-16	8/26/2008	36,000	2,600	<95	2,600	7,400	550	2,800	<3	<250
HA-16	2/19/2009	8,540	--	--	830	1,200	250	1,100	<1	<400
HA-16	8/25/2009	Insufficient Groundwater to Sample								
HA-16	3/24/2010	5,180	119	<385	367	55.6	229	922	1	<250
HA-16	8/26/2010	14,000	347	<1,330	1,720	1,730	686	2,400	<1.0	<250
HA-16	2/11/2011	5,930	161	<377	177	266	129	804	<1.0	--
HA-16	5/25/2011	4,690	160	<460	403	89.7	166	647	<1.0	--
HA-16	8/15/2011	5,070	--	--	553	163	189	575	<1.0	--
HA-16	2/27/2012	513	<76	<380	35.6	47.7	25.4	76.5	<1.0	--
HA-16	8/24/2012	3,730	--	--	763	51.9	135	575	<1.0	--
HA-16	1/31/2013	5,000	510	<440	539	675	145	875	<5.0	--
HA-16	8/22/2013	11,600	<450	<450	3,700	697	311	7,550	<1.0	--
HA-16	2/11/2014	9,950	<400	<400	872	705	356	1,760	<1.0	--
HA-17	1/14/2003	548	NA	NA	10.2	<1.25	1.55	2.61	--	--
HA-17	5/29/2003	2,090	<0.25	<0.5	50	129	80.1	322	--	--
HA-17	11/20/2003	585	1	<0.5	8.92	<0.5	<0.5	<1	--	--
HA-17	3/15/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
HA-17	12/21/2004	335	<0.25	<0.5	6.35	<0.5	<0.5	<1	--	--
HA-17	3/22/2005	<100	<0.237	<0.473	11.6	<1	9.96	<3	--	--
HA-17	6/24/2005	<100	1	<0.475	1.57	<1	<1	<3	<1	--
HA-17	7/28/2005	<48	--	--	2.3	<0.2	0.3	<0.6	<0.3	--
HA-17	11/30/2005	55	450	<94	1	<1	<2	<2	--	--
HA-17	3/1/2006	<48	340	<96	<0.5	<0.7	<0.8	<0.8	<0.5	--
HA-17	5/16/2006	<48	280	<95	0.4	<0.2	<0.2	<0.6	<5	--
HA-17	8/17/2006	Insufficient Groundwater to Sample								
HA-17	11/21/2006	<48	220	120	1	<0.7	<0.8	<0.8	<0.5	--
HA-17	2/20/2007	<48	1,700	<470	<0.5	<0.7	<0.8	<0.8	<0.5	--
HA-17	5/15/2007	<50	--	--	1	1	<0.8	<0.8	<0.5	--
HA-17	9/12/2007	Insufficient Groundwater to Sample								
HA-17	11/27/2007	<50	770(p)	<140	<0.5	<0.7	<0.8	<0.8	<0.5	--
HA-17	2/26/2008	<50	570	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
HA-17	2/18/2009	<50	88	<410	<1	<1	<1	<1	<1	<400
HA-17	8/25/2009	Insufficient Groundwater to Sample								
HA-17	3/23/2010	55	<77.7	<388	<1	<1	<1	<3	<1	<250
HA-17	8/23/2010	Insufficient Groundwater to Sample								
HA-18	1/14/2003	11,400	NA	NA	40.3	75.9	810	2,220	--	--
HA-18	5/29/2003	31,000	8	<0.5	95	157	2,440	7,840	--	--
HA-18	11/20/2003	28,000	7	<0.5	284	178	1,950	6,400	--	--
HA-18	12/21/2004	4,600	1	<0.5	21.9	26.8	188	440	--	--
HA-18	3/22/2005	7,690	1.33(d)	<0.473	27.1	10.2	333	578.2	--	--
HA-18	6/24/2005	9,810	6.83 (d)	0.594 (d)	32.3	12.4	439	907.3	<5	--
HA-18	7/28/2005	8,200	--	--	39	29	230	620	<1	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES		
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --	
HA-18	3/1/2006	780	340	<95	72	0.8	69	6	<0.5	--	
HA-18	5/16/2006	2,100	520	<94	40	3.8	93	140	<25	--	
HA-18	8/17/2006	3,800	2,700	160	51	9	170	250	<0.5	--	
HA-18	11/21/2006	3,400	2,700	650	52	23	130	240	<0.5	--	
HA-18	2/20/2007	5,000	740	180	49	18	230	460	<0.5	--	
HA-18	5/15/2007				Insufficient Groundwater to Sample						
HA-18	9/12/2007				Insufficient Groundwater to Sample						
HA-18	11/27/2007	480	4,700(q)	<370	14	4	3	7	<0.5	--	
HA-18	2/26/2008	720	4,100	740	17	4	34	21	<0.5	--	
HA-18	2/19/2009	615	240	<400	37	29	36	87	<1	<400	
HA-18	8/25/2009				Insufficient Groundwater to Sample						
HA-18	3/23/2010	1,390	135	<385	98.9	18.4	91.0	132	<1.0	<250	
HA-18	8/23/2010				Insufficient Groundwater to Sample						
HA-19	8/25/2008	<50	<75	<94	<0.5	<0.7	<0.8	<0.8	<0.5	<50	
HA-19	8/25/2009				Insufficient Groundwater to Sample						
HA-19	3/23/2010				Insufficient Groundwater to Sample						
HA-19	8/23/2010				Insufficient Groundwater to Sample						
HA-19	5/25/2011	216	<83	<420	33.8	13.5	2	9.1	<1.0	--	
HA-19	11/21/2011	<50.0 J	<76 J	<380 J	<1.0 J	<1.0 J	<1.0 J	<3.0 J	<1.0 J	--	
HA-19	5/11/2012	<100	<100	<500	<1.0	<1.0	<1.0	<3.0	<1.0	--	
HA-19	11/8/2012	<100	<110	<110	<1.0	<1.0	<1.0	<3.0	<1.0	--	
HA-19	5/3/2013	<100	<200	300	<1.0	<1.0	<1.0	<3.0	<1.0	--	
HA-19	11/20/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--	
HA-19	5/8/2014	<50	<30	<52	<0.15	<0.11	<0.16	<0.40	<0.17	--	
HA-20	7/28/2005	230,000	6,900	<940	28,000	47,000	2,900	16,000	<150	--	
HA-20	11/30/2006	110,000	4,900	<190	19,000	28,000	1,500	8,500	--	--	
HA-20	8/25/2008	18,000	4,300	<940	5,800	5,800	1,200	5,500	<1	<100	
HA-20	2/19/2009	292	93	<410	67	33	13	42	<1	<400	
HA-20	8/25/2009	18,100	1,300	<390	10,900 (8)	2,020 (8)	941	3,220 (8)	<1	<250	
HA-20 (DUP)	8/25/2009	22,200	1,900	180J	12,200	2,750	1,100	3,790	<1	<250	
HA-20	3/24/2010	7,070	2,450	<381	4,100	2,170	109	435	<1	<250	
HA-20	8/26/2010	69,700	712	<388	14,600	23,100	932	4,810	<1.0	<250	
HA-20 (DUP)	8/26/2010	56,800	767	<426	13,800	14,600	1,400	6,010	<1.0	<250	
HA-20	2/11/2011	<50.0	<76.9	<385	<1.0	<1.0	<1.0	<3.0	<1.0	--	
HA-20	5/25/2011	24,000	240	<380	4,540	4,860	302	939	<1.0	--	
HA-20	8/15/2011	8,660	200 J	<380 J	5,270	2,190	534	1,850	<1.0	--	
HA-20	11/18/2011	29,600	200	<380	3,720	4,560	592	2,690	<1.0	--	
HA-20	2/27/2012	<50.0	<76	<380	2.2	1.9	1.2	4.7	<1.0	--	
HA-20	5/16/2012	660	<76	<380	280	37.7	35.1	85.5	<1.0	--	
HA-20	8/24/2012	9,220 <sup>10</sup>	170	<400	4,100	964	378	1,470	<1.0	--	
HA-20	11/9/2012	4,440	920	<110	1,360	224	179	638	<1.0	--	
HA-20	2/4/2013	320	<430	<430	130	1.5	1.8	70.1	<1.0	--	
HA-20	5/3/2013	2,740	<200	250	53.6	11.8	<2.0	540	<2.0	--	
HA-20	8/22/2013	2,760	850	<420	3,850	134	129	666	<5.0	--	
HA-20	11/20/2013	921	<400	<400	508 J	46	42	111	<2.0	--	
HA-20	2/11/2014	13,800	600	440	3,910	1,550	470	2,190	<10.0	--	
HA-20	5/6/2014	<50	<48	<28	5.9	<0.11	<0.16	<0.40	<0.17	--	
LAI-1	1/15/2003	4,120	--	--	728	935	23	120	--	--	
LAI-1	2/26/2003	15,100	1	<0.5	2,150	3,680	116	979	--	--	
LAI-1	3/24/2003	47,500	1	<0.5	7,970	15,000	739	4,250	--	--	
LAI-1	3/1/2006	190,000	860	<190	4,500	41,000	2,800	16,000	<13	--	
LAI-1	5/17/2006	270,000	1,400	<470	10,000	56,000	3,300	21,000	<200	--	
LAI-1	8/16/2006	130,000	2,800	240	11,000	23,000	3,000	14,000	<50	--	
LAI-1	11/20/2006	11,000	880	<95	1,900	25	400	1,300	<1	--	
LAI-1	2/19/2007	260,000	2,900	<470	13,000	58,000	3,200	19,000	<25	--	
LAI-1	5/14/2007	290,000	3,200	<480	9,000	60,000	2,200	16,000	<	--	
LAI-1	9/11/2007	21,000	510	<94	1,300	680	440	2,500	<1	--	
LAI-1	11/26/2007	2,300	310	<99	1,100	10	130	410	<0.5	--	
LAI-1	2/26/2008	23,000	2,400	<95	160	190	1,100	4,300	<1	--	
LAI-1	8/26/2008	4,400	450	<95	12	4	300	560	<0.5	<50	
LAI-1 (DUP)	8/26/2008	4,300	520	<95	12	5	200	360	<0.5	<50	
LAI-1	2/19/2009	93,900	600	<410	470	19,000	1,500	9,800	<1	<400	

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
LAI-1	8/25/2009	73,300	2,000	140 J	358	1,330	277	1,700	<1.0 (9)	<250
LAI-1	3/23/2010	114,000	800	<381	2,610	19,300	4,190	23,200	<1.0	<250
LAI-1	8/24/2010	57,700	812	<388	2,040	3,150	187	17,700	<1.0	<250
LAI-1	2/9/2011	59,300	692	<388	689	6,530	1,960	9,420	<1.0	--
LAI-1	5/16/2011	40,200 J	650	<380	615 J	887 J	1,620 J	6,420 J	<1.0 J	--
LAI-1 (DUP)	5/16/2011	41,400 J	650	<380	580 J	919 J	1,770 J	6,920 J	<1.0 J	--
LAI-1	8/9/2011	30,700 J	530	<400	1,370 J	303 J	1,620 J	6,680 J	<1.0	--
LAI-1	2/27/2012	53,000	460	<380	987	6,680	2,140	9,280	<1.0	--
LAI-1	9/4/2012	19,100 <sup>10</sup>	600	<400	551	130	735	3,520	<1.0	--
LAI-1	2/5/2013	24,000	1,300	<430	79.6	2,320	933	5,600	<10.0	--
LAI-1	8/14/2013	54,600	2,800	<420	324	691	1,160	10,100	<5.0	--
LAI-1 (DUP)	8/14/2013	49,900	3,200	<420	404	601	1,080	9,750	<5.0	--
LAI-1	2/12/2014	88,200	860	<400	995	4,430	2,770	3,580	<1.0	--
LAI-2	1/15/2003	73	--	--	2.78	2.2	1.1	9.33	--	--
LAI-2 (DUP)	1/15/2003	103	--	--	3.39	3.36	1.68	15.1	--	--
LAI-2	5/29/2003	18,100	<0.25	<0.5	2,940	6,100	235	1,680	--	--
LAI-2 (DUP)	5/29/2003	18,800	0	<0.5	2,840	6,320	235	1,680	--	--
LAI-2	8/11/2003	8,950	1	<0.562	1,880	2,150	135	907	--	--
LAI-2 (DUP)	8/11/2003	6,620	1	<0.5	1,750	1,340	104	678	--	--
LAI-2	11/20/2003	1,330	0	<0.5	580	1.98	35.3	235	--	--
LAI-2	3/16/2004	120,000	2	<0.5	23,600	27,700	2,370	11,300	--	--
LAI-2	6/22/2004	17,600	0	<0.5	4,390	53.3	889	1,190	--	--
LAI-2 (DUP)	6/22/2004	20,400	<0.25	<0.5	4,960	51.4	1,020	1,340	--	--
LAI-2	9/22/2004	6,150	1	<0.5	1,070	4.87	672	234	--	--
LAI-2 (DUP)	9/22/2004	6,020	1	<0.5	1,070	4.37	673	187	--	--
LAI-2	12/21/2004	9,920	<0.25	<0.5	2,080	<25	875	552	--	--
LAI-2	3/21/2005	22,900	1	<0.498	7,720	2,970	1,380	2,208	--	--
LAI-2	6/23/2005	123,000	4,150	<0.473	21,700	40,300	2,260	10,180	<200	--
LAI-2	7/29/2005	170,000	1,400	<190	18,000	28,000	3,100	15,000	30	--
LAIx-2	9/21/2005	32,000	1,400	<94	5,500	3,300	1,100	5,600	--	--
LAIx-2	12/1/2005	8,700	730	<94	1,700	230	330	1,300	--	--
LAIx-2 (DUP)	12/1/2005	8,700	830	<95	1,900	100	370	1,400	--	--
LAIx-2	3/1/2006	120,000	1,200	<190	13,000	24,000	1,500	8,500	<10	--
LAIx-2 (DUP)	3/1/2006	97,000	1,400	<190	12,000	15,000	1,600	8,100	<10	--
LAIx-2	5/17/2006	160,000	2,200	<470	21,000	32,000	2,800	14,000	<200	--
LAIx-2 (DUP)	5/17/2006	160,000	2,400	<470	21,000	31,000	2,900	14,000	<200	--
LAIx-2	8/16/2006	87,000	4,200	<1900	14,000	19,000	1,600	11,000	<5	--
LAIx-2	11/20/2006	20,000	810	<94	2,200	1,500	590	2,300	<1	--
LAIx-2	2/19/2007	150,000	2,600	<190	18,000	32,000	2,700	11,000	<25	--
LAIx-2	5/14/2007	180,000	4,600	<970	19,000	33,000	2,200	11,000	<25	--
LAIx-2	9/11/2007	17,000	1,800	150	2,400	470	680	2,600	<1	--
LAIx-2(u)	11/26/2007	8,500	380	<94	800	46	470	1,200	<0.5	--
LAIx-2	2/26/2008	780	<75	<94	9	1	26	70	<0.5	--
LAIx-2	8/26/2008	6,600	1,400	<95	350	330	330	970	<2	<200
LAIx-2	2/19/2009	29,500	320	<410	2,300	5,600	980	2,800	<100	<400
LAIx-2	8/25/2009	9,530	950	110J	3,710	37.8	990	1,330	<1	<250
LAIx-2	3/23/2010	7,400	166	<381	1,570	698	661	1,290	<1.0	<250
LAIx-2	8/24/2010	51,100	453	<385	7,600	12,100	155	7,910	<1.0	<250
LAIx-2	2/8/2011	66,400	487J	<385	6,780	13,000	1,350	4,240	<1.0	--
LAIx-2	5/16/2011	24,200 J	290	<380	2,500 J	3,630 J	851 J	2,140 J	<1.0 J	--
LAIx-2	8/9/2011	21,800 J	480	<390	3,700 J	1,810 J	1,080 J	3,680 J	<1.0	--
LAIx-2	2/27/2012	34,600	200	<380	3,220	6,960	1,260	3,890	<1.0	--
LAIx-2	9/4/2012	48,300 <sup>10</sup>	700	<400	7,030	4,090	2,100	7,110	<1.0	--
LAIx-2	2/5/2013	3,830	<460	<460	236	76.6	257	747	<2.0	--
LAIx-2	8/14/2013	49,500	2,900	<400	5,000	3,740	1,420	7,030	<20.0	--
LAIx-2	2/13/2014	67,400	1,400	<400	5,540	9,610	1,710	8,140	<1.0	--
LAI-3	1/15/2003	67	--	--	0.5	3.19	1.36	8.45	--	--
LAI-3	2/26/2003	558	0.25	0.50	70.1	159	6.42	32.6	--	--
LAI-3	3/25/2003	573	0.25	0.50	61.6	176	8.43	39.5	--	--
LAI-3	4/17/2003	154	0.25	0.50	7.56	24.5	4	29.4	--	--
LAI-3	5/29/2003	301	0.25	0.50	151	40.7	0.951	4.63	--	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPH <sub>g</sub> 800	TPH <sub>d</sub> 500	TPH <sub>o</sub> 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
LAI-3	8/11/2003	985	0.25	0.50	329	18.4	2.47	7.27	--	--
LAI-3	11/20/2003	50	0.25	0.50	9.2	0.5	0.5	1	--	--
LAI-3	3/16/2004	4,670	0.27	0.50	2,030	94.9	113	225	--	--
LAI-3	6/22/2004	2,880	0.25	0.50	1,580	5	50.7	69.4	--	--
LAI-3	9/22/2004	424	0.43	0.56	60.7	5	82.1	2.05	--	--
LAI-3	12/21/2004	62	0.25	0.50	0.542	0.5	2.31	1	--	--
LAI-3	3/21/2005	100	0.24	0.47	1	1	1	3	--	--
LAI-3	6/23/2005	2,200	0.748 (a)	0.47	2,360	119	184	200.4	20	--
LAI-3	7/29/2005	34,000	690	160	5,300	6,300	690	2,500	7.5	--
LAIx-3	9/21/2005	23,000	1,400	94	3,800	4,200	450	3,100	--	--
LAIx-3	11/30/2005	43,000	1,500	<96	8,200	9,200	400	5,300	--	--
LAIx-3 (DUP)	12/1/2005	45,000	1,800	<94	9,000	8,700	350	5,200	--	--
LAIx-3	3/1/2006	130,000	3,500	<970	18,000	26,000	1,800	10,000	<10	--
LAIx-3 (DUP)	3/1/2006	100,000	3,200	<950	16,000	13,000	1,700	9,500	<10	--
LAIx-3	5/17/2006	130,000	3,500	<950	19,000	24,000	2,300	12,000	--	--
LAIx-3 (DUP)	5/17/2006	110,000	3,300	<470	16,000	18,000	2,100	10,000	<30	--
LAIx-3	8/16/2006	20,000	3,900	<480	2,200	2,900	470	2,600	<0.5	--
LAIx-3	11/20/2006	13,000	910	<95	2,400	550	490	1,500	<1	--
LAIx-3	2/19/2007	120,000	2,700	<94	21,000	21,000	2,500	9,700	<25	--
LAIx-3	5/14/2007	150,000	4,300	<960	25,000	26,000	2,100	9,700	<25	--
LAIx-3	9/11/2007	14,000	1,800	160	1,700	690	450	1,600	<0.5	--
LAIx-3(v)	11/26/2007	10,000	850	<94	1,600	22	560	1,100	<1	--
LAIx-3	2/26/2008	1,500	110	<95	18	<0.7	46	52	<0.5	--
LAIx-3	8/26/2008	3,800	1,000	130	310	450	160	290	<3	<250
LAIx-3	2/19/2009	12,400	420	<410	4,100	620	990	1,600	<100	<400
LAIx-3	8/25/2009	4,450	790	95J	3,660	10.3	719	310	<1	<250
LAIx-3	3/23/2010	30,000	342	<381	8,030	8,190	1,540	5,040	<1.0	<250
LAIx-3	8/24/2010	24,800	420	<430	8,640	4,130	1,400	4,840	<1.0	<250
LAIx-3	2/8/2011	18,100	292J	<385	3,070	2,720	767	2,440	<1.0	--
LAIx-3	5/16/2011	59,800	630	<380	8,230	12,700	1,790	7,590	<50.0	--
LAIx-3 (DUP)	5/16/2011	61,800 J	620	<380	8,260 J	12,800 J	1,810 J	7,710 J	<50.0 J	--
LAIx-3	8/10/2011	9,510	290	<400	3,050 J	72.1	534	1,250	<1.0	--
LAIx-3 (DUP)	8/10/2011	9,600	290	<390	3,010 J	68.4	542	1,280	<1.0	--
LAIx-3	11/15/2011	8,690 J	<75	<380	2,020	16.5	508	1,000	<1.0	--
LAIx-3	2/28/2012	71,300	750	<380	6,250	6,140	1,750	5,850	<1.0 J	--
LAIx-3	5/8/2012	33,500	620	<380	7,960	6,160	1,520	5,780	<5.0	--
LAIx-3	9/4/2012	31,700 <sup>10</sup>	690	<390	7,850	141	1,800	5,440	<1.0	--
LAIx-3	11/13/2012	985	180	<110	97.1	<1.0	111	229	<1.0	--
LAIx-3	2/5/2013	1,860	<450	<450	217	1.3	258	152	<1.0	--
LAIx-3	5/1/2013	4,840	490	<500	1,580	302	469	592	<10.0	--
LAIx-3	8/14/2013	14,100	1,200	<400	6,260	23.8 J	1,040	1,800	<20.0	--
LAIx-3	11/22/2013	12,100	940 J	<400	6,100	55.5	839	1,430	<1.0	--
LAIx-3	2/13/2014	47,600	1,400	<400	8,840	3,540	1,780	6,350	<20.0	--
LAIx-3	4/30/2014	55,900	800	<28	10,100	7,060	1,590	6,410	<8.4	--
LAIx-3 (DUP)	4/30/2014	55,800	930	<29	9,760	6,830	1,510	6,060	<8.4	--
LAIx-4	8/26/2008	9,900	--	--	2,200	180	270	1,400	<1	<100
LAIx-5	11/29/2005	180,000	13,000	570	42,000	49,000	2,300	12,000	--	--
LAIx-5	8/26/2008	220,000	3,900	<480	31,000	45,000	3,600	19,000	<50	<5000
LAIx-5	2/17/2017	2,620	<390	<390	32.3	57.0	37.0	433	---	---
LAIx-5	9/28/2017	29,200	1,900	<430	9,600	174	1,020	6,400	---	---
LAIx-6	11/29/2005	70,000	9,700	600	22,000	22,000	850	4,300	--	--
LAIx-6	8/26/2008	190,000	6,300	<950	31,000	45,000	3,200	16,000	<25	<2500
LAIx-6	2/17/2017	38,900	1,200	<410	4,440	6,740	510	3,070	---	---
LAIx-6	2/17/2017	43,700	930	<390	5,090	6,890	561	3,410	---	---
LAIx-6	9/28/2017	134,000	3,200	<400	28,700	26,600	2,570	14,700	---	---
LAI-7	7/28/2005	160,000	17,000	<4700	160,000	32,000	2,500	14,000	<30	--
LAIx-7	9/21/2005	220,000	7,100	<950	43,000	55,000	4,300	21,000	--	--
LAIx-7	8/27/2008	79,000	4,200	<480	12,000	27,000	2,200	11,000	<13	<1300

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
LAIx-8	9/21/2005	140,000	6,400	<940	29,000	33,000	3,300	15,000	--	--
LAIx-8	11/29/2005	130,000	5,100	<190	33,000	35,000	2,900	14,000	--	--
LAIx-8	8/26/2008	180,000	7,300	<2000	28,000	40,000	3,300	16,000	<10	<1000
LAIx-9	11/29/2005	110,000	8,300	<950	37,000	45,000	2,600	21,000	--	--
LAIx-9	8/27/2008	140,000	3,800	<490	17,000	32,000	2,600	15,000	<10	<1000
LAI-10	2/26/2003	<50	<0.25	<0.5	<0.5	0.991	<0.5	1.37	--	--
LAI-10 (DUP)	2/26/2003	<50	<0.25	<0.5	<0.5	0.757	<0.5	1.18	--	--
LAI-10	3/24/2003	<50	<0.25	<0.5	1.35	2.67	<0.5	1.36	--	--
LAI-10	4/17/2003	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-10	5/28/2003	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-10	8/11/2003	<50	<0.25	<0.5	<0.5	1.75	0.757	4.54	--	--
LAI-10	11/20/2003	<50	2	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-10	3/16/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-10	6/22/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-10	9/22/2004	<50	0	<0.5	<0.5	0.666	<0.5	<1	--	--
LAI-10	12/21/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-10	3/21/2005	<100	<0.238	<0.475	<1	<1	<1	<3	--	--
LAI-10	6/23/2005	<100	<0.237	<0.474	3.52	<1	<1	<1	<1	<1
LAI-10	7/29/2005	<48	<76	<95	23	0.3	<0.2	<0.6	<0.3	--
LAI-10	9/20/2005	<48	<75	94	32	2	0.5	2.8	--	--
LAI-10	12/1/2005	<48	200	<95	<0.5	<0.7	<0.8	<0.8	--	--
LAI-10 (DUP)	11/28/2005	<48	520	220	<0.5	1	<0.8	<0.8	--	--
LAI-10	2/28/2006	<48	<77	<96	<0.5	4	<0.8	<0.8	<0.5	--
LAI-10 (DUP)	3/1/2006	<48	88	<95	<0.5	10	<0.8	<0.8	<0.5	--
LAI-10	5/17/2006	<48	<75	<94	<0.2	3.4	<0.2	<0.6	<0.3	--
LAI-10 (DUP)	5/17/2006	<48	<75	<120	0.6	4.5	<0.2	<1	<0.3	--
LAI-10	8/16/2006	<48	<76	<96	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-10	11/20/2006	<48	<77	<96	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-10	2/19/2007	<48	<75	<94	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-10	5/14/2007	<50	<78	<97	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-10	9/11/2007	<50	98	<94	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-10	11/26/2007	<250	<76	<95	<5	<7	<8	<8	<5	--
LAI-10	2/26/2008	140	<75	<94	12	1	4	12	<0.5	--
LAI-10	8/26/2008	<50	<76	<96	<0.5	<0.7	<0.8	<0.8	<0.5	<50
LAI-10	2/18/2009	<50	<82	<410	<1	<1	<1	<1	<1	<400
LAI-10	8/25/2009	<50	<77	<380	<1	<1	<1	<3	<1	<250
LAI-10	3/23/2010	<50	<76.2	<381	<1	<1	<1	<3	<1	<250
LAI-10	8/24/2010	<50.0	<76.9	<385	<1.0	<1.0	<1.0	<3.0	<1.0	<250
LAI-10	2/9/2011	<50.0	<76.2	<381	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-10	5/17/2011	<50.0 J	<75	<380	<1.0 J	<1.0 J	<1.0 J	<3.0 J	<1.0 J	--
LAI-10	8/9/2011	<50.0	<80	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-10	11/15/2011	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-10	2/27/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-10	5/8/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-10	9/4/2012	96.4	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-10	11/13/2012	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-10	2/5/2013	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-10	5/1/2013	<100	<200	<450	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-10	8/14/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-10	11/22/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-10	2/12/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-10	4/30/2014	<50	<48	<28	<0.15	<0.11	<0.16	<0.40	<0.17	--
LAI-11	2/26/2003	<50	0.40	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-11	3/24/2003	<50	0.43	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-11	4/17/2003	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-11	5/28/2003	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-11	11/20/2003	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-11	3/16/2004	<50	<0.25	<0.5	<0.5	0.634	<0.5	<1	--	--
LAI-11	6/22/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-11	9/22/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-11	12/21/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-11	3/21/2005	<100	<0.236	<0.473	<1	1	<1	<3	--	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
LAI-11	6/23/2005	<100	<0.237	<0.474	222	1.11	2.82	19.2	<1	--
LAI-11	7/29/2005	<48	<76	<95	55	0.5	4.2	3.2	<0.3	--
LAI-11	9/20/2005	<48	95	<94	32	2	0.5	2.8	--	--
LAI-11	12/1/2005	<48	110	<94	15	<0.7	0.9	3	--	--
LAI-11	2/27/2006	<48	81	<96	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-11	5/17/2006	<48	<75	<94	<0.2	<0.2	<0.2	<0.6	<0.3	--
LAI-11	8/16/2006	<48	<77	<96	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-11	11/20/2006	<48	760	190	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-11	2/19/2007	<48	110	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-11	5/14/2007	<50	160	<96	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-11	9/11/2007	<50	190	<95	55	<0.7	<0.8	<0.5	<0.5	--
LAI-11	11/26/2007	<50	170	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-11	2/26/2008	<50	<75	<94	14	<0.7	<0.8	<0.8	<0.5	--
LAI-11	8/26/2008	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	<50
LAI-11	2/18/2009	<50	<82	<410	<1	<1	<1	<1	<1	<400
LAI-11	8/25/2009	<50	38J	<380	<1	<1	<1	<3	<1	<250
LAI-11	3/23/2010	<50	<76.2	<381	<1	<1	<1	<3	<1	<250
LAI-11	8/24/2010	<50.0	<76.9	<385	<1.0	<1.0	<1.0	<3.0	<1.0	<250
LAI-11	2/9/2011	117	<76.2	<381	<1.0	13.1	<1.0	<3.0	<1.0	--
LAI-11	8/9/2011	<50.0	<90	<450	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-11	2/27/2012	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-11	9/4/2012	90.3	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-11	2/5/2013	<100	<440	<440	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-11	8/14/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-11	2/12/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-12	5/28/2003	<50	<0.25	<0.5	<0.5	<0.5	<0.5	1.81	--	--
LAI-12	8/11/2003	<50	0	<0.5	<0.5	<0.5	<0.5	2.21	--	--
LAI-12	11/20/2003	61	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-12	3/16/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-12	6/22/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-12	9/22/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-12	12/21/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-12	3/21/2005	<100	<0.242	<0.485	<1	<1	<1	<3	--	--
LAI-12	6/23/2005	<100	0.606 (b)	<0.476	<1	<1	<1	<3	<1	--
LAI-12	7/29/2005	<48	430	<95	<0.2	<0.2	<0.2	<0.6	<0.3	--
LAI-12	9/20/2005	<48	1,300	<320	1.6	3.9	<0.5	2.7	--	--
LAI-12	12/1/2005	<48	300	100	<0.5	<0.7	<0.8	<0.8	--	--
LAI-12	2/27/2006	<48	78	<97	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-12	5/17/2006	<48	410	<94	<0.2	<0.2	<0.2	<0.6	<0.3	--
LAI-12	8/17/2006	<48	1,200	130	<0.5	1	<0.8	<0.8	<0.5	--
LAI-12	11/20/2006	<48	600	120	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-12	2/19/2007	<48	530	<94	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-12	5/14/2007	<50	810	<96	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-12	9/11/2007	99	1,100	140	16	9	<2	9	<0.5	--
LAI-12	11/26/2007	<50	620	<95	0.7	<0.7	<0.8	3	<0.5	--
LAI-12	2/26/2008	<50	84	<94	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-12	8/26/2008	<50	260	<95	<0.5	<0.7	<0.8	<0.8	<0.5	<50
LAI-12	2/18/2009	<50	<82	<410	<1	<1	<1	<1	<1	<400
LAI-12	8/25/2009	<50	53J	<380	<1	<1	<1	<3	<1	<250
LAI-12	3/23/2010	<50	<76.2	<381	<1	<1	<1	<3	<1	<250
LAI-12	8/24/2010	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	<1.0	<250
LAI-12	2/9/2011	<50.0	<76.9	<385	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-12	5/17/2011	<50.0 J	<75	<380	<1.0 J	<1.0 J	<1.0 J	<3.0 J	<1.0 J	--
LAI-12	8/9/2011	<50.0	<78	<390	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-12	11/16/2011	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-12	2/27/2012	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-12	5/8/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-12	9/4/2012	<50.0	<81	<400	<1.0	1.7	1.4	8.9	<1.0	--
LAI-12	11/13/2012	<100	<110	<110	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-12	2/5/2013	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-12	5/1/2013	<100	<200	<390	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-12	8/14/2013	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-12	11/22/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-12	2/12/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
LAI-12	4/30/2014	<50	<50	<29	<0.15	<0.11	<0.16	<0.40	<0.17	--
LAI-13	5/28/2003	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-13	8/11/2003	<50	<0.25	<0.5	<0.5	0.647	<0.5	<1	--	--
LAI-13	11/20/2003	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-13	3/15/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-13	6/22/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-13	9/21/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-13	12/21/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-13	3/21/2005	<100	<0.237	<0.473	<1	<1	<1	<3	--	--
LAI-13	6/23/2005	<100	<0.236	<0.472	<1	<1	<1	<3	<1	--
LAI-13	7/29/2005	<48	<77	<120	<0.2	<0.2	<0.2	<0.6	<0.3	--
LAI-13	9/20/2005	<48	<75	<93	<0.5	<0.5	<0.5	<1.5	--	--
LAI-13	12/1/2005	<48	<75	<94	<0.5	<0.7	<0.8	<0.8	--	--
LAI-13	2/27/2006	<48	<78	<97	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-13	5/16/2006	<48	<76	<95	<0.2	<0.2	<0.2	<0.6	<0.3	--
LAI-13	8/16/2006	<84	<75	<94	<0.5	3	<0.8	<6	<0.5	--
LAI-13	11/21/2006	<48	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-13	2/20/2007	<48	--	--	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-13	5/15/2007	<50	<78	<97	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-13	9/11/2007	<50	240	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-13	11/26/2007	<50	180	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-13	2/26/2008	<50	<75	<94	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-13	8/25/2008	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	<50
LAI-13	2/18/2009	<50	<82	<410	<1	<1	<1	<1	<1	<400
LAI-13	8/25/2009	<50	59J	<510	<1	<1	<1	<3	<1	<250
LAI-13	3/22/2010	<50	<76.2	<381	<1	<1	<1	<3	<1	<250
LAI-13	8/24/2010	<50.0	<78.4	<392	<1.0	<1.0	<1.0	<3.0	<1.0	<250
LAI-13	2/10/2011	<50.0	<75.8	<379	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-13	8/11/2011	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-13	2/21/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-13	8/28/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-13	1/30/2013	<100	<470	<470	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-13	8/15/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-13	2/5/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-13	9/24/2019	<100	<392	<392	<1.0	<1.0	<1.0	<3.0	---	---
LAI-13	2/25/2020	<100	<588	<588	<1.0	<1.0	<1.0	<3.0	---	---
LAI-13	3/18/2021	<100	<392	<392	<1.00	<1.00	<1.00	<3.00	---	---
LAI-13	9/16/2021	<100	250	<97	<0.50	<1.0	<1.0	<2.0	---	---
LAI-13	3/3/2022	<100	<100	<100	<0.50	<1.0	<1.0	<2.0	---	---
LAI-14	2/25/2003	50	0.27	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-14	3/25/2003	66	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-14	4/18/2003	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-14	5/28/2003	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-14	8/11/2003	<50	0.28	<0.5	<0.5	0.631	<0.5	<1	--	--
LAI-14	11/20/2003	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-14	3/15/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-14	6/22/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-14	9/21/2004	<50	0	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-14	12/21/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-14	3/21/2005	<100	<0.237	<0.473	<1	1.45	<1	<3	--	--
LAI-14	6/23/2005	<100	0.26	<0.475	<1	<1	<1	<3	<1	--
LAI-14	7/29/2005	57	140	190	0.2	<0.2	<0.2	<0.6	<0.3	--
LAI-14	9/21/2005	<48	--	--	<0.5	<0.5	<0.5	<1.5	--	--
LAI-14	12/1/2005	<48	<75	<94	<0.5	<0.7	<0.8	<0.8	--	--
LAI-14	2/27/2006	55	<77	<96	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-14	5/16/2006	<48	<77	<97	<0.2	<0.2	<0.2	<0.6	<0.3	--
LAI-14	8/16/2006	72	<77	<97	<0.5	1	<0.8	2	<0.5	--
LAI-14	11/21/2006	<48	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-14	2/20/2007	<48	<75	<94	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-14	5/15/2007	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-14	9/11/2007	<50	<76	<94	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-14	11/26/2007	<50	<77	<96	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-14	2/26/2008	<50	<75	<93	<0.5	<0.7	<0.8	<0.8	<0.5	--



Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
LAI-14	8/25/2008	<50	<75	<94	<0.5	<0.7	<0.8	<0.8	<0.5	<50
LAI-14	2/18/2009	<50	<83	<410	<1	<1	<1	<1	<1	<400
LAI-14	8/25/2009	<50	<150	<750	<1	<1	<1	<3	<1	<250
LAI-14	3/22/2010	<50	<75.5	<377	<1	<1	<1	<3	<1	<250
LAI-14	8/24/2010	<50.0	<76.9	<385	<1.0	<1.0	<1.0	<3.0	<1.0	<250
LAI-14	2/10/2011	<50.0	<76.9	<385	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-14	8/11/2011	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-14	2/21/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-14	8/28/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-14	1/30/2013	<100	<450	<450	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-14	8/15/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-14	2/5/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-14	8/12/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-14	11/25/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-14	2/13/2015	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	---
LAI-14	9/24/2019	<100	<392	<392	<1.0	<1.0	<1.0	<3.0	---	---
LAI-14	2/25/2020	<100	<500	<500	<1.0	<1.0	<1.0	<3.0	---	---
LAI-14	3/18/2021	<100	<392	<392	<1.00	<1.00	<1.00	<3.00	---	---
LAI-14	9/16/2021	<100	<96	<96	<0.50	<1.0	<1.0	<2.0	---	---
LAI-14	3/3/2022	<100	<97	<97	<0.50	<1.0	<1.0	<2.0	---	---
LAI-15	5/28/2003	104	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-15	8/11/2003	158	0.33	<0.5	<0.5	0.641	<0.5	1.95	--	--
LAI-15	11/20/2003	54	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-15	3/15/2004	154	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-15	6/22/2004	135	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-15	9/21/2004	92	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-15	12/21/2004	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-15	3/21/2005	<100	<0.237	<0.473	<1	<1	<1	<3	--	--
LAI-15	6/23/2005	<100	<0.237	<0.473	<1	<1	<1	<3	<1	--
LAI-15	7/29/2005	76	<800	<1000	<0.2	0.3	<0.2	<0.6	--	--
LAI-15	9/21/2005	100	<75	<94	<0.5	<0.5	<0.5	<1.5	--	--
LAI-15	12/1/2005	67	<75	<94	<0.5	<0.7	<0.8	<0.8	--	--
LAI-15 (DUP)	11/28/2005	92	110	<94	<0.5	<0.7	<0.8	<0.8	--	--
LAI-15	2/27/2006	77	<77	<97	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-15 (DUP)	3/1/2006	90	<76	<95	<0.5	0.8	0.8	<0.8	<0.5	--
LAI-15	5/16/2006	98	<76	<95	<0.2	<0.2	<0.2	<0.6	<0.3	--
LAI-15 (DUP)	5/17/2006	97	<76	<95	0.4	1	<0.2	<0.6	<0.3	--
LAI-15	8/16/2006	85	<75	<93	<0.5	1	<0.8	1	<0.5	--
LAI-15	11/21/2006	50	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-15	2/20/2007	75	<75	<94	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-15	5/15/2007	83	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-15	9/11/2007	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-15	11/26/2007	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-15	2/26/2008	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
LAI-15	8/25/2008	56	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	<50
LAI-15	2/18/2009	<50	<83	<410	<1	<1	<1	<1	<1	<400
LAI-15	8/25/2009	32.2J	<76	<380	<1	<1	<1	<3	<1	<250
LAI-15	3/22/2010	<50	<75.5	<377	<1	<1	<1	<3	<1	<250
LAI-15	8/24/2010	61	<77.3	<386	<1.0	<1.0	<1.0	<3.0	<1.0	<250
LAI-15	2/9/2011	57.3	<76.9	<385	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-15	5/24/2011	248	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-15	8/11/2011	90.4	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-15 (DUP)	8/11/2011	73.9	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-15	2/21/2012	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-15	8/28/2012	56.4	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-15	1/30/2013	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-15	8/15/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-15	2/5/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-16	2/25/2003	<50	<0.25	<0.5	<0.5	0.679	<0.5	1.09	--	--
LAI-16	3/25/2003	<50	0.29	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-16 (DUP)	3/25/2003	<50	0.33	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-16	4/17/2003	<50	<0.25	<0.5	3.51	<0.5	<0.5	<1	--	--
LAI-16	5/28/2003	705	<0.25	<0.5	<b>523</b>	14.9	<1	2.25	--	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
LAI-16	11/21/2003	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-16 (DUP)	11/21/2003	<50	<0.25	<0.5	<0.5	<0.5	<0.5	<1	--	--
LAI-16	3/16/2004	<50	<0.25	<0.5	2.7	0.796	<0.5	<1	--	--
LAI-16 (DUP)	3/16/2004	<50	<0.25	<0.5	4.76	0.63	<0.5	<1	--	--
LAI-16	6/22/2004	<50	<0.25	<0.5	<b>8.52</b>	<0.5	<0.5	<1	--	--
LAI-16	12/21/2004	<50	<0.25	<0.5	<0.5	0.667	<0.5	<1	--	--
LAI-16	3/21/2005	<100	<0.236	<0.471	<1	6.08	<1	<3	--	--
LAI-16	6/23/2005	<100	<0.384 (d)	<0.473	<1	<1	<1	<3	<1	--
LAI-16	9/21/2005	Insufficient Groundwater to Sample								
LAI-16	12/1/2005	<48	140	98	<0.5	<0.7	<0.8	<0.8	--	--
LAI-16	3/1/2006	<48	160	<95	<b>21</b>	<0.7	<0.8	<0.8	<0.5	--
LAI-16	5/17/2006	<48	78	<94	1.8	0.3	<0.2	<0.6	<0.3	--
LAI-16	8/16/2006	Insufficient Groundwater to Sample								
LAI-16	11/20/2006	<48	91	<95	<0.5	0.8	<0.8	1	<0.5	--
LAI-16	2/19/2007	<48	120	<94	<b>17</b>	<0.7	<0.8	<0.8	<0.5	--
LAI-16	5/14/2007	<50	--	--	0.7	<0.7	<0.8	<0.8	<0.5	--
LAI-16	9/11/2007	Insufficient Groundwater to Sample								
LAI-16	11/26/2007	Insufficient Groundwater to Sample								
LAI-16	2/26/2008	310	300	<94	<b>64</b>	6	11	20	<0.5	--
LAI-16	2/19/2009	<50	<82	<410	<1	<1	1	1	<1	<400
LAI-16	8/25/2009	Insufficient Groundwater to Sample								
LAI-16	3/23/2010	<50	<75.5	<377	<1	<1	<1	<3	<1	<250
LAI-16	8/26/2010	Insufficient Groundwater to Sample								
LAI-16	5/16/2011	<50 J	<75	<380	<1 J	<1 J	<1 J	<3 J	<1 J	--
LAI-16	3/1/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
LAI-16	2/8/2013	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	<1.0	--
RW-1	11/30/2005	55	<75	<94	1	6	<0.8	4	--	--
RW-1	8/25/2008	<50	<78	<97	<0.5	<0.7	<0.8	<0.8	<0.5	<50
RW-1	2/18/2009	<50	<80	<400	<1	<1	<1	<1	<1	<400
RW-1	8/25/2009	Insufficient Groundwater to Sample								
RW-1	3/23/2010	<50	<78.4	<392	<1	<1	<1	<3	<1	<250
RW-1	8/23/2010	Insufficient Groundwater to Sample								
RWx-2	9/20/2005	<b>130,000</b>	<b>3,000</b>	<470	<b>16,000</b>	<b>30,000</b>	<b>2,200</b>	<b>12,000</b>	--	--
RWx-2	8/26/2008	<b>100,000</b>	<b>610</b>	<96	<b>1,600</b>	<b>16,000</b>	<b>1,600</b>	<b>9,700</b>	<1	<100
RWx-2 (DUP)	8/27/2008	<b>62,000</b>	<b>5,600</b>	<970	<b>180</b>	<b>5,500</b>	<b>1,100</b>	<b>9,800</b>	<3	<250
RWX-2	11/18/2016	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
RWX-2	2/17/2017	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
RWX-2	5/26/2017	<100	<410	<410	<1.0	2.2	1.4	3.2	---	---
RWX-2	9/28/2017	<b>28,000</b>	<b>1,100</b>	<380	<b>2,210</b>	<b>7,340 J</b>	416	<b>2,180</b>	---	---
RWX-2	12/14/2017	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
RWX-2	3/2/2018	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
RWX-2	6/27/2018	139	<b>530</b>	<420	1.1	<1.0	4.8	<3.0	---	---
RWX-2	8/29/2018	<b>12,900</b>	<b>1,700</b>	<430	<b>1,190</b>	<b>2,700</b>	222	<b>1,060</b>	---	---
RWX-2	12/19/2018	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	---	---
RW-3	7/28/2005	<b>79,000</b>	<b>57,000</b>	<b>4,700</b>	<b>1,400</b>	<b>8,700</b>	<b>1,300</b>	<b>8,800</b>	15	--
RW-3	11/30/2005	<b>4,100</b>	<b>2,700</b>	130	<b>20</b>	200	30	220	--	--
RW-3	2/28/2006	270	<78	<97	<b>6</b>	46	4	23	<0.5	--
RW-3	5/16/2006	<b>2,600</b>	<b>1,700</b>	<94	<b>34</b>	190	26	200	<5	--
RW-3	8/17/2006	<b>12,000</b>	<b>2,400</b>	150	<b>480</b>	<b>1,700</b>	130	930	<0.5	--
RW-3	11/21/2006	<b>3,200</b>	<b>1,700</b>	<95	<b>26</b>	220	50	310	<0.5	--
RW-3	2/20/2007	<b>1,100</b>	300	<94	<b>12</b>	96	12	77	<0.5	--
RW-3	5/15/2007	<b>4,000</b>	<b>3,000</b>	<480	<b>240</b>	<b>1,200</b>	140	900	<1	--
RW-3	9/12/2007	<b>88,000</b>	--	--	<b>940</b>	<b>9,900E</b>	<b>1,500</b>	<b>8,700</b>	<0.5	--
RW-3	11/27/2007	<b>1,100</b>	310	<94	<b>12</b>	100	14	97	<0.5	--
RW-3	2/26/2008	<b>6,500</b>	<b>47,000</b>	<1900	<b>25</b>	370	140	760	<0.5	--
RW-3	8/25/2008	<b>830</b>	440	<97	<b>12</b>	45	15	95	<0.5	<50
RW-3	2/19/2009	266	110	<410	<1	9.9	3.2	20	<1	<400
RW-3	8/25/2009	Insufficient Groundwater to Sample								
RW-3	3/23/2010	<b>1,200</b>	<b>1,150</b>	<385	1.8	69.5	23.2	138	<1	<250
RW-3	8/23/2010	Insufficient Groundwater to Sample								
RW-3	2/27/2012	<b>3,700</b>	<b>2,400</b>	<380	<b>5.4</b>	111	62.5	351	<1.0	--
RW-3	8/24/2012	<b>2,710</b>	<b>2,100</b>	<420	<b>34.0</b>	17.7	92.3	456	<1.0	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location MTCA Method A Screening Levels:	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
RW-3	2/1/2013	366	15,400	700	<1.0	2.3	6.6	40.2	<1.0	--
RW-4	8/26/2008	4,100	2,200	<98	7	88	77	590	<0.5	<50
RW-4	2/19/2009	<50	<80	<400	<1	2.4	<1	3.5	<1	<400
RW-4	8/25/2009	Insufficient Groundwater to Sample								
RW-4	3/24/2010	84	<77.7	<388	<1	5.7	1.4	11.2	<1	<250
RW-4	8/26/2010	5,340	172	<400	123	1,250	230	1,430	<1.0	<250
RW-4	2/10/2011	<50.0	<76.9	<385	<1.0	<1.0	<1.0	<3.0	<1.0	--
RW-4	8/12/2011	5,820	<76	<380	151	551	176	770	<1.0	--
RW-4	11/18/2011	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
RW-4	2/23/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	3	<1.0	--
RW-4	5/11/2012	241	<80	<400	10.4	88.4	17.0	95.4	<1.0	--
RW-4	8/24/2012	1,350	<82	<410	26.9	77.7	42.3	183	<1.0	--
RW-4	11/9/2012	101	<100	<100	<1.0	3.1	3.1	17.5	<1.0	--
RW-4	1/31/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
RW-4 (DUP)	1/31/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
RW-4	5/3/2013	138	<200	290	<1.0	2.4	1.6	10	<1.0	--
RW-4	8/22/2013	4,080	1,600	<430	21.5	47.2	33.3	174	<1.0	--
RW-4	11/20/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
RW-4 (DUP)	11/20/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
RW-4	2/11/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
RW-4	5/7/2014	<50	<48	<28	<0.15	<0.11	<0.16	<0.40	<0.17	--
RWx-5	8/26/2008	43,000	1,700	<99	3,800	9,500	810	4,300	<5	<500
RWx-5	2/19/2009	2,690	350	<400	37	120	10	530	<1	<400
RWx-5	8/25/2009	190,000	1,600	84J	30,200	43,500	3,260	17,200	<1	<250
RWx-5 (DUP)	8/25/2009	191,000	1,300	120J	28,300	40,700	22,820	14,600	<1	<250
RWx-5	3/24/2010	827	<76.2	<381	26.3	44.9	3.8	192	<1	<250
RWx-5	8/26/2010	16,200	193	<396	2,700	3,140	375	1,660	<1.0	<250
RWx-5 (DUP)	8/26/2010	29,800	582	<412	4,190	7,990	1,130	4,140	<1.0	<250
RWx-5	2/11/2011	1,730	<78.4	<392	18.8	38.2	5.9	325	<1.0	--
RWx-5	5/25/2011	689	<75	<380	4.5	9.5	2.4	96.1	<1.0	--
RWx-5	8/15/2011	72,400	550	<380	4,480	26,100	1,640	7,290	<1.0	--
RWx-5	11/18/2011	309	<76	<380	21.6	48.5	<1.0	25.7	<1.0	--
RWx-5	2/23/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
RWx-5	5/11/2012	1,970	<79	<400	6.7	113	19.6	862	<1.0	--
RWx-5	8/27/2012	67,300	420	<380	2,620	18,100	1,260	6,010	<50.0	--
RWx-5	11/9/2012	1,460	380	<110	5.2	183	48.7	431	<1.0	--
RWx-5 (DUP)	11/9/2012	1,430	230J	<110	4.0	148	42.3	398	<1.0	--
RWx-5	1/31/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
RWx-5	5/3/2013	67,800	360	320	8,540	18,300	1,300	6,740	<100	--
RWx-5	8/22/2013	52,300	<420	<420	977	2,130	107	658	<100	--
RWx-5	11/20/2013	<100	<400	<400	<1.0 J	<1.0 J	<1.0 J	<3.0 J	<1.0 J	--
RWx-5	2/7/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
RWx-5	5/7/2014	<50	<48	<28	<0.15	<0.11	<0.16	<0.40	<0.17	--
RW-6	8/27/2008	84	<79	<99	<0.5	<0.7	<0.8	2	<0.5	<50
RW-6	2/18/2009	50	<80	<400	<1	<1	<1	<1	<1	<400
RW-6	8/25/2009	Insufficient Groundwater to Sample								
RW-6	3/24/2010	<50	<75.8	<379	<1	<1	<1	<3	<1	<250
RW-6	8/23/2010	Insufficient Groundwater to Sample								
RWx-7	8/27/2008	65,000	5,400	<980	180	4,800	1,200	8,900	<3	<250
RWx-7	2/19/2009	13,700	1,900	<410	1	22	35	1,100	<1	<400
RWx-7	8/25/2009	39,100	1,600	110J	2,990	2,670	279	3,210	<1	<250
RWx-7	3/24/2010	939	124	<381	<1	<1	<1	12	<1	<250
RWx-7	8/26/2010	19,600	742	<421	352	1,270	462	3,280	<1.0	<250
RWx-7	2/11/2011	<50.0	<76.9	<385	<1.0	<1.0	<1.0	<3.0	<1.0	--
RWx-7	8/12/2011	25,600	580	<380	1,590	3,870	552	2,650	<1.0	--
RWx-7	2/23/2012	88.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
RWx-7	8/27/2012	23,600	630	<390	1,100	3,900	361	2,550	<5.0	--
RWx-7	1/30/2013	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	<1.0	--
RWx-7	8/22/2013	30,300	530	<420	1,830	4,460	370	2,100	<25.0	--
RWx-7	2/11/2014	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
RWx-7	11/18/2016	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
RWX-7	2/17/2017	1,360	<400	<400	<1.0	<1.0	<1.0	24.2	---	---
RWX-7	5/26/2017	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
RWX-7	9/28/2017	932	<420	<420	272	10.6	1.5	40.6	---	---
RWX-7	12/14/2017	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	---	---
RWX-7	3/2/2018	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
RWX-7	6/27/2018	<100	<430	<430	9.9	<1.0	<1.0	<3.0	---	---
RWX-7	8/29/2018	2,540	960	<400	290	263	31.1	87.3	---	---
RWX-7	12/19/2018	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	---	---
HWx-1E	9/21/2005	3,800	610	<94	460	21	220	90	--	--
HWx-1E	11/30/2005	4,900	720	<95	2,300	250	220	590	--	--
HWx-1E	3/1/2006	80,000	2,200	<480	9,000	12,000	1,400	7,600	<5	--
HWx-1E	5/17/2006	69,000	1,100	860	10,000	9,800	1,700	7,600	<200	--
HWx-1E	8/16/2006	23,000	2,800	<940	5,300	1,300	840	3,700	<1	--
HWx-1E	11/20/2006	750	91	<94	70	14	29	75	<0.5	--
HWx-1E	2/19/2007	42,000	1,400	<94	6,300	5,100	1,200	3,700	<5	--
HWx-1E	5/14/2007	80,000	1,300	<96	8,800	12,000	1,600	7,400	<10	--
HWx-1E	9/11/2007	4,800	1,100	<94	750	34	200	620	<0.5	--
HWx-1E	11/26/2007	310	170	<97	240	7	3	29	<0.5	--
HWx-1E	2/26/2008	300	320	<95	65	7	13	23	<0.5	--
HWx-1E	8/26/2008	1,200	390	<96	250	220	13	69	<0.5	<50
HWx-1W	11/29/2005	1,200	590	<95	420	<1	62	120	--	--
HWx-1W	2/28/2006	54,000	1,500	<190	2,700	6,400	780	3,200	<3	--
HWx-1W	5/17/2006	73,000	1,100	<190	6,800	12,000	1,500	7,400	<100	--
HWx-1W	8/16/2006	8,500	970	120	2,000	280	440	1,300	<0.5	--
HWx-1W	11/20/2006	220	89	<96	12	1	8	30	<0.5	--
HWx-1W	2/19/2007	11,000	1,100	140	1,500	1,300	470	1,500	<1	--
HWx-1W	5/14/2007	38,000	980	<95	6,200	4,900	1,000	4,100	<5	--
HWx-1W	9/11/2007	1,800	1,700	<950	2,000	4	210	180	<0.5	--
HWx-1W	11/26/2007	680	440	<96	1,700	16	20	76	<1	--
HWx-1W	2/26/2008	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
HWx-1W	8/26/2008	84	120	<95	1	<0.7	1	2	<0.5	<50
MW-1	11/15/2011	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-1	2/28/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-1	5/8/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-1	9/4/2012	<50	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-1	11/7/2012	<100	<110	<110	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-1	2/5/2013	<100	<460	<460	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-1	5/1/2013	<100	<200	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-1	8/14/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-1	11/22/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-1	2/13/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-1	4/30/2014	<50	<48	<28	<0.15	<0.11	<0.16	<0.40	<0.17	--
MW-1	8/13/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-1	11/23/2014	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-1	2/13/2015	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	---
MW-1	11/16/2016	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	---	---
MW-1	2/16/2017	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-1	5/24/2017	<100	<440	<440	<1.0	<1.0	<1.0	<3.0	---	---
MW-1	9/27/2017	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-1	12/13/2017	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-1	2/28/2018	<100	<380	<380	<1.0 J	<1.0 J	<1.0 J	<3.0 J	---	---
MW-1	6/26/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-1	8/28/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-1	12/18/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-1	3/14/2019	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
MW-1	9/23/2019	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-1	2/25/2020	<100	<417	<417	<1.0	<1.0	<1.0	<3.0	---	---
MW-1	9/17/2020	<100	<417	<417	<1.00	<1.00	<1.00	<3.00	---	---
MW-1	3/17/2021	<100	<400	<400	<1.00	<1.00	<1.00	<3.00	---	---
MW-1	9/14/2021	<100	<97	<97	<0.50	<1.0	<1.0	<2.0	---	---
MW-1	3/3/2022	<100	<99	<99	<1.0	<2.0	<2.0	<4.0	---	---

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
MW-2	11/16/2011	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-2	2/28/2012	86.4	<150	<730	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-2	5/14/2012	<100	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-2	9/4/2012	<50.0	<78	<390	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-2	11/7/2012	<100	<110	<110	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-2	2/8/2013	103	<450	<450	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-2	5/1/2013	113	210	<390	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-2	8/23/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-2	11/22/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-2	2/13/2014	189	<400	<400	<1.0	<1.0	<1.0	<2.0	<4.0	--
MW-2	4/30/2014	134	<50	<29	<0.15	<0.11	<0.16	<0.40	<0.17	--
MW-2	8/13/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-2	11/23/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-2	2/13/2015	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-2	11/16/2016	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-2	2/16/2017	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-2	5/24/2017	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	---	---
MW-2	9/27/2017	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
MW-2	12/13/2017	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-2	2/28/2018	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
MW-2	6/26/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-2	8/28/2018	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-2	12/18/2018	118	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-2	3/14/2019	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
MW-2	9/23/2019	<100	<392	<392	<1.0	<1.0	<1.0	<3.0	---	---
MW-2	2/25/2020	107	<455	<455	<1.0	<1.0	<1.0	<3.0	---	---
MW-2	9/17/2020	<100	<435	<435	<1.00	<1.00	<1.00	<3.00	---	---
MW-2	3/17/2021	<100 J	<400 J	<400 J	<1.00	<1.00	<1.00	<3.00	---	---
MW-2	9/14/2021	<100	<98	<98	<0.50	<1.0	<1.0	<2.0	---	---
MW-2	3/3/2022	<100	<110	<110	<0.50	<1.0	<1.0	<2.0	---	---
MW-3	11/17/2011	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-3	3/1/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-3	5/14/2012	<50.0	350	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-3	8/28/2012	463	<76	<380	<1.0	181	<1.0	<3.0	<1.0	--
MW-3	11/7/2012	206	<120	<120	<1.0	143J	<1.0	<3.0	<1.0	--
MW-3	2/8/2013	133	<450	<450	1.7	36.6	<1.0	<3.0	<1.0	--
MW-3	5/6/2013	<100	<200	<200	<1.0	17.1	<1.0	<3.0	<1.0	--
MW-3	8/16/2013	187	<420	<420	<1.0	84.1	<1.0	<3.0	<1.0	--
MW-3	11/26/2013	<100	<400	<400	<1.0	6.9	<1.0	<3.0	<1.0	--
MW-3	2/10/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-3	5/1/2014	<50	<50	<29	<0.15	<0.11	<0.16	<0.40	<0.17	--
MW-3	8/14/2014	<100	<400	<400	<1.0	1.5	<1.0	<3.0	<1.0	--
MW-3	11/23/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-3	2/17/2015	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	<1.0	---
MW-3	11/16/2016	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-3	2/16/2017	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
MW-3	5/24/2017	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	---	---
MW-3	9/27/2017	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-3	9/27/2017	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-3	12/13/2017	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
MW-3	2/27/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-3	6/26/2018	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-3	8/28/2018	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
MW-3	12/18/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-3	3/14/2019	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	---	---
MW-3	9/24/2019	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-3	2/25/2020	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-3	9/17/2020	<100	<435	<435	<1.00	<1.00	<1.00	<3.00	---	---
MW-3	3/17/2021	<100	<392	<392	<1.00	<1.00	<1.00	<3.00	---	---
MW-3	9/14/2021	<100	<96	<96	<0.50	<1.0	<1.0	<2.0	---	---
MW-3	3/3/2022	<100	<98	<98	<0.50	<1.0	<1.0	<2.0	---	---
MW-4	11/17/2011	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-4	3/1/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
MW-4	5/14/2012	<50.0	<82	<410	<1.0 <sup>(SS)</sup>	<1.0 <sup>(SS)</sup>	<1.0	<3.0	<1.0	--
MW-4	8/28/2012	<50.0	<80	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-4	11/7/2012	<100	<110UJ	<110UJ	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-4	2/8/2013	<100	<440	<440	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-4	5/6/2013	<100	<200	<200	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-4	8/16/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-4	11/26/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-4	2/10/2014	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-4	5/1/2014	<50	<48	600	<0.15	<0.11	<0.16	<0.40	<0.17	--
MW-4	8/14/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-4	11/23/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-4	2/17/2015	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	---
MW-4	11/16/2016	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	--	---
MW-4	2/16/2017	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	--	---
MW-4	5/24/2017	<100	<510	<510	<1.0	2.4	<1.0	<3.0	--	---
MW-4	9/27/2017	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	--	---
MW-4	12/13/2017	<100	<380	<380	<1.0	1.0	<1.0	<3.0	--	---
MW-4	2/27/2018	<100	<380	<380	<1.0	2.1	1.4	<3.0	--	---
MW-4	6/26/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	---
MW-4	8/28/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	---
MW-4	12/19/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	---
MW-4	3/14/2019	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	--	---
MW-4	9/24/2019	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	---
MW-4	2/25/2020	<100	<417	<417	<1.0	<1.0	<1.0	<3.0	--	---
MW-4	9/17/2020	<100	<417	<417	<1.00	<1.00	<1.00	<3.00	--	---
MW-4	3/17/2021	<100	<392	<392	<1.00	<1.00	<1.00	<3.00	--	---
MW-4	9/14/2021	<100	<96	<96	<0.50	<1.0	<1.0	<2.0	--	---
MW-4	3/3/2022	<100	<100	<100	<0.50	<1.0	<1.0	<2.0	--	---
MW-5	11/17/2011	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-5	3/1/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-5	5/14/2012	<50.0	<83	<420	<1.0 <sup>(SS)</sup>	<1.0 <sup>(SS)</sup>	<1.0	<3.0	<1.0	--
MW-5	8/28/2012	<50.0	<83	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-5	11/7/2012	<100	<100UJ	<100UJ	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-5	2/7/2013	<100	<470	<470	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-5	5/6/2013	<100	<200	<200	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-5	8/16/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-5	11/26/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-5	2/10/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-5	5/1/2014	<50	<48	<28	<0.15	<0.11	<0.16	<0.40	<0.17	--
MW-5	8/14/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-5	11/23/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-5	2/17/2015	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	---
MW-5	11/17/2016	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	--	---
MW-5	2/16/2017	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	--	---
MW-5	5/24/2017	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	--	---
MW-5	9/28/2017	<100	<380	<b>720</b>	<1.0	<1.0	<1.0	<3.0	--	---
MW-5	12/13/2017	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	--	---
MW-5	2/27/2018	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	--	---
MW-5	6/26/2018	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	--	---
MW-5	8/28/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	---
MW-5	12/19/2018	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	--	---
MW-6	11/16/2011	<50.0	<77	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-6	3/1/2012	64.5	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-6	5/14/2012	62.6	<84	<420	<1.0 <sup>(SS)</sup>	<1.0 <sup>(SS)</sup>	<1.0	<3.0	<1.0	--
MW-6	8/28/2012	<50.0	<82	<410	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-6	11/7/2012	<100	<110UJ	<110UJ	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-6	2/7/2013	<100	<440	<440	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-6	5/6/2013	<100	<200	<200	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-6	8/16/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-6	11/26/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-6	2/10/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-6	5/1/2014	<50	<48	<28	<0.15	<0.11	<0.16	<0.40	<0.17	--
MW-6	8/14/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
MW-6	11/23/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-6	2/23/2015	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	---
MW-6	2/23/2015	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	---
MW-6	11/17/2016	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
MW-6	11/17/2016	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
MW-6	2/16/2017	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-6	5/24/2017	112	<440	<440	<1.0	<1.0	<1.0	<3.0	---	---
MW-6	9/28/2017	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
MW-6	12/13/2017	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
MW-6	2/28/2018	<100	<400	<400	<1.0 J	<1.0 J	<1.0 J	<3.0 J	---	---
MW-6	6/26/2018	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
MW-6	8/28/2018	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	---	---
MW-6	12/19/2018	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-6	3/14/2019	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-6	9/24/2019	<100	<417	<417	<1.0	<1.0	<1.0	<3.0	---	---
MW-6	2/25/2020	<100	<417	<417	<1.0	<1.0	<1.0	<3.0	---	---
MW-6	9/17/2020	<100	<435	<435	<1.00	<1.00	<1.00	<3.00	---	---
MW-6	3/17/2021	<100	<408	<408	<1.00	<1.00	<1.00	<3.00	---	---
MW-6	9/15/2021	<100	<95	<95	<0.50	<1.0	<1.0	<2.0	---	---
MW-6	3/3/2022	<100	<110	<110	<0.50	<1.0	<1.0	<2.0	---	---
MW-7	11/15/2011	<b>7,530</b>	380	<380	<b>3,560</b>	<b>1,610</b>	<b>898</b>	<b>3,250</b>	<1.0	--
MW-7	3/1/2012	<b>58,000</b>	<b>1,300</b>	<380	<b>15,000</b>	<b>1,600</b>	<b>1,150</b>	<b>2,770</b>	<1.0	--
MW-7	5/9/2012	<b>32,900</b>	<b>1,500</b>	<380	<b>7,470</b>	<b>1,620</b>	<b>1,290</b>	<b>2,930</b>	<50.0	--
MW-7	8/23/2012	<b>24,700<sup>10</sup></b>	<b>850</b>	<390	<b>8,930</b>	<b>1,220</b>	<b>1,880</b>	<b>3,310</b>	1.1	--
MW-7	11/6/2012	<b>28,000</b>	<b>3,100</b>	<110	<b>6,620</b>	337	<b>1,120</b>	<b>2,230</b>	<20.0	--
MW-7	2/7/2013	<b>17,500</b>	<b>3,800</b>	<450	<b>6,840</b>	314	<b>1,940</b>	<b>1,410</b>	<50.0	--
MW-7	4/29/2013	<b>19,600</b>	<200	<200	<b>6,400</b>	310	<b>2,410</b>	<b>1,360</b>	<50.0	--
MW-7	8/13/2013	<b>19,700</b>	<b>2,600</b>	<b>1,000</b>	<b>8,710</b>	843	<b>1,080</b>	<b>2,810</b>	<50.0	--
MW-7	11/18/2013	<b>12,100</b>	<b>1,000</b>	<430	<b>6,730</b>	420	<b>1,310</b>	<b>1,270</b>	<50.0	--
MW-7 (DUP)	2/5/2014	<b>18,400</b>	<b>930</b>	<400	<b>4,760</b>	148	<b>1,560</b>	<b>1,170</b>	<20.0	--
MW-7	2/5/2014	<b>18,900</b>	<b>1,200</b>	<400	<b>6,150 J</b>	170 J	<b>1,750 J</b>	<b>1,310 J</b>	<20.0 J	--
MW-7	4/29/2014	<b>17,200</b>	<b>1,200</b>	<28	<b>6,870</b>	129	<b>2,330</b>	<b>1,080</b>	<8.4	--
MW-7	11/17/2016	<b>11,300</b>	<b>2,200</b>	<390	<b>3,250</b>	27.3	<b>1,500</b>	318	---	---
MW-7	5/24/2017	<b>11,100</b>	<b>1,100</b>	<430	<b>2,790</b>	32.7	<b>924</b>	263	---	---
MW-7	12/13/2017	<b>4,630</b>	<b>27,400 J</b>	<410	<b>1,660</b>	78.5	238	257	---	---
MW-7	3/1/2018	<b>4,340 J</b>	<b>16,900</b>	<370	<b>2,470</b>	68.4	382	208	---	---
MW-7	8/29/2018	<b>19,400</b>	<b>1,800</b>	<390	<b>4,640</b>	<b>1,440</b>	<b>1,070</b>	<b>2,400</b>	---	---
MW-8	11/15/2011	<b>11,900</b>	130	<380	<b>3,670</b>	365	431	<b>1,510</b>	2.6	--
MW-8	2/22/2012	<b>9,370</b>	220	<380	<b>4,430</b>	382	<b>957</b>	<b>2,660</b>	6.9	--
MW-8	5/10/2012	<b>23,500</b>	<b>670</b>	<410	<b>9,090</b>	542	<b>841</b>	<b>2,280</b>	<25.0	--
MW-8 (DUP)	5/10/2012	<b>24,700</b>	<b>940</b>	<380	<b>8,940</b>	571	<b>855</b>	<b>2,320</b>	8.0	--
MW-8	8/23/2012	<b>17,500<sup>10</sup></b>	<b>680</b>	<380	<b>9,570</b>	670	<b>1,090</b>	<b>2,780</b>	5.1	--
MW-8	11/6/2012	<b>10,300</b>	<b>1,400</b>	<110	<b>3,420</b>	140	422	<b>1,037</b>	1.8	--
MW-8	1/29/2013	<b>8,130</b>	<b>2,800</b>	<b>820</b>	<b>6,280</b>	186	465	<b>1,250</b>	6.2	--
MW-8	4/29/2013	<b>5,430</b>	<200	<200	<b>4,720</b>	100	533	<b>1,380</b>	<50.0	--
MW-8	8/13/2013	<b>12,700</b>	<b>1,800</b>	<b>820</b>	<b>7,460</b>	58.8 J	<b>708</b>	<b>1,670</b>	<50.0	--
MW-8	11/19/2013	<b>7,500</b>	<b>550</b>	<420	<b>4,550</b>	<50.0	477	<b>1,100</b>	<50.0	--
MW-8	2/4/2014	<b>7,650</b>	<b>520 J</b>	<420	<b>4,040</b>	<50.0	447	931	<50.0	--
MW-8 (DUP)	2/4/2014	<b>7,960</b>	430 J	<400	<b>3,940</b>	<25.0	436	918	<25.0	--
MW-8	4/29/2014	<b>7,780</b>	480	<29	<b>7,070</b>	<5.5	552	<b>1,120</b>	<8.4	--
MW-8	11/17/2016	540	<400	<400	<b>123</b>	<1.0	2.6	24.7	---	---
MW-8	5/24/2017	<b>1,460</b>	<420	<420	<b>1,330</b>	25.8	13.0	73.1	---	---
MW-8	12/13/2017	692 J	<b>650 J</b>	<400	<b>695</b>	<5.0	10.3	<15.0	---	---
MW-8	3/1/2018	692	<380	<380	<b>832 J</b>	<5.0 J	39.7 J	<15.0 J	---	---
MW-8	3/1/2018	688	<380	<380	<b>784 J</b>	<5.0 J	37.4 J	<15.0 J	---	---
MW-8	8/29/2018	<b>1,250</b>	<b>840</b>	<390	<b>194</b>	4.1	8.5	10.6	---	---
MW-9	11/16/2011	<b>1,950</b>	<76	<380	<b>1,430</b>	2	5	7.7	1.2	--
MW-9	2/22/2012	566	120 J	<380	<b>899</b>	1.9 J	1.8 J	3.4 J	<1.0 J	--
MW-9 (DUP)	2/22/2012	535	260 J	<380	<b>889</b>	1.8 J	1.7 J	3.2 J	1.0 J	--
MW-9	5/9/2012	<b>1,830</b>	290	<430	<b>625</b>	1.4	1.7	<3.0	<1.0	--
MW-9	8/24/2012	<b>1,070</b>	270	<380	<b>977</b>	2.8	5.1	8.0	<1.0	--
MW-9	11/15/2012	<b>1,330</b>	220	<100	<b>439</b>	<2.0	2.3	<6.0	<2.0	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
MW-9	1/31/2013	224	<450	<450	180	<1.0	<1.0	<3.0	<1.0	--
MW-9	4/30/2013	1,210	<200	<200	1,150	<10.0	<10.0	<30.0	<10.0	--
MW-9	8/13/2013	1,790	1,500	<400	817	4.1 J	7.3	6.8	<1.0	--
MW-9	11/18/2013	869	430	<400	266	<2.0	2.2	<6.0	<2.0	--
MW-9	2/4/2014	1,520	650 J	<430	1,040	<5.0	6.4	<15.0	<5.0	--
MW-9	4/30/2014	2,050	550	<29	762	<0.55	<0.82	<2.0	<0.84	--
MW-9	11/16/2016	1,330	540	1,100	120	1.4	2.2	3.9	---	---
MW-9	2/16/2017	1,240	740	580	159	1.5	3.2	6.8	---	---
MW-9	5/25/2017	1,120	<500	<500	179	1.4	6.7	<3.0	---	---
MW-9	9/27/2017	849	580	<410	80.7	1.1	1.6	<3.0	---	---
MW-9	12/13/2017	950 J	600 J	<410	29.0	<1.0	<1.0	<3.0	---	---
MW-9	2/28/2018	1,320	410	<380	52.4 J	<1.0 J	5.8 J	<3.0 J	---	---
MW-9	6/27/2018	2,100	1,300	<410	258	1.2	8.2	4.4	---	---
MW-9	8/29/2018	1,230	960	<420	27.9	<1.0	1.7	<3.0	---	---
MW-9	12/19/2018	1,040	730	<380	13.1	<1.0	<1.0	<3.0	---	---
MW-10	11/17/2011	174	<75	<380	562	3	1.6	17.9	<1.0	--
MW-10 (DUP)	11/17/2011	113	<75	<380	440	2	<1.0	15.3	<1.0	--
MW-10	2/22/2012	434	160	<380	2.0	<1.0	<1.0	<3.0	<1.0	--
MW-10	5/10/2012	282	140	<390	65.4	3.5	5.7	15.7	<1.0	--
MW-10	11/9/2012	466	<110	<110	200	1.1	<1.0	3.2	<1.0	--
MW-10	2/1/2013	125	<440	<440	1.6	<1.0	<1.0	<3.0	<1.0	--
MW-10	4/30/2013	185	<200	<200	7.1	<1.0	<1.0	<3.0	<1.0	--
MW-10	8/20/2013	139	<400	<400	47.6	<1.0	<1.0	3.5	<1.0	--
MW-10	11/18/2013	116	<400	<400	57.9	2.2	<1.0	10.3	<1.0	--
MW-10	2/4/2014	125	<420	<420	27.4	<1.0	<1.0	<3.0	<1.0	--
MW-10	4/29/2014	415	<50	<29	<0.15	<0.11	<0.16	<0.40	<0.17	--
MW-10	8/12/2014	152	<400	<400	26.3	1.1	<1.0	3.7	<1.0	--
MW-10	11/25/2014	122	<400	<400	12.7	<1.0	<1.0	<3.0	<1.0	--
MW-10	2/17/2015	291	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	---
MW-10	11/16/2016	164	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-10	2/16/2017	189	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-10	5/24/2017	277	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-10	9/28/2017	<100	<410	<410	1.1 J	<1.0 J	<1.0 J	<3.0 J	---	---
MW-10	12/14/2017	<100	430	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-10	12/14/2017	<100	620	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-10	3/1/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-10	6/27/2018	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-10	8/28/2018	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-10	12/19/2018	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-10	3/14/2019	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
MW-10 (DUP)	3/14/2019	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-10	9/25/2019	<100	<417	<417	<1.0	<1.0	<1.0	<3.0	---	---
MW-10	2/25/2020	<100	<392	<392	<1.0	<1.0	<1.0	<3.0	---	---
MW-10	9/17/2020	<100	<465	<465	<1.00	<1.00	<1.00	<3.00	---	---
MW-10	3/17/2021	<100 J	<400	<400	<1.00	<1.00	<1.00	<3.00	---	---
MW-10	9/16/2021	<100	<97	<97	<0.50	<1.0	<1.0	<2.0	---	---
MW-10 (DUP)	9/16/2021	<100	<96	<96	<0.50	<1.0	<1.0	<2.0	---	---
MW-10	3/3/2022	<100	<97	<97	<0.50	<1.0	<1.0	<2.0	---	---
MW-11	2/29/2012	128	82	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-11	5/16/2012	177	<77	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-11	8/29/2012	145	<78	<390	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-11	11/16/2012	<100	<110	<110	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-11	2/6/2013	<100	<450	<450	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-11	5/7/2013	<100	<200	<200	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-11	8/21/2013	196	500	<420	<1.0 J	<1.0 J	<1.0 J	<3.0 J	<1.0 J	--
MW-11	11/26/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-11	2/6/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-11	5/9/2014	<50	<30	<52	<0.15	<0.11	<0.16	<0.40	<0.17	--
MW-11	8/15/2014	114	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-11	11/21/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-11	2/18/2015	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	---
MW-11	11/18/2016	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
MW-11	2/17/2017	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---



Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
MW-11	5/25/2017	<100	<510	<510	<1.0	<1.0	<1.0	<3.0	---	---
MW-11	9/27/2017	168	<400	480	<1.0	<1.0	<1.0	<3.0	---	---
MW-11	12/12/2017	117	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-11	2/28/2018	<100	<400	<400	<1.0 J	<1.0 J	<1.0 J	<3.0 J	---	---
MW-11	6/26/2018	207	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
MW-11	8/28/2018	182	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-11	12/18/2018	105	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-11	3/14/2019	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-11	9/25/2019	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-11	2/25/2020	<100	<500	<500	<1.0	<1.0	<1.0	<3.0	---	---
MW-11	9/17/2020	149	<435	<435	<1.00	<1.00	<1.00	<3.00	---	---
MW-11	3/17/2021	102 J	<392	<392	<1.00	<1.00	<1.00	<3.00	---	---
MW-11 Dup	3/17/2021	<100 J	<392	<392	<1.00	<1.00	<1.00	<3.00	---	---
MW-11	9/15/2021	160	<100	<100	<0.50	<1.0	<1.0	<2.0	---	---
MW-11	3/3/2022	130	<98	<98	<0.50	<1.0	<1.0	<2.0	---	---
MW-12	2/29/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-12	5/16/2012	<50.0	<400	<2,000	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-12	8/29/2012	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-12	11/14/2012	<100	<110	<110	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-12	5/7/2013	<100	<200	<200	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-12	8/21/2013	<100	<390	<390	<1.0 J	<1.0 J	<1.0 J	<3.0 J	<1.0 J	--
MW-12	11/26/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-12	2/3/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-12	5/8/2014	<50	<32	<55	<0.15	<0.11	<0.16	<0.40	<0.17	--
MW-12	8/15/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-12	11/21/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-12	2/18/2015	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-12	11/18/2016	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-12	2/17/2017	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
MW-12	2/17/2017	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
MW-12	5/25/2017	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
MW-12	9/27/2017	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-12	12/12/2017	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-12	2/28/2018	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-12	6/26/2018	<100	<450	<450	<1.0	<1.0	<1.0	<3.0	---	---
MW-12	8/28/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-12	12/18/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-12	3/14/2019	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	---	---
MW-12	9/25/2019	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-12	2/25/2020	<100	<526	<526	<1.0	<1.0	<1.0	<3.0	---	---
MW-12	9/17/2020	<100	<455	<455	<1.00	<1.00	<1.00	<3.00	---	---
MW-12	3/17/2021	<100 J	<392 J	<392 J	<1.00	<1.00	<1.00	<3.00	---	---
MW-12	9/15/2021	<100	<95	<95	<0.50	<1.0	<1.0	<2.0	---	---
MW-12	3/3/2022	<100	<97	<97	<0.50	<1.0	<1.0	<2.0	---	---
MW-13	2/29/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-13	5/16/2012	<50.0	<78	<390	<1.0 <sup>(M1)</sup>	<1.0 <sup>(M1)</sup>	<1.0 <sup>(M1)</sup>	<3.0 <sup>(M1)</sup>	<1.0 <sup>(M1)</sup>	--
MW-13	9/5/2012	<50.0	<78	<390	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-13	11/14/2012	<100	<120	<120	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-13	2/6/2013	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-13	5/8/2013	<100	<200	<200	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-13	8/21/2013	<100	<390	<390	1.1 J	<1.0 J	<1.0 J	<3.0 J	<1.0 J	--
MW-13	11/26/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-13	2/6/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-13	5/8/2014	<50	<28	<48	<0.15	<0.11	<0.16	<0.40	<0.17	--
MW-13	8/15/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-13	11/21/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-13	2/18/2015	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-13	11/17/2016	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-13	2/16/2017	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-13	5/25/2017	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	---	---
MW-13	9/27/2017	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-13	12/13/2017	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-13	2/28/2018	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
MW-13	6/26/2018	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	---	---
MW-13	8/28/2018	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	---	---
MW-13	12/18/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-13	3/14/2019	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-13	9/24/2019	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-13	2/25/2020	<100	<476	<476	<1.0	<1.0	<1.0	<3.0	---	---
MW-13	9/17/2020	<100	<400	<400	<1.00	<1.00	<1.00	<3.00	---	---
MW-13	3/17/2021	<100 J	<392	<392	<1.00	<1.00	<1.00	<3.00	---	---
MW-13	9/15/2021	<100	<b>2,400</b>	<b>2,000</b>	<0.50	<1.0	<1.0	<2.0	---	---
MW-13	3/3/2022	<100	<97	<97	<0.50	<1.0	<1.0	<2.0	---	---
MW-14	11/21/2011	<b>123,000 J</b>	<b>640 J</b>	<380 J	<b>17,500 J</b>	<b>18,200 J</b>	<b>2,550 J</b>	<b>14,100 J</b>	<1.0 J	--
MW-14	2/28/2012	<b>110,000</b>	<b>1,400</b>	<380	<b>16,400 J</b>	<b>16,300 J</b>	<b>2,020 J</b>	<b>10,500 J</b>	<1.0 J	--
MW-14	5/14/2012	<b>133,000</b>	<b>2,000</b>	<380	<b>18,400<sup>(SS)</sup></b>	<b>2,3400<sup>(SS)</sup></b>	<b>2,090</b>	<b>11,900</b>	<10.0	--
MW-14	11/16/2012	<b>90,800</b>	300	<110	<b>17,900</b>	<b>15,600</b>	<b>1,780</b>	<b>10,720</b>	<50.0	--
MW-14	2/6/2013	<b>94,200</b>	<b>4,100</b>	<470	<b>16,300</b>	<b>15,400</b>	<b>1,740</b>	<b>10,400</b>	<100	--
MW-14	5/2/2013	<b>90,300</b>	<b>1,500</b>	450	<b>16,200</b>	<b>16,200</b>	<b>2,050</b>	<b>11,500</b>	<100	--
MW-14	8/23/2013	<b>150,000</b>	<b>1,300</b>	<b>540</b>	<b>23,600</b>	<b>21,300</b>	<b>2,670</b>	<b>15,000</b>	<100	--
MW-14	11/18/2013	<b>91,100</b>	<b>1,600</b>	<420	<b>21,100</b>	<b>15,700</b>	<b>2,470</b>	<b>13,400</b>	<20.0	--
MW-14	2/12/2014	<b>103,000</b>	<b>1,400</b>	<400	<b>14,000</b>	<b>11,800</b>	<b>1,770</b>	<b>10,700</b>	<100	--
MW-14	5/6/2014	<b>19,300</b>	<b>530</b>	430	<b>283</b>	<b>327</b>	<b>96.8</b>	<b>560</b>	<3.4	--
MW-14	11/17/2016	<b>30,300</b>	<b>1,800</b>	<b>1,500</b>	<b>6,910</b>	<b>585</b>	<b>1,040</b>	<b>4,800</b>	---	---
MW-14	5/25/2017	<b>60,800</b>	<b>850</b>	<370	<b>16,000</b>	<b>4,670</b>	<b>1,730</b>	<b>9,040</b>	---	---
MW-14	12/14/2017	<b>57,700</b>	<b>1,600</b>	<390	<b>14,000</b>	<b>3,630</b>	<b>1,690</b>	<b>8,530</b>	---	---
MW-14	3/1/2018	<b>34,900</b>	<b>550</b>	<370	<b>5,140 J</b>	<b>3,540 J</b>	<b>462 J</b>	<b>2,020 J</b>	---	---
MW-14	3/1/2018	<b>50,600</b>	<b>740</b>	<390	<b>8,920 J</b>	<b>6,400 J</b>	<b>966 J</b>	<b>4,370 J</b>	---	---
MW-14	8/28/2018	<b>58,700</b>	<b>2,400</b>	<420	<b>15,500</b>	<b>4,960</b>	<b>1,850</b>	<b>8,860</b>	---	---
MW-15	11/21/2011	265 J	<76 J	<380 J	<b>32.9 J</b>	<1.0 J	<1.0 J	<3.0 J	<1.0 J	--
MW-15 (DUP)	11/21/2011	262 J	<77 J	<380 J	<b>30.9 J</b>	<1.0 J	1.4 J	<3.0 J	<1.0 J	--
MW-15	2/28/2012	195	<76	<380	<b>52.2</b>	<1.0	1.8	<3.0	<1.0	--
MW-15	5/11/2012	266	130	<380	<b>35.0</b>	<1.0	3.2	<3.0	<1.0	--
MW-15	8/27/2012	226	<84	<420	<b>40.3</b>	<1.0	<1.0	<3.0	<1.0	--
MW-15 (DUP)	8/27/2012	203	<83	<420	<b>39.5</b>	<1.0	1.2	<3.0	<1.0	--
MW-15	11/12/2012	445	<110	<110	<b>76.5</b>	<1.0	1.3	<3.0	<1.0	--
MW-15	2/4/2013	294	<430	<430	<b>35.2</b>	<1.0	3.2	<3.0	<1.0	--
MW-15	5/3/2013	309	320	340	<b>42.3</b>	<1.0	3.5	<3.0	<1.0	--
MW-15	8/23/2013	450	<b>1,500</b>	<430	<b>58.5</b>	<1.0	1.1	<3.0	<1.0	--
MW-15	11/20/2013	348	<400	<400	<b>42.9</b>	<1.0	<1.0	<3.0	<1.0	--
MW-15	2/7/2014	520	<400	<400	<b>41.1</b>	<1.0	1.6	<3.0	<1.0	--
MW-15	5/7/2014	278	<48	<28	<b>28.4</b>	1.1	1.6	<0.40	<0.17	--
MW-15	11/18/2016	353	420	<400	<b>18.2</b>	<1.0	<1.0	<3.0	---	---
MW-15	2/17/2017	<b>1,210</b>	<370	<370	<1.0	<1.0	<1.0	24.4	---	---
MW-15	5/26/2017	165	<430	<430	<b>11.8</b>	<1.0	1.6	<3.0	---	---
MW-15	9/28/2017	314	<390	<390	<b>13.0</b>	<1.0	<1.0	<3.0	---	---
MW-15	12/14/2017	170	<410	<410	4.6	<1.0	<1.0	<3.0	---	---
MW-15	3/1/2018	413 J	<b>550</b>	470	<b>33.6 J</b>	<1.0 J	2.5 J	<3.0 J	---	---
MW-15	6/27/2018	345	<430	<430	<b>28.8</b>	<1.0	<1.0	<3.0	---	---
MW-15	8/29/2018	395	<b>510</b>	<400	<b>47.4</b>	<1.0	<1.0	<3.0	---	---
MW-15 (DUP)	8/29/2018	443	430	<400	<b>53.3</b>	<1.0	<1.0	<3.0	---	---
MW-15	12/19/2018	416	<430	<430	<b>43.7</b>	<1.0	<1.0	<3.0	---	---
MW-15	3/14/2019	332	<400	<400	<b>31.5</b>	<1.0	1.8	<3.0	---	---
MW-15	9/25/2019	159	<400	<400	<b>7.3</b>	<1.0	<1.0	<3.0	---	---
MW-15 (DUP)	2/26/2020	153	<500	<500	<b>20.9</b>	<1.0	<1.0	<3.0	---	---
MW-15	2/26/2020	129	<526	<526	<b>20.1</b>	<1.0	<1.0	<3.0	---	---
MW-15	9/17/2020	133	<400	<400	<b>18.3</b>	<1.00	<1.00	<3.00	---	---
MW-15	3/18/2021	119	<392	<392	<b>17.4</b>	<1.00	<1.00	<3.00	---	---
MW-15	9/16/2021	120	110	<96	<b>6.4</b>	<1.0	<1.0	<2.0	---	---
MW-15	3/4/2022	130	<96	<96	<b>12</b>	<1.0	<1.0	<2.0	---	---
MW-16	2/29/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-16	5/16/2012	68.7	120	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-16	9/5/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-16	11/14/2012	<100	<110	<110	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-16	2/6/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
MW-16	5/8/2013	<100	<200	<200	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-16	8/21/2013	<100	<400	<400	<1.0 J	<1.0 J	<1.0 J	<3.0 J	<1.0 J	--
MW-16	11/26/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-16	2/3/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-16	5/8/2014	<50	<28	<48	<0.15	<0.11	<0.16	<0.40	<0.17	--
MW-16	8/15/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-16 (DUP)	8/15/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-16	11/21/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-16	2/18/2015	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-16	11/17/2016	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
MW-16	2/17/2017	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
MW-16	5/25/2017	<100	<500	<500	<1.0	<1.0	<1.0	<3.0	---	---
MW-16	9/27/2017	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
MW-16	12/13/2017	405	<410	<410	2.8	8.8	6.4	55.2	---	---
MW-16	2/28/2018	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	---	---
MW-16	6/26/2018	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	---	---
MW-16	8/28/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-16	12/18/2018	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-16	3/14/2019	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	---	---
MW-16	9/24/2019	<100	<392	<392	<1.0	<1.0	<1.0	<3.0	---	---
MW-16 (DUP)	9/24/2019	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-16	2/25/2020	<100	<500	<500	<1.0	<1.0	<1.0	<3.0	---	---
MW-16	9/17/2020	<100	<455	<455	<1.00	<1.00	<1.00	<3.00	---	---
MW-16 (DUP)	9/17/2020	<100	<400	<400	<1.00	<1.00	<1.00	<3.00	---	---
MW-16	3/17/2021	<100	<392	<392	<1.00	<1.00	<1.00	<3.00	---	---
MW-16	9/15/2021	<100	<97	<97	<0.50	<1.0	<1.0	<2.0	---	---
MW-16	3/3/2022	<100	<98	<98	<1.0	<2.0	<2.0	<4.0	---	---
MW-17	9/5/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-17	11/16/2012	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-17	2/6/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-17	5/7/2013	<100	<200	<200	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-17	8/21/2013	<100	430	<420	<1.0 J	<1.0 J	<1.0 J	<3.0 J	<1.0 J	--
MW-17	11/26/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-17	2/6/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
MW-17	5/9/2014	<50	<28	<48	<0.15	<0.11	<0.16	<0.40	<0.17	--
MW-17	11/18/2016	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	---	---
MW-17	5/25/2017	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
MW-17	9/27/2017	<100 J	<390	<390	<1.0 J	<1.0 J	<1.0 J	<3.0 J	---	---
MW-17	12/12/2017	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	---	---
MW-17	2/28/2018	<100	<390	<390	<1.0 J	<1.0 J	<1.0 J	<3.0 J	---	---
MW-17	6/26/2018	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
MW-17	8/28/2018	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	---	---
MW-17	12/18/2018	<100	<400	<400	<1.0 J	<1.0 J	<1.0 J	<3.0 J	---	---
DW-1	11/15/2011	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-1	2/28/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-1	5/16/2012	<50.0	<76	<380	<b>10.9</b>	<1.0	<1.0	<3.0	<1.0	--
DW-1	9/4/2012	<50.0	<77	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-1	11/13/2012	<100	<110	<110	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-1	2/5/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-1	5/1/2013	<100	<200	<410	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-1	8/14/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-1	11/22/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-1	2/13/2014	<100	<400	<400	2	<1.0	<1.0	<3.0	<1.0	--
DW-1	4/30/2014	<50	<48	<28	<0.15	<0.11	<0.16	<0.40	<0.17	--
DW-2	11/16/2011	<b>33,800</b>	340	<380	<b>638</b>	<b>2,280</b>	699	<b>3,820</b>	4.8	--
DW-2	2/23/2012	<b>8,730</b>	430	<380	<b>132</b>	281	225	<b>1,330</b>	5.8	--
DW-2 (DUP)	2/23/2012	<b>8,190</b>	380	<380	<b>128</b>	292	234	<b>1,330</b>	6.2	--
DW-2	5/9/2012	<b>4,150</b>	390	<380	<b>54.4</b>	34.4	72.0	407	4.6	--
DW-2	8/24/2012	<b>1,360</b>	98	<410	<b>44.6</b>	8.9	26.5	120	1.7	--
DW-2	11/6/2012	<b>1,060</b>	140	<110	<b>49.1</b>	2.4	19.5	48.3J	<1.0	--
DW-2	1/31/2013	434	<450	<450	<b>11.9</b>	<1.0	6.5	9.2	<1.0	--
DW-2	4/30/2013	378	<200	<200	<b>14.7</b>	<1.0	3.3	15.5	<1.0	--

Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg 800	TPHd 500	TPHo 500	B 5	T 1,000	E 700	X 1,000	MTBE 20	Ethanol --
DW-2 (DUP)	4/30/2013	321	<200	<200	15.1	<1.0	3	14.6	<1.0	--
DW-2	8/23/2013	821	<420	<420	13	1.3 J	3.4	10.1	1.4	--
DW-2 (DUP)	8/23/2013	733	<400	<400	12.9	1.3	3.1	10.1	1.4	--
DW-2	11/21/2013	326	<400	<400	5.9	<1.0	<1.0	13.1	<1.0	--
DW-2	2/12/2014	395	<400	450	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-2	4/29/2014	333	48	<28	1.4	1.1	<0.16	3.4	2.1	--
DW-3	11/17/2011	<50.0	<75	<380	<1.0	<1.0	1.3	<3.0	<1.0	--
DW-3	2/21/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-3	5/15/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-3	8/28/2012	<50.0	<81	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-3	11/9/2012	<100	<120	<120	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-3	1/30/2013	<100	<490	<490	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-3	5/1/2013	<100	<200	<600	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-3	8/15/2013	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-3	11/19/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-3	2/5/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-3	5/1/2014	<50	410	2,200	<0.15	<0.11	<0.16	<0.40	<0.17	--
DW-4	9/5/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-4	11/16/2012	<100	<110	<110	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-4	2/6/2013	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-4	5/7/2013	<100	<200	<200	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-4	8/21/2013	<100	<420	<420	<1.0 J	<1.0 J	<1.0 J	<3.0 J	<1.0 J	--
DW-4	11/26/2013	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-4	2/6/2014	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--
DW-4	5/9/2014	<50	<29	<50	<0.15	<0.11	<0.16	<0.40	<0.17	--
Retention Pond	6/3/2004	36,200	--	--	7,860	6,920	792	3,260	--	--
Retention Pond	4/19/2006	38,000	2,800	<1000	2,100	4,400	180	3,300	NA	--
Retention Pond	2/19/2007	16,000	1,400	140	1,600	2,500	100	1,500	2	--

Notes: Not analyzed.

NA Not detected above reporting limit.

U Estimated

J Extension on well nomenclature signifies well extended by SECOR 07/05

x micrograms per liter

µg/L Results in the diesel organics range are due to overlap from a gasoline range product.

(a) Chromatogram suggest this might be aged or degraded diesel.

(b) Contaminant does not appear to be typical product.

(d) The observed sample pattern includes #2 fuel/diesel and an additional pattern which elutes earlier and later in the DRO range

(e) The reporting limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system

(f) Due to insufficient sample size, the lab was unable to report their usual reporting limits.

(g) The values reported represent the lowest reporting limits obtainable. The observed sample pattern includes #2 fuel/diesel and an additional pattern which elutes earlier and later in the DRO range.

The observed sample pattern is not typical of #2 diesel fuel. It elutes in the DRO range earlier than #2 fuel.

(h) Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.

The observed sample pattern is not typical of #2 fuel/diesel. The reported result is due to an individual peak(s) eluting in the DRO range.

(i) The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

(j) Due to insufficient sample size, we were unable to report our usual reporting limits. The values reported represent the lowest reporting limits attainable.

(k) The concentration reported for toluene is estimated since it exceeded the calibration range of the instrument.

(l) Because only one sample vial was submitted for this analysis, a further diluted analysis could not be performed. Insufficient water to fill all sample bottles.

(m) The reporting limits for the GC/MS volatile compounds were raised due to sample foaming.

(n) Due to excessive foaming of the sample, normal reporting limits were not attained.

(o) Due to insufficient sample size, we were unable to report our usual reporting limits. The values reported represent the lowest reporting limits attainable.

(p) Due to insufficient sample size, we were unable to report our usual reporting limits. The values reported represent the lowest reporting limits attainable.

(q) The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

(r) Due to insufficient sample size, we were unable to report our usual reporting limits. The values reported represent the lowest reporting limits attainable.

(s) MTCA Method A levels for TPH-g are 1,000 µg/l when no benzene is present and 800 µg/l when benzene is present.

(t) Well LAIx-2 labeled LAI-2 in the analytical report and Chain-Of-Custody.

(u) Well LAIx-3 labeled LAI-2 in the analytical report and Chain-Of-Custody.

(v) Ethanol sampled 3Q08 and 1Q09

(w) The GRO value is estimated because the value is over the calibration range of the system. The sample was not reanalyzed because the hold time has expired.

(x) The GC/MS volatile results were obtained from a vial with headspace.

(y) The initial analyses of this sample were unable to be reported due to carryover issues and QC spiking

The reporting limits for the GC/MS volatile compounds were raised due to the level of non-target compounds.

(z) The analytical data is from Acton Mickelson Environmental, Inc. sampling on 8/26/2008 and 8/27/2008.

(1) A-01 Contamination elutes between C18 and C40 and does not match any standards in TestAmerica's reference library.

(2) A-01a Contamination elutes between C8 and C18 and does not match any standards in TestAmerica's reference library.

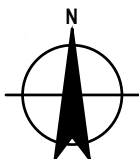
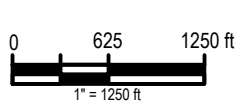
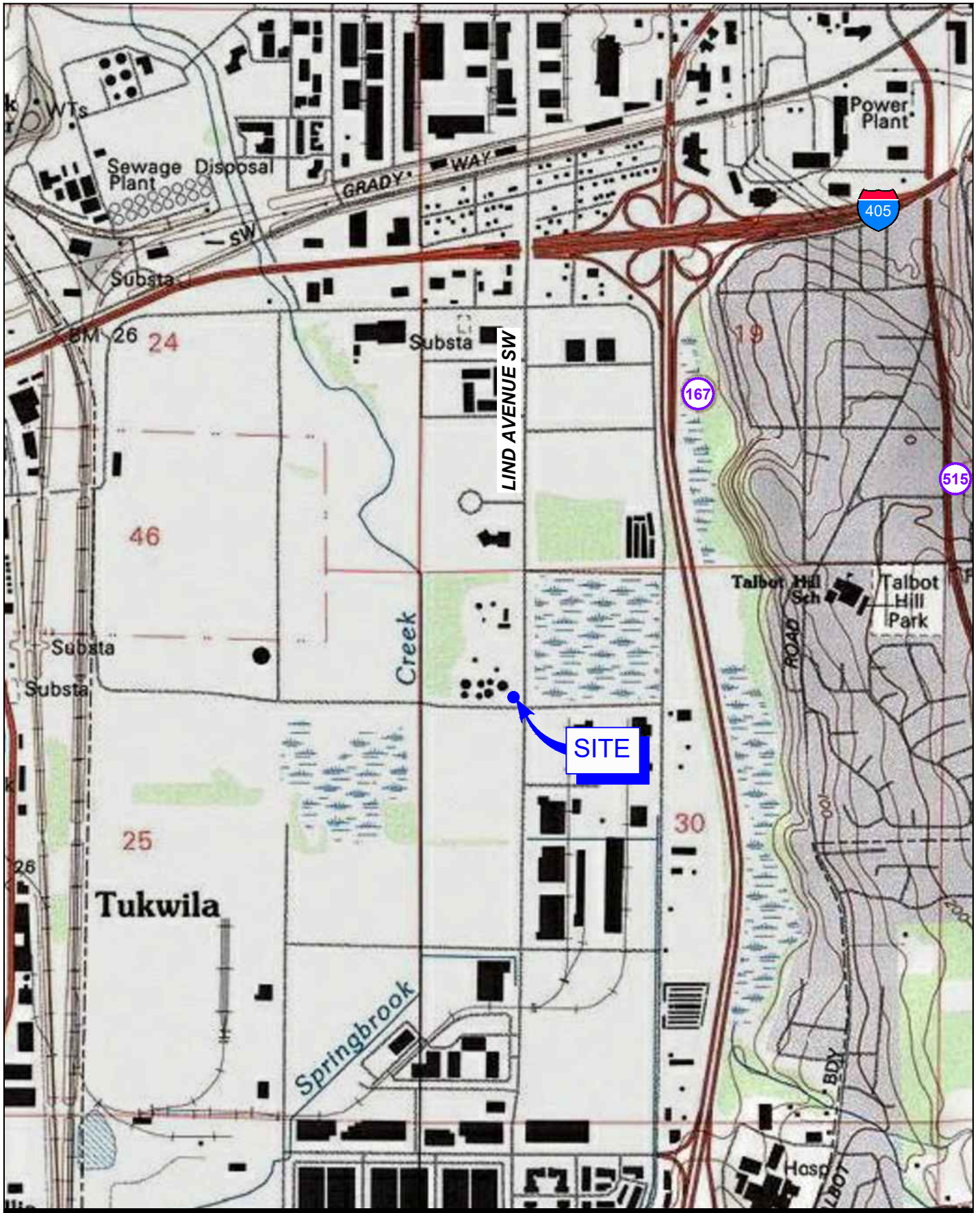
Table 6

**Groundwater Analytical Data  
Phillips 66 Company  
Renton Terminal  
Renton, Washington**

Sample Location	Date	HYDROCARBONS			PRIMARY VOCs				OXYGENATES	
		TPHg	TPHd	TPHo	B	T	E	X	MTBE	Ethanol
<b>MTCA Method A Screening Levels:</b>		<b>800</b>	<b>500</b>	<b>500</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>	<b>20</b>	<b>--</b>

- (3) A-01b Contamination elutes between C8 and C28 and does not match any standards in TestAmerica's reference library.
- (4) A-01c Contamination elutes between C8 and C40 and does not match any standards in TestAmerica's reference library.
- (5) M8 The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
- (6) RL1 Reporting limit raised due to sample matrix effects.
- (7) H1 = Analysis conducted outside the EPA method holding time.
- (8) 2n = The internal standard response is outside the QC criteria. Results may be biased low.
- (9) Sample was diluted due to the presence of high levels of target analytes.
- (10) Analyte concentration exceeded the calibration range. The reported result is estimated.
- (E) Result confirmed by second analysis.
- (C0) Matrix Spike recovery exceeded the QC limits. Batch accepted based on laboratory control sample recovery.
- (M1) This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimate.

# Figures

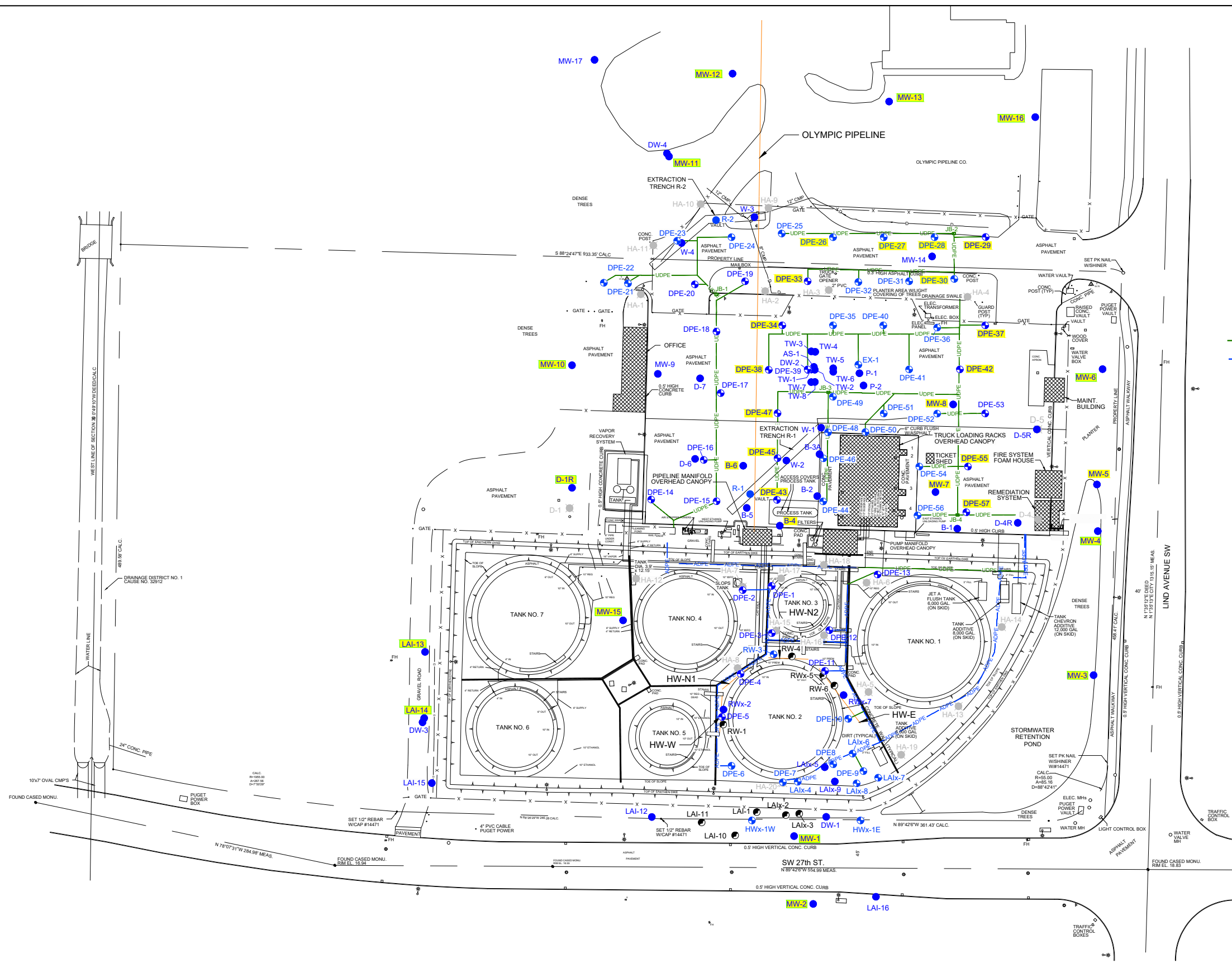


PHILLIPS 66 RENTON TERMINAL  
 2423 LIND AVENUE SOUTHWEST  
 RENTON, WASHINGTON

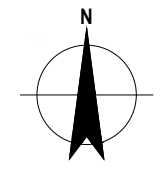
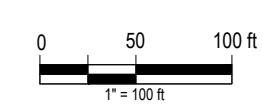
Project No. 12572873  
 Date April 2022

VICINITY MAP

FIGURE 1



- LEGEND**
- B-1 ● MONITORING WELL LOCATION
  - D-4 ■ ABANDONED OR DESTROYED MONITORING WELL LOCATION
  - DPE-6 ● VERTICAL RECOVERY WELL (ACTIVELY PUMPING)
  - DPE-25 ● VERTICAL RECOVERY WELL (INACTIVE - NOT PUMPING)
  - LAI-1 ● VERTICAL RECOVERY WELL (INACTIVE - NOT PUMPING)
  - DPE-25 ● VERTICAL RECOVERY WELL (GAUGE ONLY)
  - MW-1 ● MONITORING WELL LOCATION (GAUGE AND SAMPLE)
  - UDPE — UNDERGROUND DUAL PHASE EXTRACTION PIPE
  - ADPE — ABOVEGROUND DUAL PHASE EXTRACTION PIPE



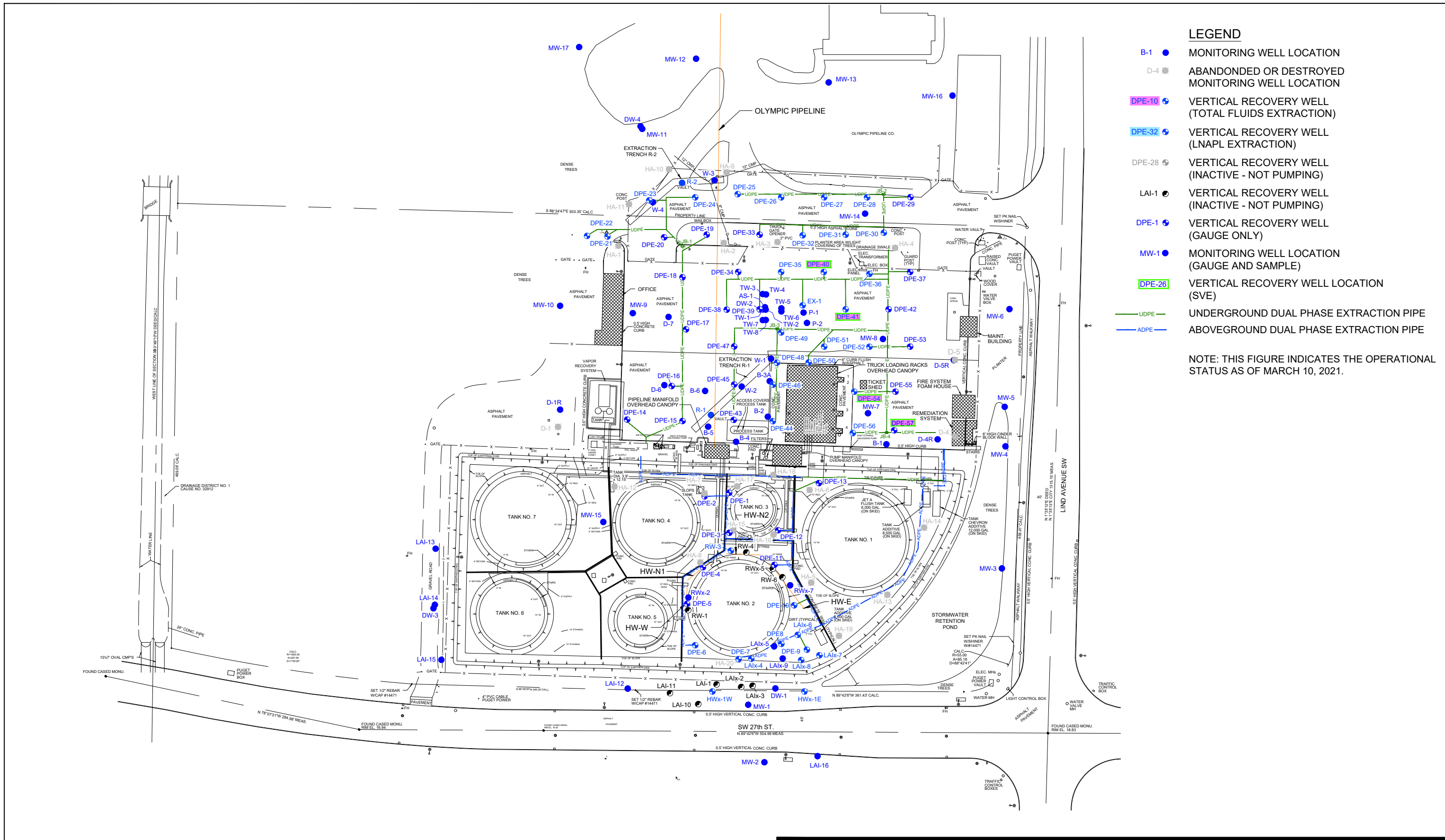
PHILLIPS 66 RENTON TERMINAL  
2423 LIND AVENUE SOUTHWEST  
RENTON, WASHINGTON

Project No. 12572873  
Date April 2022

**SITE PLAN WITH MONITORING  
LOCATIONS**

**FIGURE 2A**





**LEGEND**

- B-1 ● MONITORING WELL LOCATION
- D-4 ■ ABANDONDED OR DESTROYED MONITORING WELL LOCATION
- DPE-10 ● VERTICAL RECOVERY WELL (TOTAL FLUIDS EXTRACTION)
- DPE-32 ● VERTICAL RECOVERY WELL (LNAPL EXTRACTION)
- DPE-28 ● VERTICAL RECOVERY WELL (INACTIVE - NOT PUMPING)
- LAI-1 ● VERTICAL RECOVERY WELL (INACTIVE - NOT PUMPING)
- DPE-1 ● VERTICAL RECOVERY WELL (GAUGE ONLY)
- MW-1 ● MONITORING WELL LOCATION (GAUGE AND SAMPLE)
- DPE-26 ● VERTICAL RECOVERY WELL LOCATION (SVE)
- UDPE — UNDERGROUND DUAL PHASE EXTRACTION PIPE
- ADPE — ABOVEGROUND DUAL PHASE EXTRACTION PIPE

NOTE: THIS FIGURE INDICATES THE OPERATIONAL STATUS AS OF MARCH 10, 2021.

0 50 100 ft  
1" = 100 ft

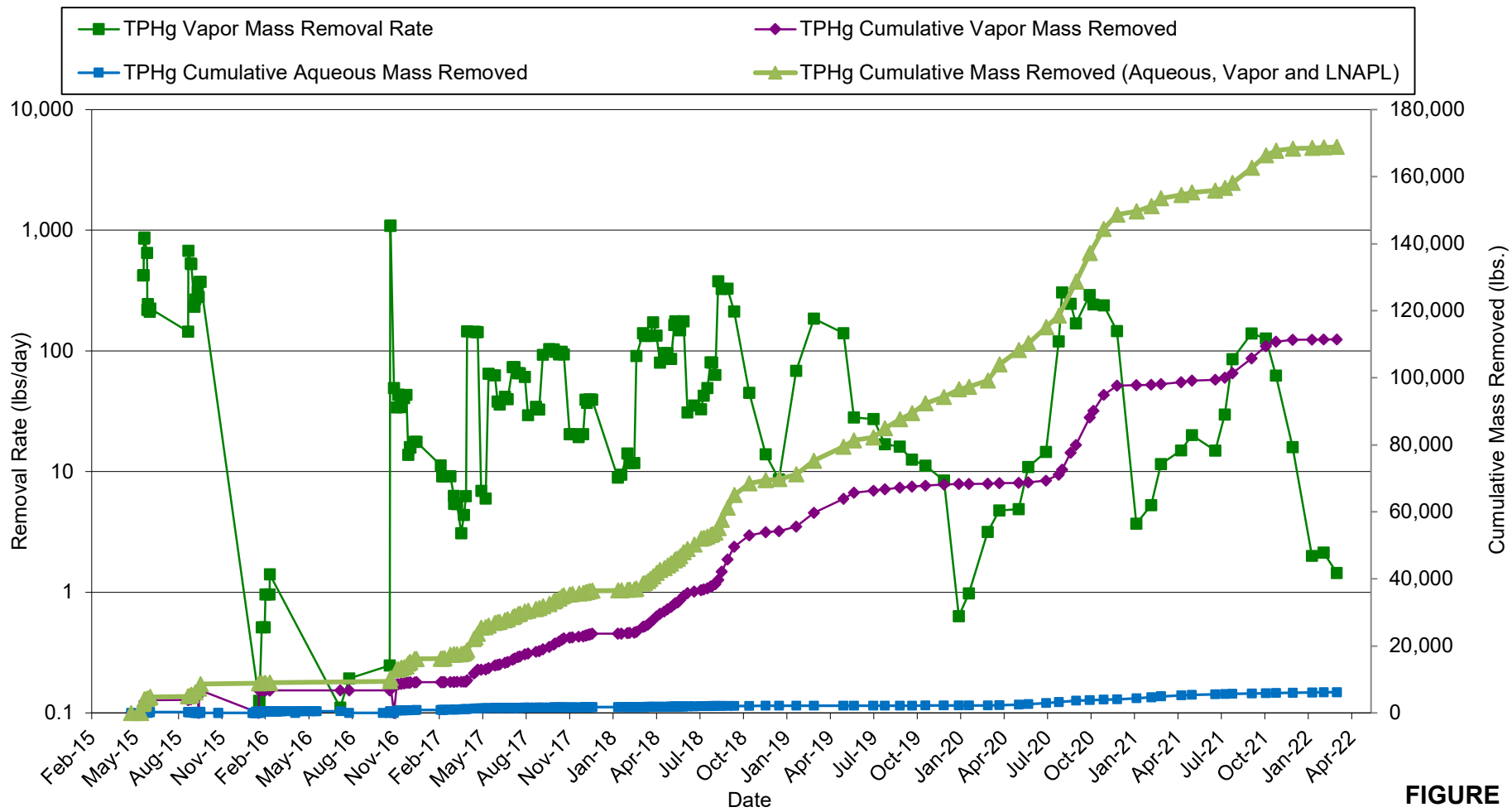
WASHINGTON STATE PLANE  
NORTH ZONE 4601 IN SURVEY FT.

PHILLIPS 66 RENTON TERMINAL  
2423 LIND AVENUE SOUTHWEST  
RENTON, WASHINGTON

Project No. 12572873  
Date April 2022

**SITE PLAN WITH ACTIVE REMEDIATION LOCATIONS**

**FIGURE 2B**

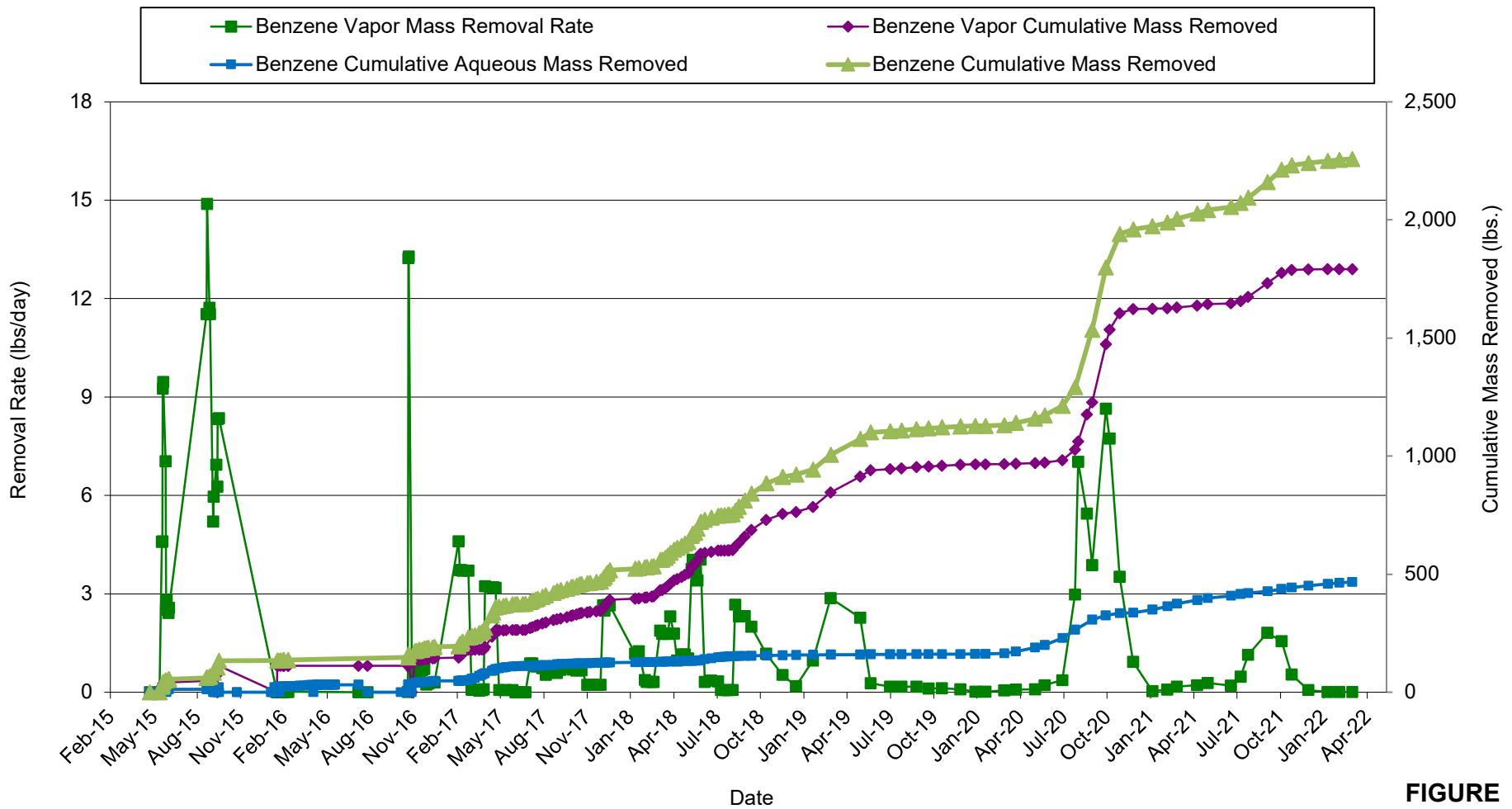


**FIGURE 3**

Phillips 66 Renton Terminal  
 2423 Lind Avenue Southwest  
 Renton, Washington



TPHg MASS REMOVAL VS. TIME

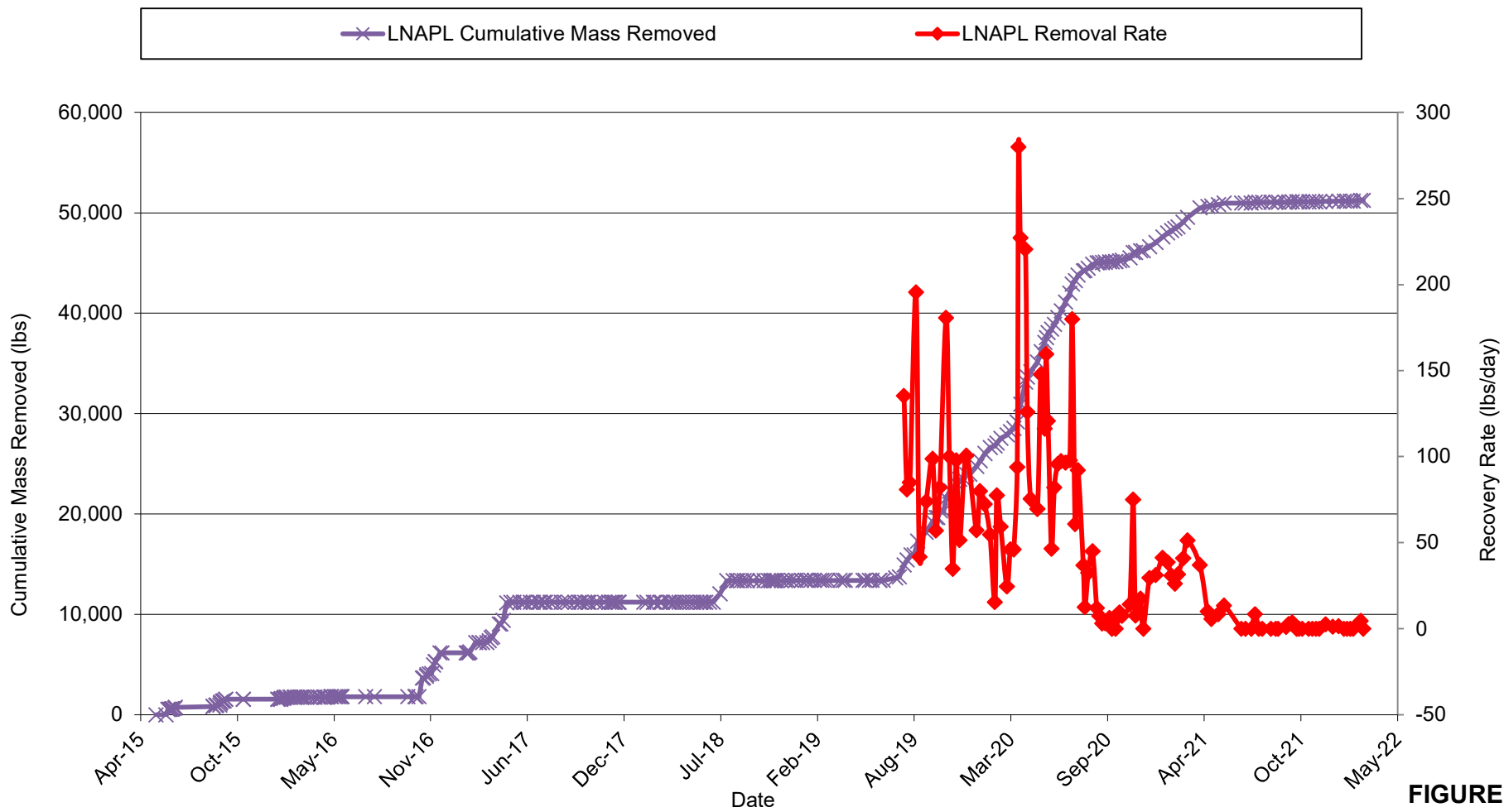


**FIGURE 4**

Phillips 66 Renton Terminal  
 2423 Lind Avenue Southwest  
 Renton, Washington



BENZENE MASS REMOVAL VS. TIME

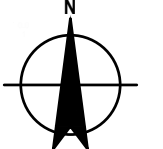
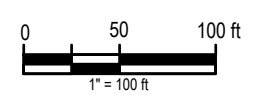
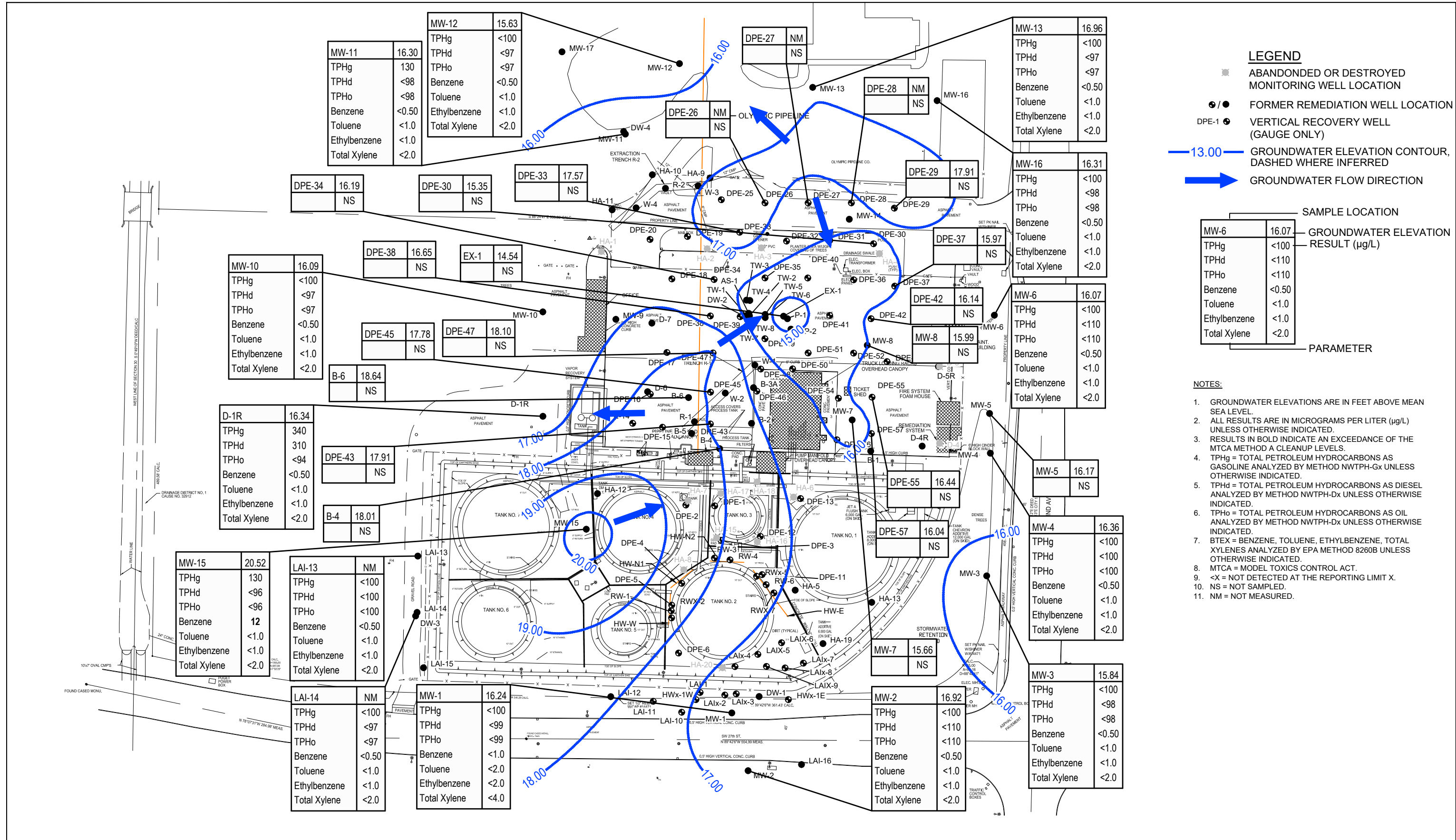


**FIGURE 5**

Phillips 66 Renton Terminal  
 2423 Lind Avenue Southwest  
 Renton, Washington



LNAPL MASS REMOVAL VS. TIME



PHILLIPS 66 RENTON TERMINAL  
 2423 LIND AVENUE SOUTHWEST  
 RENTON, WASHINGTON

GROUNDWATER CONTOUR AND CHEMICAL  
 CONCENTRATION MAP - INTERMEDIATE WELLS -  
 MARCH 1-4, 2022

Project No. 12572873  
 Date March 2022

**FIGURE 6**

# Appendices

# **Appendix A**

**O&M Laboratory Analytical Reports**

## ANALYTICAL REPORT

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

Laboratory Job ID: 570-82022-1

Client Project/Site: P66 Renton Terminal AOC 5228 / 11226464

For:

GHD Services Inc.  
9725 3rd Avenue NE, Suite 204  
Seattle, Washington 98115

Attn: Matt Davis

*Vikas Patel*

---

Authorized for release by:  
1/28/2022 3:26:31 PM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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.*



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	8
QC Sample Results . . . . .	9
QC Association Summary . . . . .	11
Lab Chronicle . . . . .	12
Certification Summary . . . . .	13
Method Summary . . . . .	14
Sample Summary . . . . .	15
Chain of Custody . . . . .	16
Receipt Checklists . . . . .	18
Air Canister Dilution . . . . .	19



# Definitions/Glossary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-82022-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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 Renton Terminal AOC 5228 / 11226464

Job ID: 570-82022-1

---

**Job ID: 570-82022-1**

---

**Laboratory: Eurofins Calscience**

## Narrative

**Job Narrative**  
**570-82022-1**

## Comments

No additional comments.

## Receipt

The samples were received on 1/18/2022 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 22.0° C.

## Air Toxics

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

# Detection Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-82022-1

## Client Sample ID: A-011722-JRL-INF

## Lab Sample ID: 570-82022-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	54		1.0	ppb v/v	2		TO-15	Total/NA
Ethylbenzene	30		1.0	ppb v/v	2		TO-15	Total/NA
o-Xylene	59		1.0	ppb v/v	2		TO-15	Total/NA
m,p-Xylene	150		4.0	ppb v/v	2		TO-15	Total/NA
Toluene	180		1.0	ppb v/v	2		TO-15	Total/NA
Xylenes, Total	210		5.0	ppb v/v	2		TO-15	Total/NA
Gasoline Range Organics (C6-C12)	8.8		1.0	ppm v/v	1		TO3	Total/NA

## Client Sample ID: A-011722-JRL-EFF

## Lab Sample ID: 570-82022-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.59		0.50	ppb v/v	1		TO-15	Total/NA
Toluene	1.8		0.50	ppb v/v	1		TO-15	Total/NA
Gasoline Range Organics (C6-C12)	1.6		1.0	ppm v/v	1		TO3	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-82022-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Client Sample ID: A-011722-JRL-INF**

**Date Collected: 01/17/22 12:20**

**Date Received: 01/18/22 10:30**

**Sample Container: Summa Canister 1L**

**Lab Sample ID: 570-82022-1**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	54		1.0	ppb v/v			01/28/22 02:09	2
Ethylbenzene	30		1.0	ppb v/v			01/28/22 02:09	2
o-Xylene	59		1.0	ppb v/v			01/28/22 02:09	2
m,p-Xylene	150		4.0	ppb v/v			01/28/22 02:09	2
Toluene	180		1.0	ppb v/v			01/28/22 02:09	2
Xylenes, Total	210		5.0	ppb v/v			01/28/22 02:09	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		66 - 132		01/28/22 02:09	2
4-Bromofluorobenzene (Surr)	95		70 - 130		01/28/22 02:09	2
Toluene-d8 (Surr)	99		70 - 130		01/28/22 02:09	2

**Client Sample ID: A-011722-JRL-EFF**

**Date Collected: 01/17/22 12:15**

**Date Received: 01/18/22 10:30**

**Sample Container: Summa Canister 1L**

**Lab Sample ID: 570-82022-2**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.59		0.50	ppb v/v			01/28/22 01:29	1
Ethylbenzene	ND		0.50	ppb v/v			01/28/22 01:29	1
o-Xylene	ND		0.50	ppb v/v			01/28/22 01:29	1
m,p-Xylene	ND		2.0	ppb v/v			01/28/22 01:29	1
Toluene	1.8		0.50	ppb v/v			01/28/22 01:29	1
Xylenes, Total	ND		2.5	ppb v/v			01/28/22 01:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 132		01/28/22 01:29	1
4-Bromofluorobenzene (Surr)	98		70 - 130		01/28/22 01:29	1
Toluene-d8 (Surr)	95		70 - 130		01/28/22 01:29	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-82022-1

## Method: TO3 - Volatile Organic Compounds in Ambient Air, Cryogenic Pre-Conc Techniques (GC)

Client Sample ID: A-011722-JRL-INF

Date Collected: 01/17/22 12:20

Date Received: 01/18/22 10:30

Sample Container: Summa Canister 1L

Lab Sample ID: 570-82022-1

Matrix: Air

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C6-C12)	8.8		1.0	ppm v/v			01/19/22 15:07	1

Client Sample ID: A-011722-JRL-EFF

Date Collected: 01/17/22 12:15

Date Received: 01/18/22 10:30

Sample Container: Summa Canister 1L

Lab Sample ID: 570-82022-2

Matrix: Air

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C6-C12)	1.6		1.0	ppm v/v			01/19/22 13:24	1

# Surrogate Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-82022-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	TOL
		(66-132)	(70-130)	(70-130)
570-82022-1	A-011722-JRL-INF	96	95	99
570-82022-2	A-011722-JRL-EFF	97	98	95
LCS 570-209879/4	Lab Control Sample	96	92	99
LCSD 570-209879/5	Lab Control Sample Dup	94	90	98
MB 570-209879/8	Method Blank	98	97	94

### Surrogate Legend

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

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-82022-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Lab Sample ID: MB 570-209879/8**  
**Matrix: Air**  
**Analysis Batch: 209879**

**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	ppb v/v			01/28/22 00:49	1
Ethylbenzene	ND		0.50	ppb v/v			01/28/22 00:49	1
o-Xylene	ND		0.50	ppb v/v			01/28/22 00:49	1
m,p-Xylene	ND		2.0	ppb v/v			01/28/22 00:49	1
Toluene	ND		0.50	ppb v/v			01/28/22 00:49	1
Xylenes, Total	ND		2.5	ppb v/v			01/28/22 00:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 132		01/28/22 00:49	1
4-Bromofluorobenzene (Surr)	97		70 - 130		01/28/22 00:49	1
Toluene-d8 (Surr)	94		70 - 130		01/28/22 00:49	1

**Lab Sample ID: LCS 570-209879/4**  
**Matrix: Air**  
**Analysis Batch: 209879**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	21.32		ppb v/v		85	68 - 134
Ethylbenzene	25.0	22.91		ppb v/v		92	70 - 130
o-Xylene	25.0	22.15		ppb v/v		89	68 - 130
m,p-Xylene	50.0	44.75		ppb v/v		89	70 - 130
Toluene	25.0	23.34		ppb v/v		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		66 - 132
4-Bromofluorobenzene (Surr)	92		70 - 130
Toluene-d8 (Surr)	99		70 - 130

**Lab Sample ID: LCSD 570-209879/5**  
**Matrix: Air**  
**Analysis Batch: 209879**

**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	25.0	20.70		ppb v/v		83	68 - 134	3	25
Ethylbenzene	25.0	22.04		ppb v/v		88	70 - 130	4	25
o-Xylene	25.0	21.46		ppb v/v		86	68 - 130	3	25
m,p-Xylene	50.0	43.27		ppb v/v		87	70 - 130	3	25
Toluene	25.0	22.22		ppb v/v		89	70 - 130	5	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	94		66 - 132
4-Bromofluorobenzene (Surr)	90		70 - 130
Toluene-d8 (Surr)	98		70 - 130



# QC Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-82022-1

## Method: TO3 - Volatile Organic Compounds in Ambient Air, Cryogenic Pre-Conc Techniques (GC)

**Lab Sample ID: MB 570-208218/3**  
**Matrix: Air**  
**Analysis Batch: 208218**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C6-C12)	ND		1.0	ppm v/v			01/19/22 11:33	1

**Lab Sample ID: LCS 570-208218/2**  
**Matrix: Air**  
**Analysis Batch: 208218**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C6-C12)	100	107.0		ppm v/v		107	80 - 120

**Lab Sample ID: 570-82022-1 DU**  
**Matrix: Air**  
**Analysis Batch: 208218**

**Client Sample ID: A-011722-JRL-INF**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Gasoline Range Organics (C6-C12)	8.8		10.22		ppm v/v		15	20

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-82022-1

## Air - GC/MS VOA

### Analysis Batch: 209879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-82022-1	A-011722-JRL-INF	Total/NA	Air	TO-15	
570-82022-2	A-011722-JRL-EFF	Total/NA	Air	TO-15	
MB 570-209879/8	Method Blank	Total/NA	Air	TO-15	
LCS 570-209879/4	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 570-209879/5	Lab Control Sample Dup	Total/NA	Air	TO-15	

## Air - GC VOA

### Analysis Batch: 208218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-82022-1	A-011722-JRL-INF	Total/NA	Air	TO3	
570-82022-2	A-011722-JRL-EFF	Total/NA	Air	TO3	
MB 570-208218/3	Method Blank	Total/NA	Air	TO3	
LCS 570-208218/2	Lab Control Sample	Total/NA	Air	TO3	
570-82022-1 DU	A-011722-JRL-INF	Total/NA	Air	TO3	

# Lab Chronicle

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-82022-1

**Client Sample ID: A-011722-JRL-INF**

**Lab Sample ID: 570-82022-1**

Date Collected: 01/17/22 12:20

Matrix: Air

Date Received: 01/18/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		2	250 mL	250 mL	209879	01/28/22 02:09	USQD	ECL 2
Instrument ID: GCMSLLL										
Total/NA	Analysis	TO3		1	10 mL	10 mL	208218	01/19/22 15:07	I9H5	ECL 2
Instrument ID: GC38										

**Client Sample ID: A-011722-JRL-EFF**

**Lab Sample ID: 570-82022-2**

Date Collected: 01/17/22 12:15

Matrix: Air

Date Received: 01/18/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	250 mL	250 mL	209879	01/28/22 01:29	USQD	ECL 2
Instrument ID: GCMSLLL										
Total/NA	Analysis	TO3		1	10 mL	10 mL	208218	01/19/22 13:24	I9H5	ECL 2
Instrument ID: GC38										

**Laboratory References:**

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



# Accreditation/Certification Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-82022-1

## Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	CA300001	01-30-22
Washington	State	C916-18	10-12-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO-15		Air	m,p-Xylene
TO-15		Air	o-Xylene



# Method Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-82022-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	ECL 2
TO3	Volatile Organic Compounds in Ambient Air, Cryogenic Pre-Conc Techniques (GC)	EPA	ECL 2

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

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



# Sample Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-82022-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-82022-1	A-011722-JRL-INF	Air	01/17/22 12:20	01/18/22 10:30	Air Canister (1-Liter) #SLC118
570-82022-2	A-011722-JRL-EFF	Air	01/17/22 12:15	01/18/22 10:30	Air Canister (1-Liter) #LC1147

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16



Calscience

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

LABORATORY CLIENT: GHD Services Inc



570-82022 Chain of Custody

11-17-22

1 OF 1

CLIENT PROJECT NAME / NUMBER P66 Renton Terminal AOC 5228 / 11226464		P.O. NO. 11226464-2021-04														
PROJECT CONTACT <del>Eric Moore 425-569-9266</del> Matt Davis 253-507-6217		SAMPLER(S) (PRINT) Joe Lewandowski														
<b>REQUESTED ANALYSES</b>																
Please check box or fill in blank as needed																
LAB USE ONLY	SAMPLE ID	SAMPLING		NO. OF CONT.	MATRIX	LOG CODE	Field Filtered	Preserved	Unpreserved	GRO (TO-3)	BTEX (TO-15)	Catalyst #	SIC 1118	LC 1147	Time	
		DATE	TIME													Date
	1 A-011722 - JRL - INF	01-17-22	1220	1	A				X		X					
	2 A-011722 - JRL - EFF	01-17-22	1215	1	A				X		X					
SPECIAL INSTRUCTIONS																
TURNAROUND TIME (Rush surcharges may apply to any TAT not STANDARD) <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 5 DAYS																
ADDRESS 9725 3rd Avenue NE Ste 204		STATE WA		ZIP 98115												
CITY Seattle		E-MAIL matthew.davis@ghd														
TEL 253-507-6217																
COELT EDF <input type="checkbox"/>																
SPECIAL INSTRUCTIONS																
Relinquished by (Signature)		Received by (Signature/Affiliation)														
Relinquished by (Signature)		Received by (Signature/Affiliation) ECI														
Relinquished by (Signature)		Received by (Signature/Affiliation)														



**FedEx** Package **US Airbill** Tracking Number **8166 8708 8810**

1 From **217 12**

Sender's Name **9 AUSA DANKA** Phone **281 384-7025**

Company **Star 204**

Address **Star 204**

City **NY** State **NY** ZIP **98115**

2 Your Internal Billing Reference

3 To Recipient's Name **714 KGS - 51941** Phone **714 KGS - 51941**

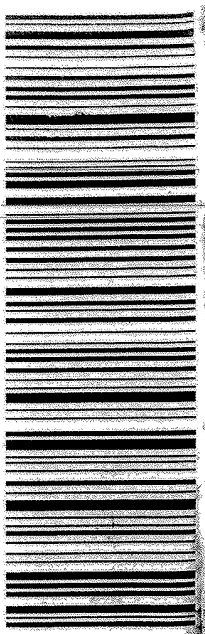
Company **714 KGS - 51941**

Address **714 KGS - 51941**

City **714 KGS - 51941** State **CA** ZIP **92841**

**FedEx** TRK# **0200** **8166 8708 8810** **TUE - 18 JAN AA** **PRIORITY OVERNIGHT** **ISR**

**92 APVA** **92841** **CA-US** **SNA**



986398 17JAN022 PAEA 56064/F289/1823

Waybill 570-82022

Recipient's Copy

Packages up to 150 lbs. For packages over 150 lbs. see an FedEx Express Package US Airbill.

\*To send location

4 Express Package Service

Next Business Day  
 FedEx First Overnight  
 FedEx Priority Overnight  
 FedEx Standard Overnight

2 or 3 Business Days  
 FedEx 2Day AM  
 FedEx 2Day  
 FedEx Express Saver

5 Packaging  
 FedEx Envelope\*  
 FedEx Pak\*  
 FedEx Box  
 FedEx Tube  
 Other

6 Special Handling and Delivery Signature Options  
 Saturday/Delivery  
 No Signature Required  
 Does this shipment contain dangerous goods?  
 Direct Signature  
 Indirect Signature

7 Payment / Bill to  
 Sender  
 Recipient  
 Other  
 Total Packages: **1** Total Weight: **644**



570-82022 Waybill



# Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 570-82022-1

**Login Number: 82022**  
**List Number: 1**  
**Creator: Cortez Diaz, Antonio**

**List Source: Eurofins Calscience**

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.	False	Thermal preservation not required.
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	



## Summa Canister Dilution Worksheet

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job No.: 570-82022-1

Lab Sample ID	Canister Volume (L)	Presampling Pressure ("Hg)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Pressure Gauge ID	Date	Analyst Initials
570-82022-1	1	-29.5	-3.8	0.87	0.87	-1.86639	0.87	0.87		1.00	1.00	air mg6	01/19/22 12:18	I9H5
570-82022-2	1	-29.5	-4.2	0.86	0.86	-2.06285	0.86	0.86		1.00	1.00	air mg6	01/19/22 12:18	I9H5

**Formulae:**

- Preadjusted Volume (L) = ((Preadjusted Pressure ("Hg) + 29.92 "Hg) \* Vol L ) / 29.92 "Hg
- Adjusted Volume (L) = (( Adjusted Pressure (psig) + 14.7 psig ) \* Vol L ) / 14.7 psig
- Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

**Where:**

- 29.92 "Hg = Standard atmospheric pressure in inches of Mercury ("Hg)
- 14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)



## ANALYTICAL REPORT

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

Laboratory Job ID: 570-81947-1

Client Project/Site: P66 Renton Terminal AOC 5228 / 12572873

For:

GHD Services Inc.  
9725 3rd Avenue NE, Suite 204  
Seattle, Washington 98115

Attn: Matt Davis

*Vikas Patel*

---

Authorized for release by:  
1/27/2022 9:00:48 AM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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.*



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	10
QC Sample Results . . . . .	11
QC Association Summary . . . . .	14
Lab Chronicle . . . . .	15
Certification Summary . . . . .	16
Method Summary . . . . .	17
Sample Summary . . . . .	18
Chain of Custody . . . . .	19
Receipt Checklists . . . . .	21

# Definitions/Glossary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

---

## Job ID: 570-81947-1

---

### Laboratory: Eurofins Calscience

#### Narrative

---

#### Job Narrative 570-81947-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 1/18/2022 10:15 AM. Unless otherwise noted below, 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.

#### GC/MS VOA

Method 8260C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-209176. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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

Methods 3510C, 3510C SGC: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-209113. 8015B\_DRO.

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 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

## Client Sample ID: GW-011722-JR-INF 1

## Lab Sample ID: 570-81947-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1900		10	ug/L	20		8260C	Total/NA
Toluene	3600		20	ug/L	20		8260C	Total/NA
o-Xylene	1400		20	ug/L	20		8260C	Total/NA
m,p-Xylene	3900		40	ug/L	20		8260C	Total/NA
Ethylbenzene	680		20	ug/L	20		8260C	Total/NA
Xylenes, Total	5300		40	ug/L	20		8260C	Total/NA
TPH as Gasoline (C4-C13)	25000		500	ug/L	5		NWTPH-Gx	Total/NA
TPH as Motor Oil Range	0.17		0.10	mg/L	1		NWTPH-Dx	Silica Gel Cleanup
TPH as Diesel Range - DL	17		0.20	mg/L	2		NWTPH-Dx	Silica Gel Cleanup

## Client Sample ID: GW-011722-JR-MID 1

## Lab Sample ID: 570-81947-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	91		0.50	ug/L	1		8260C	Total/NA
Toluene	12		1.0	ug/L	1		8260C	Total/NA
o-Xylene	4.1		1.0	ug/L	1		8260C	Total/NA
m,p-Xylene	8.3		2.0	ug/L	1		8260C	Total/NA
Xylenes, Total	12		2.0	ug/L	1		8260C	Total/NA
TPH as Gasoline (C4-C13)	210		100	ug/L	1		NWTPH-Gx	Total/NA
TPH as Diesel Range	0.58		0.10	mg/L	1		NWTPH-Dx	Silica Gel Cleanup

## Client Sample ID: GW-011722-JR-MID 2

## Lab Sample ID: 570-81947-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Client Sample ID: GW-011722-JR-INF 1**

**Date Collected: 01/17/22 12:00**

**Date Received: 01/18/22 10:15**

**Lab Sample ID: 570-81947-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1900		10	ug/L			01/25/22 04:25	20
Toluene	3600		20	ug/L			01/25/22 04:25	20
o-Xylene	1400		20	ug/L			01/25/22 04:25	20
m,p-Xylene	3900		40	ug/L			01/25/22 04:25	20
Ethylbenzene	680		20	ug/L			01/25/22 04:25	20
Xylenes, Total	5300		40	ug/L			01/25/22 04:25	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 123		01/25/22 04:25	20
4-Bromofluorobenzene (Surr)	101		80 - 120		01/25/22 04:25	20
Dibromofluoromethane (Surr)	103		78 - 120		01/25/22 04:25	20
Toluene-d8 (Surr)	102		80 - 120		01/25/22 04:25	20

**Client Sample ID: GW-011722-JR-MID 1**

**Date Collected: 01/17/22 11:45**

**Date Received: 01/18/22 10:15**

**Lab Sample ID: 570-81947-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	91		0.50	ug/L			01/25/22 03:57	1
Toluene	12		1.0	ug/L			01/25/22 03:57	1
o-Xylene	4.1		1.0	ug/L			01/25/22 03:57	1
m,p-Xylene	8.3		2.0	ug/L			01/25/22 03:57	1
Ethylbenzene	ND		1.0	ug/L			01/25/22 03:57	1
Xylenes, Total	12		2.0	ug/L			01/25/22 03:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 123		01/25/22 03:57	1
4-Bromofluorobenzene (Surr)	99		80 - 120		01/25/22 03:57	1
Dibromofluoromethane (Surr)	100		78 - 120		01/25/22 03:57	1
Toluene-d8 (Surr)	100		80 - 120		01/25/22 03:57	1

**Client Sample ID: GW-011722-JR-MID 2**

**Date Collected: 01/17/22 11:30**

**Date Received: 01/18/22 10:15**

**Lab Sample ID: 570-81947-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			01/25/22 03:29	1
Toluene	ND		1.0	ug/L			01/25/22 03:29	1
o-Xylene	ND		1.0	ug/L			01/25/22 03:29	1
m,p-Xylene	ND		2.0	ug/L			01/25/22 03:29	1
Ethylbenzene	ND		1.0	ug/L			01/25/22 03:29	1
Xylenes, Total	ND		2.0	ug/L			01/25/22 03:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 123		01/25/22 03:29	1
4-Bromofluorobenzene (Surr)	97		80 - 120		01/25/22 03:29	1
Dibromofluoromethane (Surr)	104		78 - 120		01/25/22 03:29	1
Toluene-d8 (Surr)	98		80 - 120		01/25/22 03:29	1



# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

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

**Client Sample ID: GW-011722-JR-INF 1**

**Date Collected: 01/17/22 12:00**

**Date Received: 01/18/22 10:15**

**Lab Sample ID: 570-81947-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	25000		500	ug/L	-		01/20/22 05:01	5
<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)	125		50 - 150				01/20/22 05:01	5

**Client Sample ID: GW-011722-JR-MID 1**

**Date Collected: 01/17/22 11:45**

**Date Received: 01/18/22 10:15**

**Lab Sample ID: 570-81947-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	210		100	ug/L	-		01/20/22 05:26	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)	97		50 - 150				01/20/22 05:26	1

**Client Sample ID: GW-011722-JR-MID 2**

**Date Collected: 01/17/22 11:30**

**Date Received: 01/18/22 10:15**

**Lab Sample ID: 570-81947-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L	-		01/20/22 05:50	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)	93		50 - 150				01/20/22 05:50	1

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup - Silica Gel Cleanup

**Client Sample ID: GW-011722-JR-INF 1**

**Date Collected: 01/17/22 12:00**

**Date Received: 01/18/22 10:15**

**Lab Sample ID: 570-81947-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Motor Oil Range	0.17		0.10	mg/L		01/24/22 13:09	01/25/22 18:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	107		50 - 150			01/24/22 13:09	01/25/22 18:37	1

**Client Sample ID: GW-011722-JR-MID 1**

**Date Collected: 01/17/22 11:45**

**Date Received: 01/18/22 10:15**

**Lab Sample ID: 570-81947-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	0.58		0.10	mg/L		01/24/22 13:09	01/25/22 19:20	1
TPH as Motor Oil Range	ND		0.10	mg/L		01/24/22 13:09	01/25/22 19:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	109		50 - 150			01/24/22 13:09	01/25/22 19:20	1

**Client Sample ID: GW-011722-JR-MID 2**

**Date Collected: 01/17/22 11:30**

**Date Received: 01/18/22 10:15**

**Lab Sample ID: 570-81947-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.10	mg/L		01/24/22 13:09	01/25/22 19:41	1
TPH as Motor Oil Range	ND		0.10	mg/L		01/24/22 13:09	01/25/22 19:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	117		50 - 150			01/24/22 13:09	01/25/22 19:41	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup - Silica Gel Cleanup - DL

Client Sample ID: GW-011722-JR-INF 1

Date Collected: 01/17/22 12:00

Date Received: 01/18/22 10:15

Lab Sample ID: 570-81947-1

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	17		0.20	mg/L		01/24/22 13:09	01/26/22 00:25	2
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	111		50 - 150			01/24/22 13:09	01/26/22 00:25	2

# Surrogate Summary

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-123)	BFB (80-120)	DBFM (78-120)	TOL (80-120)
570-81947-1	GW-011722-JR-INF 1	101	101	103	102
570-81947-2	GW-011722-JR-MID 1	100	99	100	100
570-81947-3	GW-011722-JR-MID 2	104	97	104	98
LCS 570-209176/4	Lab Control Sample	101	101	105	101
LCSD 570-209176/5	Lab Control Sample Dup	104	99	108	99
MB 570-209176/8	Method Blank	101	100	102	100

### 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)
570-81947-1	GW-011722-JR-INF 1	125
570-81947-2	GW-011722-JR-MID 1	97
570-81947-3	GW-011722-JR-MID 2	93
LCS 570-208393/33	Lab Control Sample	102
LCSD 570-208393/34	Lab Control Sample Dup	100
MB 570-208393/35	Method Blank	90

### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Matrix: Water

Prep Type: Silica Gel Cleanup

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		OTCSN (50-150)
570-81947-1	GW-011722-JR-INF 1	107
570-81947-1 - DL	GW-011722-JR-INF 1	111
570-81947-2	GW-011722-JR-MID 1	109
570-81947-3	GW-011722-JR-MID 2	117
LCS 570-209113/2-A	Lab Control Sample	110
LCSD 570-209113/3-A	Lab Control Sample Dup	115
MB 570-209113/1-A	Method Blank	114

### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 570-209176/8**  
**Matrix: Water**  
**Analysis Batch: 209176**

**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			01/25/22 02:04	1
Toluene	ND		1.0	ug/L			01/25/22 02:04	1
o-Xylene	ND		1.0	ug/L			01/25/22 02:04	1
m,p-Xylene	ND		2.0	ug/L			01/25/22 02:04	1
Ethylbenzene	ND		1.0	ug/L			01/25/22 02:04	1
Xylenes, Total	ND		2.0	ug/L			01/25/22 02:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 123		01/25/22 02:04	1
4-Bromofluorobenzene (Surr)	100		80 - 120		01/25/22 02:04	1
Dibromofluoromethane (Surr)	102		78 - 120		01/25/22 02:04	1
Toluene-d8 (Surr)	100		80 - 120		01/25/22 02:04	1

**Lab Sample ID: LCS 570-209176/4**  
**Matrix: Water**  
**Analysis Batch: 209176**

**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	50.25		ug/L		100	76 - 120
Toluene	50.0	52.59		ug/L		105	76 - 120
o-Xylene	50.0	51.01		ug/L		102	80 - 121
m,p-Xylene	100	105.7		ug/L		106	74 - 122
Ethylbenzene	50.0	52.44		ug/L		105	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 123
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	105		78 - 120
Toluene-d8 (Surr)	101		80 - 120

**Lab Sample ID: LCSD 570-209176/5**  
**Matrix: Water**  
**Analysis Batch: 209176**

**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	49.89		ug/L		100	76 - 120	1	20
Toluene	50.0	52.02		ug/L		104	76 - 120	1	20
o-Xylene	50.0	50.55		ug/L		101	80 - 121	1	20
m,p-Xylene	100	106.2		ug/L		106	74 - 122	1	20
Ethylbenzene	50.0	52.15		ug/L		104	80 - 120	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		70 - 123
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	108		78 - 120
Toluene-d8 (Surr)	99		80 - 120

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

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

**Lab Sample ID: MB 570-208393/35**  
**Matrix: Water**  
**Analysis Batch: 208393**

**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			01/20/22 01:24	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		50 - 150				01/20/22 01:24	1

**Lab Sample ID: LCS 570-208393/33**  
**Matrix: Water**  
**Analysis Batch: 208393**

**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)	1970	2022		ug/L		103	76 - 128
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	102		50 - 150				

**Lab Sample ID: LCSD 570-208393/34**  
**Matrix: Water**  
**Analysis Batch: 208393**

**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)	1970	1942		ug/L		99	76 - 128	4	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	100		50 - 150						

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

**Lab Sample ID: MB 570-209113/1-A**  
**Matrix: Water**  
**Analysis Batch: 209372**

**Client Sample ID: Method Blank**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 209113**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.10	mg/L		01/24/22 13:09	01/25/22 16:48	1
TPH as Motor Oil Range	ND		0.10	mg/L		01/24/22 13:09	01/25/22 16:48	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	114		50 - 150			01/24/22 13:09	01/25/22 16:48	1

**Lab Sample ID: LCS 570-209113/2-A**  
**Matrix: Water**  
**Analysis Batch: 209372**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 209113**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	4.00	4.197		mg/L		105	68 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
n-Octacosane (Surr)	110		50 - 150				

Eurofins Calscience

# QC Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup (Continued)

**Lab Sample ID: LCSD 570-209113/3-A**  
**Matrix: Water**  
**Analysis Batch: 209372**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 209113**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	4.00	4.432		mg/L		111	68 - 120	5	20
<b>Surrogate</b>									
<i>n</i> -Octacosane (Surr)									

	LCSD %Recovery	LCSD Qualifier	LCSD Limits
<i>n</i> -Octacosane (Surr)	115		50 - 150

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

## GC/MS VOA

### Analysis Batch: 209176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-81947-1	GW-011722-JR-INF 1	Total/NA	Water	8260C	
570-81947-2	GW-011722-JR-MID 1	Total/NA	Water	8260C	
570-81947-3	GW-011722-JR-MID 2	Total/NA	Water	8260C	
MB 570-209176/8	Method Blank	Total/NA	Water	8260C	
LCS 570-209176/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 570-209176/5	Lab Control Sample Dup	Total/NA	Water	8260C	

## GC VOA

### Analysis Batch: 208393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-81947-1	GW-011722-JR-INF 1	Total/NA	Water	NWTPH-Gx	
570-81947-2	GW-011722-JR-MID 1	Total/NA	Water	NWTPH-Gx	
570-81947-3	GW-011722-JR-MID 2	Total/NA	Water	NWTPH-Gx	
MB 570-208393/35	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 570-208393/33	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 570-208393/34	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

## GC Semi VOA

### Prep Batch: 209113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-81947-1 - DL	GW-011722-JR-INF 1	Silica Gel Cleanup	Water	3510C SGC	
570-81947-1	GW-011722-JR-INF 1	Silica Gel Cleanup	Water	3510C SGC	
570-81947-2	GW-011722-JR-MID 1	Silica Gel Cleanup	Water	3510C SGC	
570-81947-3	GW-011722-JR-MID 2	Silica Gel Cleanup	Water	3510C SGC	
MB 570-209113/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 570-209113/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 570-209113/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	

### Analysis Batch: 209372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-81947-1	GW-011722-JR-INF 1	Silica Gel Cleanup	Water	NWTPH-Dx	209113
570-81947-1 - DL	GW-011722-JR-INF 1	Silica Gel Cleanup	Water	NWTPH-Dx	209113
570-81947-2	GW-011722-JR-MID 1	Silica Gel Cleanup	Water	NWTPH-Dx	209113
570-81947-3	GW-011722-JR-MID 2	Silica Gel Cleanup	Water	NWTPH-Dx	209113
MB 570-209113/1-A	Method Blank	Silica Gel Cleanup	Water	NWTPH-Dx	209113
LCS 570-209113/2-A	Lab Control Sample	Silica Gel Cleanup	Water	NWTPH-Dx	209113
LCSD 570-209113/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	NWTPH-Dx	209113



# Lab Chronicle

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

**Client Sample ID: GW-011722-JR-INF 1**

**Lab Sample ID: 570-81947-1**

Date Collected: 01/17/22 12:00

Matrix: Water

Date Received: 01/18/22 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	5 mL	5 mL	209176	01/25/22 04:25	N1A	ECL 2
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		5	5 mL	5 mL	208393	01/20/22 05:01	A9VE	ECL 2
Instrument ID: GC1										
Silica Gel Cleanup	Prep	3510C SGC			247.9 mL	2.5 mL	209113	01/24/22 13:09	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			209372	01/25/22 18:37	A1W	ECL 1
Instrument ID: GC48										
Silica Gel Cleanup	Prep	3510C SGC	DL		247.9 mL	2.5 mL	209113	01/24/22 13:09	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx	DL	2			209372	01/26/22 00:25	A1W	ECL 1
Instrument ID: GC48										

**Client Sample ID: GW-011722-JR-MID 1**

**Lab Sample ID: 570-81947-2**

Date Collected: 01/17/22 11:45

Matrix: Water

Date Received: 01/18/22 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	209176	01/25/22 03:57	N1A	ECL 2
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	208393	01/20/22 05:26	A9VE	ECL 2
Instrument ID: GC1										
Silica Gel Cleanup	Prep	3510C SGC			245 mL	2.5 mL	209113	01/24/22 13:09	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			209372	01/25/22 19:20	A1W	ECL 1
Instrument ID: GC48										

**Client Sample ID: GW-011722-JR-MID 2**

**Lab Sample ID: 570-81947-3**

Date Collected: 01/17/22 11:30

Matrix: Water

Date Received: 01/18/22 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	209176	01/25/22 03:29	N1A	ECL 2
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	208393	01/20/22 05:50	A9VE	ECL 2
Instrument ID: GC1										
Silica Gel Cleanup	Prep	3510C SGC			248.5 mL	2.5 mL	209113	01/24/22 13:09	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			209372	01/25/22 19:41	A1W	ECL 1
Instrument ID: GC48										

**Laboratory References:**

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

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

# Accreditation/Certification Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

## Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	CA300001	01-30-22
Washington	State	C916-18	10-12-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Method Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ECL 2
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ECL 2
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	ECL 1
3510C SGC	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 Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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

# Sample Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81947-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-81947-1	GW-011722-JR-INF 1	Water	01/17/22 12:00	01/18/22 10:15
570-81947-2	GW-011722-JR-MID 1	Water	01/17/22 11:45	01/18/22 10:15
570-81947-3	GW-011722-JR-MID 2	Water	01/17/22 11:30	01/18/22 10:15

1

2

3

4

5

6

7

8

9

10

11

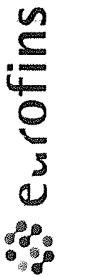
12

13

14

15

81947



Calscience

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

LABORATORY CLIENT: GHD Services Inc

ADDRESS: 9725 3rd Avenue NE Ste 204

CITY: Seattle STATE: WA ZIP: 98115

TEL: 253-507-6217 E-MAIL: matthew.davis@ghd

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD")

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

COELT EDF GLOBAL ID LOG CODE

SPECIAL INSTRUCTIONS:

Laboratory composite EFF 1 2 3 4 samples for BTEX and TPHg  
 Laboratory composite EFF 5, 6, 7 samples for Oil & Grease

CHAIN OF CUSTODY RECORD

DATE: 01-17-22  
 PAGE: 1 OF 1

WO # / LAB USE ONLY

CLIENT PROJECT NAME / NUMBER: P66 Renton Terminal AOC 5228 / 11226464  
 PROJECT CONTACT: Eric Maise 425-563-3260, Matt Davis 253-507-6217  
 P.O. NO: 11226464-2021-04  
 SAMPLER(S) (PRINT): Joe Lewandowski

REQUESTED ANALYSES

Please check box or fill in blank as needed



570-81947 Chain of Custody

DRO/ORO (NWTPH-Dx) X  
 GRO (NWTPH-Gx) X  
 BTEX (8260) X  
 Oil & Grease (1664) X

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	LOG CODE			Field Filled	Preserved	Unpreserved
		DATE	TIME			Unpreserved	Preserved	Field Filled			
1	GW-011722 JMC-INF 1	01-17-22	1200	GW	8			X			
2	GW-011722 JMC-MID 1	01-17-22	1145	GW	8			X			
3	GW-011722 JMC-MID 2	01-17-22	1130	GW	8			X			
	GW- - EFF			GW				X			
	GW- - EFF 1			GW				X			
	GW- - EFF 2			GW				X			
	GW- - EFF 3			GW				X			
	GW- - EFF 4			GW				X			
	GW- - EFF 5			GW				X			
	GW- - EFF 6			GW				X			
	GW- - EFF 7			GW				X			

Relinquished by (Signature)	Date	Time
<i>[Signature]</i>	01/17/22	
<i>[Signature]</i>	01/18/22	1015
<i>[Signature]</i>		

Received by (Signature/Affiliation): *[Signature]* ECI  
 Received by (Signature/Affiliation):  
 Received by (Signature/Affiliation):

1.9/13 4 566



570-81947 Waybill

**FedEx Express** Package **US Airbill**  
FedEx Tracking Number **8166 8708 8821**

**1 From** 11-17-22  
 Date  
 Sender's Name [Redacted]  
 Phone [Redacted]  
 Company [Redacted]  
 Address [Redacted]  
 City [Redacted] State [Redacted] ZIP [Redacted]  
 Dept./Floor/Suite/Room [Redacted]

**2 Your Internal Billing Reference** [Redacted]

**3 To**  
 Recipient's Name [Redacted]  
 Company [Redacted]  
 Address [Redacted]  
 City [Redacted] State [Redacted] ZIP [Redacted]  
 Dept./Floor/Suite/Room [Redacted]

**4 Express Package Service** \*To most locations.  
 **Next Business Day**  
 **FedEx First Overnight**  
 **FedEx Priority Overnight**  
 **FedEx Standard Overnight**

**5 Packaging** \*Declared value limit \$500.  
 FedEx Envelope\*  
 FedEx Pak\*  
 FedEx Box  
 FedEx Tube  
 FedEx Other

**6 Special Handling and Delivery Signature Options** Fees may apply. See the FedEx Service Guide.  
 **Saturday Delivery** \*NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.  
 **Direct Signature** \*Someone at recipient's address may sign for delivery.  
 **Indirect Signature** \*No one is available at recipient's address, someone at a neighboring address may sign for delivery, or recipient's phone is on.  
 **No Signature Required** \*Package may be left without obtaining a signature for delivery.  
 **Yes** Shipper's Declaration  
 **No** Shipper's Declaration  
 **Yes** Dry Ice  
 **No** Dry Ice  
 **Yes** Shipper's Declaration  
 **No** Shipper's Declaration  
 **Yes** Cargo Aircraft Only  
 **No** Cargo Aircraft Only

**7 Payment Bill to:** Enter FedEx Acct. No. below.  
 Sender Acct. No. in Section 4  
 Recipient Acct. No. in Section 4  
 Third Party

fedex.com 1.800.6.FedEx 1800.463.3339

Form ID No. **UCDU**  
**4 Express Package Service** \*To most locations.  
 Packages up to 150 lbs. For packages over 150 lbs. use the FedEx Express Freight US Airbill.

**2 or 3 Business Days**

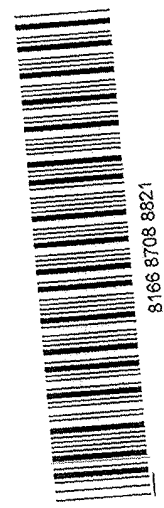
**FedEx 2Day A.M.**  
 Second business day morning, Saturday Delivery (NOT available for any shipment).  
 **FedEx 2Day**  
 Second business day morning, Saturday Delivery (NOT available for any shipment).  
 **FedEx Express Saver**  
 Third business day, Saturday Delivery (NOT available for any shipment).

**FedEx Standard Overnight**  
 Saturday Delivery (NOT available for any shipment).  
 **FedEx Envelope\***  
 **FedEx Pak\***  
 **FedEx Box**  
 **FedEx Tube**  
 **FedEx Other**

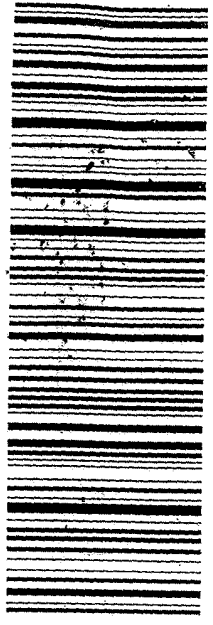
**Saturday Delivery** \*NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.  
 **Direct Signature** \*Someone at recipient's address may sign for delivery.  
 **Indirect Signature** \*No one is available at recipient's address, someone at a neighboring address may sign for delivery, or recipient's phone is on.  
 **No Signature Required** \*Package may be left without obtaining a signature for delivery.  
 **Yes** Shipper's Declaration  
 **No** Shipper's Declaration  
 **Yes** Dry Ice  
 **No** Dry Ice  
 **Yes** Cargo Aircraft Only  
 **No** Cargo Aircraft Only

**7 Payment Bill to:** Enter FedEx Acct. No. below.  
 Sender Acct. No. in Section 4  
 Recipient Acct. No. in Section 4  
 Third Party

**FedEx**  
 TRK# 8166 8708 8821  
 0200  
**92 APVA**  
**TUE - 18 JAN AA**  
**PRIORITY OVERNIGHT**  
 ISR  
**92841**  
 CA-US  
**SNA**



8166 8708 8821



986398 17Jan2022 PAEA 56064/F289/1B23



# Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 570-81947-1

**Login Number: 81947**  
**List Number: 1**  
**Creator: Patel, Jayesh**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

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

Laboratory Job ID: 570-81945-1

Client Project/Site: P66 Renton Terminal AOC 5228 / 12572873

For:

GHD Services Inc.  
9725 3rd Avenue NE, Suite 204  
Seattle, Washington 98115

Attn: Matt Davis

*Vik Patel*

---

Authorized for release by:  
1/28/2022 12:49:58 PM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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.*





# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	12
QC Sample Results . . . . .	13
QC Association Summary . . . . .	16
Lab Chronicle . . . . .	18
Certification Summary . . . . .	20
Method Summary . . . . .	21
Sample Summary . . . . .	22
Chain of Custody . . . . .	23
Receipt Checklists . . . . .	25

# Definitions/Glossary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

---

## Job ID: 570-81945-1

---

### Laboratory: Eurofins Calscience

#### Narrative

---

#### Job Narrative 570-81945-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 1/18/2022 10:15 AM. Unless otherwise noted below, 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.

#### GC/MS VOA

Method 8260C: The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-209544.

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.

#### Metals

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

#### Organic Prep

Methods 3510C, 3510C SGC: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-209113. 8015B\_DRO.

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 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

**Client Sample ID: GW-011722-JRL-EFF**

**Lab Sample ID: 570-81945-1**

No Detections.

**Client Sample ID: GW-011722-JRL-EFF-1**

**Lab Sample ID: 570-81945-2**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes			NONE	1		Composite	Total/NA

**Client Sample ID: GW-011722-JRL-EFF-2**

**Lab Sample ID: 570-81945-3**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes			NONE	1		Composite	Total/NA

**Client Sample ID: GW-011722-JRL-EFF-3**

**Lab Sample ID: 570-81945-4**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes			NONE	1		Composite	Total/NA

**Client Sample ID: GW-011722-JRL-EFF-4**

**Lab Sample ID: 570-81945-5**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes			NONE	1		Composite	Total/NA

**Client Sample ID: GW-011722-JRL-EFF-5**

**Lab Sample ID: 570-81945-6**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes			NONE	1		Composite	Total/NA

**Client Sample ID: GW-011722-JRL-EFF-6**

**Lab Sample ID: 570-81945-7**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes			NONE	1		Composite	Total/NA

**Client Sample ID: GW-011722-JRL-EFF-7**

**Lab Sample ID: 570-81945-8**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes			NONE	1		Composite	Total/NA

**Client Sample ID: GW-011722-JRL-EFF-1,2,3,4(COMPOSITE)**

**Lab Sample ID: 570-81945-9**

No Detections.

**Client Sample ID: GW-011722-JRL-EFF-5,6,7(COMPOSITE)**

**Lab Sample ID: 570-81945-10**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Client Sample ID: GW-011722-JRL-EFF-1,2,3,4(COMPOSITE)**

**Lab Sample ID: 570-81945-9**

**Date Collected: 01/17/22 00:00**

**Matrix: Water**

**Date Received: 01/18/22 10:15**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			01/26/22 17:55	1
Toluene	ND		1.0	ug/L			01/26/22 17:55	1
o-Xylene	ND		1.0	ug/L			01/26/22 17:55	1
m,p-Xylene	ND		2.0	ug/L			01/26/22 17:55	1
Ethylbenzene	ND		1.0	ug/L			01/26/22 17:55	1
Xylenes, Total	ND		2.0	ug/L			01/26/22 17:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 123		01/26/22 17:55	1
4-Bromofluorobenzene (Surr)	86		80 - 120		01/26/22 17:55	1
Dibromofluoromethane (Surr)	105		78 - 120		01/26/22 17:55	1
Toluene-d8 (Surr)	98		80 - 120		01/26/22 17:55	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

## Method: Composite - Sample Compositing

Client Sample ID: GW-011722-JRL-EFF-1

Date Collected: 01/17/22 10:30

Date Received: 01/18/22 10:15

Lab Sample ID: 570-81945-2

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes			NONE			01/19/22 11:51	1

Client Sample ID: GW-011722-JRL-EFF-2

Date Collected: 01/17/22 10:45

Date Received: 01/18/22 10:15

Lab Sample ID: 570-81945-3

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes			NONE			01/19/22 11:51	1

Client Sample ID: GW-011722-JRL-EFF-3

Date Collected: 01/17/22 11:00

Date Received: 01/18/22 10:15

Lab Sample ID: 570-81945-4

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes			NONE			01/19/22 11:51	1

Client Sample ID: GW-011722-JRL-EFF-4

Date Collected: 01/17/22 11:15

Date Received: 01/18/22 10:15

Lab Sample ID: 570-81945-5

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes			NONE			01/19/22 11:51	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

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

Client Sample ID: GW-011722-JRL-EFF-1,2,3,4(COMPOSITE)

Date Collected: 01/17/22 00:00

Date Received: 01/18/22 10:15

Lab Sample ID: 570-81945-9

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			01/24/22 21:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		50 - 150		01/24/22 21:50	1

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup - Silica Gel Cleanup

**Client Sample ID: GW-011722-JRL-EFF**

**Lab Sample ID: 570-81945-1**

**Date Collected: 01/17/22 10:30**

**Matrix: Water**

**Date Received: 01/18/22 10:15**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.10	mg/L		01/24/22 13:09	01/25/22 20:03	1
TPH as Motor Oil Range	ND		0.10	mg/L		01/24/22 13:09	01/25/22 20:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n-Octacosane (Surr)</i>	102		50 - 150			01/24/22 13:09	01/25/22 20:03	1



# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

## General Chemistry

Client Sample ID: GW-011722-JRL-EFF-5,6,7(COMPOSITE)

Lab Sample ID: 570-81945-10

Date Collected: 01/17/22 00:00

Matrix: Water

Date Received: 01/18/22 10:15

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		0.952	mg/L		01/19/22 09:42	01/19/22 09:42	1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

## Method: Composite - Sample Compositing

Client Sample ID: GW-011722-JRL-EFF-5

Date Collected: 01/17/22 10:30

Date Received: 01/18/22 10:15

Lab Sample ID: 570-81945-6

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes			NONE			01/19/22 11:51	1

Client Sample ID: GW-011722-JRL-EFF-6

Date Collected: 01/17/22 10:45

Date Received: 01/18/22 10:15

Lab Sample ID: 570-81945-7

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes			NONE			01/19/22 11:51	1

Client Sample ID: GW-011722-JRL-EFF-7

Date Collected: 01/17/22 11:00

Date Received: 01/18/22 10:15

Lab Sample ID: 570-81945-8

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes			NONE			01/19/22 11:51	1

# Surrogate Summary

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-123)	BFB (80-120)	DBFM (78-120)	TOL (80-120)
570-81945-9	GW-011722-JRL-EFF-1,2,3,4(C)	107	86	105	98
LCS 570-209544/4	Lab Control Sample	95	108	96	100
LCSD 570-209544/5	Lab Control Sample Dup	96	107	98	101
MB 570-209544/8	Method Blank	104	88	103	99

#### 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

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1
		(50-150)
570-81945-9	GW-011722-JRL-EFF-1,2,3,4(C)	89
LCS 570-209024/3	Lab Control Sample	98
LCSD 570-209024/6	Lab Control Sample Dup	96
MB 570-209024/5	Method Blank	87

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Matrix: Water

Prep Type: Silica Gel Cleanup

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN
		(50-150)
570-81945-1	GW-011722-JRL-EFF	102
LCS 570-209113/2-A	Lab Control Sample	110
LCSD 570-209113/3-A	Lab Control Sample Dup	115
MB 570-209113/1-A	Method Blank	114

#### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 570-209544/8**  
**Matrix: Water**  
**Analysis Batch: 209544**

**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			01/26/22 14:51	1
Toluene	ND		1.0	ug/L			01/26/22 14:51	1
o-Xylene	ND		1.0	ug/L			01/26/22 14:51	1
m,p-Xylene	ND		2.0	ug/L			01/26/22 14:51	1
Ethylbenzene	ND		1.0	ug/L			01/26/22 14:51	1
Xylenes, Total	ND		2.0	ug/L			01/26/22 14:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 123		01/26/22 14:51	1
4-Bromofluorobenzene (Surr)	88		80 - 120		01/26/22 14:51	1
Dibromofluoromethane (Surr)	103		78 - 120		01/26/22 14:51	1
Toluene-d8 (Surr)	99		80 - 120		01/26/22 14:51	1

**Lab Sample ID: LCS 570-209544/4**  
**Matrix: Water**  
**Analysis Batch: 209544**

**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	50.03		ug/L		100	76 - 120
Toluene	50.0	50.63		ug/L		101	76 - 120
o-Xylene	50.0	56.79		ug/L		114	80 - 121
m,p-Xylene	100	110.7		ug/L		111	74 - 122
Ethylbenzene	50.0	54.09		ug/L		108	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		70 - 123
4-Bromofluorobenzene (Surr)	108		80 - 120
Dibromofluoromethane (Surr)	96		78 - 120
Toluene-d8 (Surr)	100		80 - 120

**Lab Sample ID: LCSD 570-209544/5**  
**Matrix: Water**  
**Analysis Batch: 209544**

**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	50.12		ug/L		100	76 - 120	0	20
Toluene	50.0	51.06		ug/L		102	76 - 120	1	20
o-Xylene	50.0	56.55		ug/L		113	80 - 121	0	20
m,p-Xylene	100	110.4		ug/L		110	74 - 122	0	20
Ethylbenzene	50.0	54.02		ug/L		108	80 - 120	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 123
4-Bromofluorobenzene (Surr)	107		80 - 120
Dibromofluoromethane (Surr)	98		78 - 120
Toluene-d8 (Surr)	101		80 - 120

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

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

**Lab Sample ID: MB 570-209024/5**  
**Matrix: Water**  
**Analysis Batch: 209024**

**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			01/24/22 15:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		50 - 150				01/24/22 15:07	1

**Lab Sample ID: LCS 570-209024/3**  
**Matrix: Water**  
**Analysis Batch: 209024**

**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)	1970	1741		ug/L		88	76 - 128
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	98		50 - 150				

**Lab Sample ID: LCSD 570-209024/6**  
**Matrix: Water**  
**Analysis Batch: 209024**

**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)	1970	1840		ug/L		93	76 - 128	6	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	96		50 - 150						

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

**Lab Sample ID: MB 570-209113/1-A**  
**Matrix: Water**  
**Analysis Batch: 209372**

**Client Sample ID: Method Blank**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 209113**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.10	mg/L		01/24/22 13:09	01/25/22 16:48	1
TPH as Motor Oil Range	ND		0.10	mg/L		01/24/22 13:09	01/25/22 16:48	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	114		50 - 150			01/24/22 13:09	01/25/22 16:48	1

**Lab Sample ID: LCS 570-209113/2-A**  
**Matrix: Water**  
**Analysis Batch: 209372**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 209113**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	4.00	4.197		mg/L		105	68 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
n-Octacosane (Surr)	110		50 - 150				

Eurofins Calscience

# QC Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup (Continued)

**Lab Sample ID: LCSD 570-209113/3-A**  
**Matrix: Water**  
**Analysis Batch: 209372**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 209113**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	4.00	4.432		mg/L		111	68 - 120	5	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
<i>n-Octacosane (Surr)</i>	115		50 - 150						

## Method: 1664A - Oil and Grease

**Lab Sample ID: MB 570-208225/1-A**  
**Matrix: Water**  
**Analysis Batch: 208319**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 208225**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		1.00	mg/L		01/19/22 09:42	01/19/22 09:42	1

**Lab Sample ID: LCS 570-208225/2-A**  
**Matrix: Water**  
**Analysis Batch: 208319**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 208225**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	39.00		mg/L		98	78 - 114

**Lab Sample ID: LCSD 570-208225/3-A**  
**Matrix: Water**  
**Analysis Batch: 208319**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 208225**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Oil & Grease	40.0	38.70		mg/L		97	78 - 114	1	18

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

## GC/MS VOA

### Analysis Batch: 208271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-81945-2	GW-011722-JRL-EFF-1	Total/NA	Water	Composite	
570-81945-3	GW-011722-JRL-EFF-2	Total/NA	Water	Composite	
570-81945-4	GW-011722-JRL-EFF-3	Total/NA	Water	Composite	
570-81945-5	GW-011722-JRL-EFF-4	Total/NA	Water	Composite	

### Analysis Batch: 209544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-81945-9	GW-011722-JRL-EFF-1,2,3,4(COMPOSITE)	Total/NA	Water	8260C	
MB 570-209544/8	Method Blank	Total/NA	Water	8260C	
LCS 570-209544/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 570-209544/5	Lab Control Sample Dup	Total/NA	Water	8260C	

## GC VOA

### Analysis Batch: 209024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-81945-9	GW-011722-JRL-EFF-1,2,3,4(COMPOSITE)	Total/NA	Water	NWTPH-Gx	
MB 570-209024/5	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 570-209024/3	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 570-209024/6	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

## GC Semi VOA

### Prep Batch: 209113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-81945-1	GW-011722-JRL-EFF	Silica Gel Cleanup	Water	3510C SGC	
MB 570-209113/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 570-209113/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 570-209113/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	

### Analysis Batch: 209372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-81945-1	GW-011722-JRL-EFF	Silica Gel Cleanup	Water	NWTPH-Dx	209113
MB 570-209113/1-A	Method Blank	Silica Gel Cleanup	Water	NWTPH-Dx	209113
LCS 570-209113/2-A	Lab Control Sample	Silica Gel Cleanup	Water	NWTPH-Dx	209113
LCSD 570-209113/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	NWTPH-Dx	209113

## General Chemistry

### Prep Batch: 208225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-81945-10	GW-011722-JRL-EFF-5,6,7(COMPOSITE)	Total/NA	Water	1664A	
MB 570-208225/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-208225/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-208225/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

### Analysis Batch: 208319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-81945-10	GW-011722-JRL-EFF-5,6,7(COMPOSITE)	Total/NA	Water	1664A	208225
MB 570-208225/1-A	Method Blank	Total/NA	Water	1664A	208225
LCS 570-208225/2-A	Lab Control Sample	Total/NA	Water	1664A	208225
LCSD 570-208225/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	208225

Eurofins Calscience

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

## Organic Prep

### Analysis Batch: 208271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-81945-6	GW-011722-JRL-EFF-5	Total/NA	Water	Composite	
570-81945-7	GW-011722-JRL-EFF-6	Total/NA	Water	Composite	
570-81945-8	GW-011722-JRL-EFF-7	Total/NA	Water	Composite	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

**Client Sample ID: GW-011722-JRL-EFF**

**Lab Sample ID: 570-81945-1**

Date Collected: 01/17/22 10:30

Matrix: Water

Date Received: 01/18/22 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			242.3 mL	2.5 mL	209113	01/24/22 13:09	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			209372	01/25/22 20:03	A1W	ECL 1
Instrument ID: GC48										

**Client Sample ID: GW-011722-JRL-EFF-1**

**Lab Sample ID: 570-81945-2**

Date Collected: 01/17/22 10:30

Matrix: Water

Date Received: 01/18/22 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			208271	01/19/22 11:51	C4LT	ECL 1
Instrument ID: NOEQUIP										

**Client Sample ID: GW-011722-JRL-EFF-2**

**Lab Sample ID: 570-81945-3**

Date Collected: 01/17/22 10:45

Matrix: Water

Date Received: 01/18/22 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			208271	01/19/22 11:51	C4LT	ECL 1
Instrument ID: NOEQUIP										

**Client Sample ID: GW-011722-JRL-EFF-3**

**Lab Sample ID: 570-81945-4**

Date Collected: 01/17/22 11:00

Matrix: Water

Date Received: 01/18/22 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			208271	01/19/22 11:51	C4LT	ECL 1
Instrument ID: NOEQUIP										

**Client Sample ID: GW-011722-JRL-EFF-4**

**Lab Sample ID: 570-81945-5**

Date Collected: 01/17/22 11:15

Matrix: Water

Date Received: 01/18/22 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			208271	01/19/22 11:51	C4LT	ECL 1
Instrument ID: NOEQUIP										

**Client Sample ID: GW-011722-JRL-EFF-5**

**Lab Sample ID: 570-81945-6**

Date Collected: 01/17/22 10:30

Matrix: Water

Date Received: 01/18/22 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			208271	01/19/22 11:51	C4LT	ECL 1
Instrument ID: NOEQUIP										

# Lab Chronicle

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

**Client Sample ID: GW-011722-JRL-EFF-6**

**Lab Sample ID: 570-81945-7**

Date Collected: 01/17/22 10:45

Matrix: Water

Date Received: 01/18/22 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			208271	01/19/22 11:51	C4LT	ECL 1
Instrument ID: NOEQUIP										

**Client Sample ID: GW-011722-JRL-EFF-7**

**Lab Sample ID: 570-81945-8**

Date Collected: 01/17/22 11:00

Matrix: Water

Date Received: 01/18/22 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			208271	01/19/22 11:51	C4LT	ECL 1
Instrument ID: NOEQUIP										

**Client Sample ID: GW-011722-JRL-EFF-1,2,3,4(COMPOSITE)**

**Lab Sample ID: 570-81945-9**

Date Collected: 01/17/22 00:00

Matrix: Water

Date Received: 01/18/22 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	209544	01/26/22 17:55	OH1	ECL 2
Instrument ID: GCMSXX										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	209024	01/24/22 21:50	P1R	ECL 2
Instrument ID: GC1										

**Client Sample ID: GW-011722-JRL-EFF-5,6,7(COMPOSITE)**

**Lab Sample ID: 570-81945-10**

Date Collected: 01/17/22 00:00

Matrix: Water

Date Received: 01/18/22 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1050 mL	1000 mL	208225	01/19/22 09:42	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			208319	01/19/22 09:42	L6IE	ECL 1
Instrument ID: ICPMS05										

**Laboratory References:**

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

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

# Accreditation/Certification Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

## Laboratory: Eurofins Calscience

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	CA300001	01-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte	
Composite		Water	Composited	
Washington	State		C916-18	10-12-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Composite		Water	Composited



# Method Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ECL 2
Composite	Sample Compositing	None	ECL 1
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ECL 2
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	ECL 1
1664A	Oil and Grease	40CFR136A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1
3510C SGC	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 2

#### Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

None = None

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

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

# Sample Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-81945-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-81945-1	GW-011722-JRL-EFF	Water	01/17/22 10:30	01/18/22 10:15
570-81945-2	GW-011722-JRL-EFF-1	Water	01/17/22 10:30	01/18/22 10:15
570-81945-3	GW-011722-JRL-EFF-2	Water	01/17/22 10:45	01/18/22 10:15
570-81945-4	GW-011722-JRL-EFF-3	Water	01/17/22 11:00	01/18/22 10:15
570-81945-5	GW-011722-JRL-EFF-4	Water	01/17/22 11:15	01/18/22 10:15
570-81945-6	GW-011722-JRL-EFF-5	Water	01/17/22 10:30	01/18/22 10:15
570-81945-7	GW-011722-JRL-EFF-6	Water	01/17/22 10:45	01/18/22 10:15
570-81945-8	GW-011722-JRL-EFF-7	Water	01/17/22 11:00	01/18/22 10:15
570-81945-9	GW-011722-JRL-EFF-1,2,3,4(COMPOSITE)	Water	01/17/22 00:00	01/18/22 10:15
570-81945-10	GW-011722-JRL-EFF-5,6,7(COMPOSITE)	Water	01/17/22 00:00	01/18/22 10:15

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

51945



Calscience

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

CHAIN OF CUSTODY RECORD

DATE 01-17-22

PAGE 1 OF 1

WO # / LAB USE ONLY

CLIENT PROJECT NAME / NUMBER  
 P66 Renton Terminal AOC 5228 / 11226464  
 PROJECT CONTACT  
 Eric Maisie 425-563-3260  
 Matt Davis 253-507-6217

LABORATORY CLIENT: GHD Services Inc  
 ADDRESS 9725 3rd Avenue NE Ste 204  
 CITY Seattle  
 STATE WA ZIP 98115  
 E-MAIL matthew.davis@ghd

P O NO 11226464-2021-04  
 SAMPLER(S) (PRINT) Joe Lewandowski

TURNAROUND TIME (Rush surcharges may apply to any TAT not STANDARD)  
 SAME DAY  24 HR  48 HR  72 HR  STANDARD

GLOBAL ID COELT EDF

SPECIAL INSTRUCTIONS  
 Laboratory composite EFF 1, 2, 3, 4 samples for BTEX and TPHg  
 Laboratory composite EFF 5, 6, 7 samples for Oil & Grease



570-81945 Chain of Custody

REQUESTED ANALYSES

Please check box or fill in blank as needed

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	TIME	MATRIX	NO. OF CONT	Unpreserved	Preserved	Field Filtered	DRO/ORO (NWTPH-DX)	GRO (NWTPH-GX)	BTEX (8260)	Oil & Grease (1664)
	<del>GW-011722-JWA-EFF 1</del>	<del>01-17-22</del>	<del>1030</del>	<del>GW</del>	<del>2</del>	<del>X</del>	<del>X</del>	<del></del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>
	<del>GW-011722-JWA-MID 1</del>	<del>01-17-22</del>	<del>1030</del>	<del>GW</del>	<del>2</del>	<del>X</del>	<del>X</del>	<del></del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>
	<del>GW-011722-JWA-MID 2</del>	<del>01-17-22</del>	<del>1030</del>	<del>GW</del>	<del>2</del>	<del>X</del>	<del>X</del>	<del></del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>
1	GW-011722-JWA-EFF	01-17-22	1030	GW	2	X	X		X	X	X	X
2	GW-011722-JWA-EFF 1	01-17-22	1030	GW	2	X	X		X	X	X	X
3	GW-011722-JWA-EFF 2	01-17-22	1045	GW	2	X	X		X	X	X	X
4	GW-011722-JWA-EFF 3	01-17-22	1100	GW	2	X	X		X	X	X	X
5	GW-011722-JWA-EFF 4	01-17-22	1115	GW	2	X	X		X	X	X	X
6	GW-011722-JWA-EFF 5	01-17-22	1030	GW	1	X	X		X	X	X	X
7	GW-011722-JWA-EFF 6	01-17-22	1045	GW	1	X	X		X	X	X	X
8	GW-011722-JWA-EFF 7	01-17-22	1100	GW	1	X	X		X	X	X	X

Signature: JWA 01/17/22  
 Signature: JWA 01/17/22  
 Signature: JWA 01/17/22  
 Lab composite  
 Lab composite  
 Lab composite  
 Lab composite  
 Lab composite  
 Lab composite  
 Lab composite

Relinquished by (Signature) [Signature] Date 01/18/22 Time 1015  
 Relinquished by (Signature) [Signature] Date [ ] Time [ ]  
 Relinquished by (Signature) [Signature] Date [ ] Time [ ]

1.9/3 + 5c6





570-81945 Waybill

0200

**FedEx®** Package Express **US Airbill**

FedEx Tracking Number

8166 8708 8821

**1 From**  
 Date: 11-17-22  
 Sender's Name: J & K  
 Company: J & K  
 Address: 1111 1st St  
 City: CA  
 State: CA  
 ZIP: 91101  
 Phone: 310 807 26  
 Dept./Floor/Suite/Room:

**2 Your Internal Billing Reference**

**3 To Recipient's Name**  
 Company: SUN  
 Address: 7440 SUNWAY  
 City: GARDEN GROVE  
 State: CA  
 ZIP: 92641

**Hold Weekday**  
 FedEx location address REQUIRED. NOT available for FedEx First Overnight.

**Hold Saturday**  
 FedEx location address ONLY for FedEx Overnight and FedEx 2Day to select locations.

**Address**  
 Use this line for the HOLD location address or for continuation of your shipping address.

**4 Express Package Service**  
 \* To meet locations.

**Next Business Day**  
 FedEx First Overnight  
 FedEx Priority Overnight  
 FedEx Standard Overnight

**2 or 3 Business Days**  
 FedEx 2Day A.M.  
 FedEx 2Day  
 FedEx Express Saver

**5 Packaging** \* Declared value limit \$500.  
 FedEx Envelope\*  
 FedEx Pak\*  
 FedEx Box  
 FedEx Tube  
 Other

**6 Special Handling and Delivery Signature Options** Fees may apply. See the NIE-Service Guide.

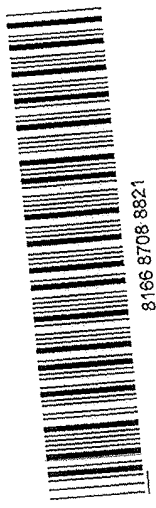
Saturday Delivery  
 Direct Signature  
 No Signature Required  
 Indirect Signature

**Does this shipment contain dangerous goods?**

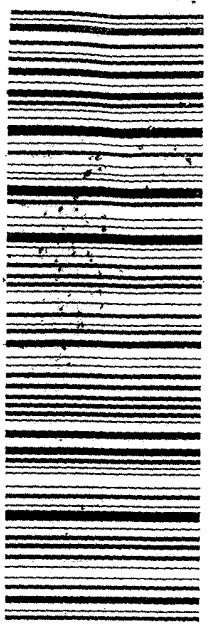
No  
 Yes  
 As per Shipper's Declaration  
 Shipper's Declaration not required.

**7 Payment Bill to:**  
 Sender  
 Recipient  
 Third Party

**FedEx**  
 TRK# 8166 8708 8821  
**92 APVA**  
**TUE - 18 JAN AA**  
**PRIORITY OVERNIGHT** ISF  
**92841**  
 CA-US  
**SNA**



8166 8708 8821



fedex.com 1800 GoFedEx 1800 463 3339

966398 17Jan2022 PAEA 56064 /F289 /1823



# Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 570-81945-1

**Login Number: 81945**

**List Number: 1**

**Creator: Patel, Jayesh**

**List Source: Eurofins Calscience**

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	



## ANALYTICAL REPORT

Eurofins Calscience  
2841 Dow Avenue, Suite 100  
Tustin, CA 92780  
Tel: (714)895-5494

Laboratory Job ID: 570-84421-1  
Client Project/Site: P66 Renton Terminal AOC 5228 / 11226464

For:  
GHD Services Inc.  
9725 3rd Avenue NE, Suite 204  
Seattle, Washington 98115

Attn: Matt Davis

*Vikas Patel*

---

Authorized for release by:  
2/24/2022 4:22:43 PM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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.*



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	9
QC Sample Results . . . . .	10
QC Association Summary . . . . .	13
Lab Chronicle . . . . .	14
Certification Summary . . . . .	15
Method Summary . . . . .	16
Sample Summary . . . . .	17
Chain of Custody . . . . .	18
Receipt Checklists . . . . .	20
Air Canister Dilution . . . . .	21

# Definitions/Glossary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

---

**Job ID: 570-84421-1**

---

**Laboratory: Eurofins Calscience**

---

**Narrative**

**Job Narrative**  
**570-84421-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 2/11/2022 10:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 22.0° C.

**Air Toxics**

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

# Detection Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

## Client Sample ID: A-021022-JRL-INF

## Lab Sample ID: 570-84421-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	57		0.50	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	39		0.50	ppb v/v	1		TO-15	Total/NA
o-Xylene	71		0.50	ppb v/v	1		TO-15	Total/NA
m,p-Xylene - DL	170		6.3	ppb v/v	3.125		TO-15	Total/NA
Toluene - DL	140		1.6	ppb v/v	3.125		TO-15	Total/NA
Xylenes, Total - DL	230		7.8	ppb v/v	3.125		TO-15	Total/NA
Gasoline Range Organics (C6-C12)	11		1.0	ppm v/v	1		TO3	Total/NA

## Client Sample ID: A-021022-JRL-EFF

## Lab Sample ID: 570-84421-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.63		0.50	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.59		0.50	ppb v/v	1		TO-15	Total/NA
Toluene	1.6		0.50	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Client Sample ID: A-021022-JRL-INF**

**Date Collected: 02/10/22 12:30**

**Date Received: 02/11/22 10:45**

**Sample Container: Summa Canister 1L**

**Lab Sample ID: 570-84421-1**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	57		0.50	ppb v/v			02/23/22 10:27	1
Ethylbenzene	39		0.50	ppb v/v			02/23/22 10:27	1
o-Xylene	71		0.50	ppb v/v			02/23/22 10:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		66 - 132				02/23/22 10:27	1
4-Bromofluorobenzene (Surr)	121		70 - 130				02/23/22 10:27	1
Toluene-d8 (Surr)	103		70 - 130				02/23/22 10:27	1

**Client Sample ID: A-021022-JRL-EFF**

**Date Collected: 02/10/22 12:25**

**Date Received: 02/11/22 10:45**

**Sample Container: Summa Canister 1L**

**Lab Sample ID: 570-84421-2**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.63		0.50	ppb v/v			02/23/22 00:17	1
Ethylbenzene	ND		0.50	ppb v/v			02/23/22 00:17	1
o-Xylene	0.59		0.50	ppb v/v			02/23/22 00:17	1
m,p-Xylene	ND		2.0	ppb v/v			02/23/22 00:17	1
Toluene	1.6		0.50	ppb v/v			02/23/22 00:17	1
Xylenes, Total	ND		2.5	ppb v/v			02/23/22 00:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 132				02/23/22 00:17	1
4-Bromofluorobenzene (Surr)	114		70 - 130				02/23/22 00:17	1
Toluene-d8 (Surr)	99		70 - 130				02/23/22 00:17	1

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

**Client Sample ID: A-021022-JRL-INF**

**Date Collected: 02/10/22 12:30**

**Date Received: 02/11/22 10:45**

**Sample Container: Summa Canister 1L**

**Lab Sample ID: 570-84421-1**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>m,p-Xylene</b>	<b>170</b>		6.3	ppb v/v			02/23/22 22:36	3.125
<b>Toluene</b>	<b>140</b>		1.6	ppb v/v			02/23/22 22:36	3.125
<b>Xylenes, Total</b>	<b>230</b>		7.8	ppb v/v			02/23/22 22:36	3.125
<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)	100		66 - 132				02/23/22 22:36	3.125
4-Bromofluorobenzene (Surr)	112		70 - 130				02/23/22 22:36	3.125
Toluene-d8 (Surr)	99		70 - 130				02/23/22 22:36	3.125

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

## Method: TO3 - Volatile Organic Compounds in Ambient Air, Cryogenic Pre-Conc Techniques (GC)

Client Sample ID: A-021022-JRL-INF

Date Collected: 02/10/22 12:30

Date Received: 02/11/22 10:45

Sample Container: Summa Canister 1L

Lab Sample ID: 570-84421-1

Matrix: Air

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C6-C12)	11		1.0	ppm v/v			02/15/22 14:53	1

Client Sample ID: A-021022-JRL-EFF

Date Collected: 02/10/22 12:25

Date Received: 02/11/22 10:45

Sample Container: Summa Canister 1L

Lab Sample ID: 570-84421-2

Matrix: Air

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C6-C12)	ND		1.0	ppm v/v			02/15/22 14:07	1



# Surrogate Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	TOL
		(66-132)	(70-130)	(70-130)
570-84421-1	A-021022-JRL-INF	108	121	103
570-84421-1 - DL	A-021022-JRL-INF	100	112	99
570-84421-2	A-021022-JRL-EFF	105	114	99
LCS 570-215024/3	Lab Control Sample	103	114	107
LCS 570-215265/3	Lab Control Sample	96	111	104
LCSD 570-215024/4	Lab Control Sample Dup	102	114	105
LCSD 570-215265/4	Lab Control Sample Dup	99	112	104
MB 570-215024/7	Method Blank	102	109	99
MB 570-215265/6	Method Blank	98	110	97

#### Surrogate Legend

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

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Lab Sample ID: MB 570-215024/7**  
**Matrix: Air**  
**Analysis Batch: 215024**

**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	ppb v/v			02/22/22 21:49	1
Ethylbenzene	ND		0.50	ppb v/v			02/22/22 21:49	1
o-Xylene	ND		0.50	ppb v/v			02/22/22 21:49	1
m,p-Xylene	ND		2.0	ppb v/v			02/22/22 21:49	1
Toluene	ND		0.50	ppb v/v			02/22/22 21:49	1
Xylenes, Total	ND		2.5	ppb v/v			02/22/22 21:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 132		02/22/22 21:49	1
4-Bromofluorobenzene (Surr)	109		70 - 130		02/22/22 21:49	1
Toluene-d8 (Surr)	99		70 - 130		02/22/22 21:49	1

**Lab Sample ID: LCS 570-215024/3**  
**Matrix: Air**  
**Analysis Batch: 215024**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	25.99		ppb v/v		104	68 - 134
Ethylbenzene	25.0	23.67		ppb v/v		95	70 - 130
o-Xylene	25.0	23.18		ppb v/v		93	68 - 130
m,p-Xylene	50.0	49.00		ppb v/v		98	70 - 130
Toluene	25.0	22.28		ppb v/v		89	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		66 - 132
4-Bromofluorobenzene (Surr)	114		70 - 130
Toluene-d8 (Surr)	107		70 - 130

**Lab Sample ID: LCSD 570-215024/4**  
**Matrix: Air**  
**Analysis Batch: 215024**

**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	25.0	25.68		ppb v/v		103	68 - 134	1	25
Ethylbenzene	25.0	23.36		ppb v/v		93	70 - 130	1	25
o-Xylene	25.0	22.84		ppb v/v		91	68 - 130	1	25
m,p-Xylene	50.0	45.55		ppb v/v		91	70 - 130	7	25
Toluene	25.0	22.08		ppb v/v		88	70 - 130	1	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		66 - 132
4-Bromofluorobenzene (Surr)	114		70 - 130
Toluene-d8 (Surr)	105		70 - 130

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: MB 570-215265/6**  
**Matrix: Air**  
**Analysis Batch: 215265**

**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	ppb v/v			02/23/22 21:00	1
Ethylbenzene	ND		0.50	ppb v/v			02/23/22 21:00	1
o-Xylene	ND		0.50	ppb v/v			02/23/22 21:00	1
m,p-Xylene	ND		2.0	ppb v/v			02/23/22 21:00	1
Toluene	ND		0.50	ppb v/v			02/23/22 21:00	1
Xylenes, Total	ND		2.5	ppb v/v			02/23/22 21:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 132		02/23/22 21:00	1
4-Bromofluorobenzene (Surr)	110		70 - 130		02/23/22 21:00	1
Toluene-d8 (Surr)	97		70 - 130		02/23/22 21:00	1

**Lab Sample ID: LCS 570-215265/3**  
**Matrix: Air**  
**Analysis Batch: 215265**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	26.58		ppb v/v		106	68 - 134
Ethylbenzene	25.0	23.82		ppb v/v		95	70 - 130
o-Xylene	25.0	23.11		ppb v/v		92	68 - 130
m,p-Xylene	50.0	48.91		ppb v/v		98	70 - 130
Toluene	25.0	22.46		ppb v/v		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		66 - 132
4-Bromofluorobenzene (Surr)	111		70 - 130
Toluene-d8 (Surr)	104		70 - 130

**Lab Sample ID: LCSD 570-215265/4**  
**Matrix: Air**  
**Analysis Batch: 215265**

**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	25.0	25.91		ppb v/v		104	68 - 134	3	25
Ethylbenzene	25.0	23.63		ppb v/v		95	70 - 130	1	25
o-Xylene	25.0	22.90		ppb v/v		92	68 - 130	1	25
m,p-Xylene	50.0	47.94		ppb v/v		96	70 - 130	2	25
Toluene	25.0	22.36		ppb v/v		89	70 - 130	0	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		66 - 132
4-Bromofluorobenzene (Surr)	112		70 - 130
Toluene-d8 (Surr)	104		70 - 130

# QC Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

## Method: TO3 - Volatile Organic Compounds in Ambient Air, Cryogenic Pre-Conc Techniques (GC)

**Lab Sample ID: MB 570-213233/4**  
**Matrix: Air**  
**Analysis Batch: 213233**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C6-C12)	ND		1.0	ppm v/v			02/15/22 13:20	1

**Lab Sample ID: LCS 570-213233/3**  
**Matrix: Air**  
**Analysis Batch: 213233**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (C6-C12)	100	83.04		ppm v/v		83	80 - 120

**Lab Sample ID: 570-84421-1 DU**  
**Matrix: Air**  
**Analysis Batch: 213233**

**Client Sample ID: A-021022-JRL-INF**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Gasoline Range Organics (C6-C12)	11		12.36		ppm v/v		12	20

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

## Air - GC/MS VOA

### Analysis Batch: 215024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84421-1	A-021022-JRL-INF	Total/NA	Air	TO-15	
570-84421-2	A-021022-JRL-EFF	Total/NA	Air	TO-15	
MB 570-215024/7	Method Blank	Total/NA	Air	TO-15	
LCS 570-215024/3	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 570-215024/4	Lab Control Sample Dup	Total/NA	Air	TO-15	

### Analysis Batch: 215265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84421-1 - DL	A-021022-JRL-INF	Total/NA	Air	TO-15	
MB 570-215265/6	Method Blank	Total/NA	Air	TO-15	
LCS 570-215265/3	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 570-215265/4	Lab Control Sample Dup	Total/NA	Air	TO-15	

## Air - GC VOA

### Analysis Batch: 213233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84421-1	A-021022-JRL-INF	Total/NA	Air	TO3	
570-84421-2	A-021022-JRL-EFF	Total/NA	Air	TO3	
MB 570-213233/4	Method Blank	Total/NA	Air	TO3	
LCS 570-213233/3	Lab Control Sample	Total/NA	Air	TO3	
570-84421-1 DU	A-021022-JRL-INF	Total/NA	Air	TO3	

# Lab Chronicle

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

**Client Sample ID: A-021022-JRL-INF**

**Lab Sample ID: 570-84421-1**

**Date Collected: 02/10/22 12:30**

**Matrix: Air**

**Date Received: 02/11/22 10:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	250 mL	250 mL	215024	02/23/22 10:27	UJHY	ECL 2
Instrument ID: GCMSZZ										
Total/NA	Analysis	TO-15	DL	3.125	250 mL	250 mL	215265	02/23/22 22:36	UJHY	ECL 2
Instrument ID: GCMSZZ										
Total/NA	Analysis	TO3		1	10 mL	10 mL	213233	02/15/22 14:53	I9H5	ECL 2
Instrument ID: GC38										

**Client Sample ID: A-021022-JRL-EFF**

**Lab Sample ID: 570-84421-2**

**Date Collected: 02/10/22 12:25**

**Matrix: Air**

**Date Received: 02/11/22 10:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	250 mL	250 mL	215024	02/23/22 00:17	UJHY	ECL 2
Instrument ID: GCMSZZ										
Total/NA	Analysis	TO3		1	10 mL	10 mL	213233	02/15/22 14:07	I9H5	ECL 2
Instrument ID: GC38										

**Laboratory References:**

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

# Accreditation/Certification Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

## Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	CA300001	01-31-23

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

# Method Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	ECL 2
TO3	Volatile Organic Compounds in Ambient Air, Cryogenic Pre-Conc Techniques (GC)	EPA	ECL 2

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

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





# Sample Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-84421-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-84421-1	A-021022-JRL-INF	Air	02/10/22 12:30	02/11/22 10:45	Air Canister (1-Liter) #LC119
570-84421-2	A-021022-JRL-EFF	Air	02/10/22 12:25	02/11/22 10:45	Air Canister (1-Liter) #LC105

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16



Calscience

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

LABORATORY CLIENT: GHD Services Inc

ADDRESS: 9725 3rd Avenue NE Ste 204

CITY: Seattle

STATE: WA ZIP 98115

TEL: 253-507-6217

E-MAIL: matthew.davis@ghd

TURNAROUND TIME (Rush surcharges may apply to any TAT not STANDARD\*):

SAME DAY  24 HR  48 HR  72 HR  5 DAYS \* STANDARD

COELT EDF

GLOBAL ID

LOG CODE

SPECIAL INSTRUCTIONS

LAB USE ONLY

SAMPLE ID

SAMPLING DATE

TIME

NO. OF CONT.

MATRIX

Unpreserved

Preserved

Field Filtered

GRO (T0-3)

BTEX (T0-15)

LC119

LC105

Relinquished by (Signature)

*[Signature]* 02/10/22 1245

Received by (Signature/Affiliation)

Date

2/11/22

Time

10:48

Relinquished by (Signature)

*[Signature]*

Received by (Signature/Affiliation)

Date

Date

Time

Time

Relinquished by (Signature)

*[Signature]*

Received by (Signature/Affiliation)

Date

Date

Time

Time

REQUESTED ANALYSES

Please check box or fill in blank as needed

CLIENT PROJECT NAME / NUMBER: P66 Renton Terminal AOC 5228 / 11226464  
 PROJECT CONTACT: ~~Eric Maise~~ 425-563-9269, Matt Davis 253-507-6217  
 PO NO: 11226464-2021-04  
 SAMPLER(S) (PRINT): Joe Lewandowski

570-84421 Chain of Custody

CHAIN OF CUSTODY RECORD

DATE: 02/10/22 PAGE: 1 OF 1



Loc: 570 84421





Ex<sup>press</sup> Package Tracking Number 8166 8704 6799  
US Airbill

0200 Recipient's Copy

-10-22

JOE LEWANDOWSKI Phone 281 389-7000  
RHD  
71725 3RD AVE NE 204  
ATTN: State WA ZIP 98115

al Billing Reference  
EUROFINS SAMPLERS Phone 714 895-5494  
EUROFINS

7440 LINCOLN WAY Dept./Floor/Suite/Room  
o P.O. boxes or P.O. ZIP codes.  
HOLD location address or for continuation of your shipping address.  
REDEN GRAVE State CA ZIP 92841



4 Express Package Service \* To most locations. Packages up to 150 lbs. For packages over 150 lbs, use the FedEx Express Freight US Airbill.

Next Business Day  
 FedEx First Overnight  
 FedEx Priority Overnight  
 FedEx Standard Overnight  
2 or 3 Business Days  
 FedEx 2Day A.M.  
 FedEx 2Day  
 FedEx Express Saver

5 Packaging \* Declared value limit \$500.  
 FedEx Envelope\*  FedEx Pak\*  FedEx Box  FedEx Tube  Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.  
 Saturday Delivery  
 No Signature Required  
 Direct Signature  
 Indirect Signature

Does this shipment contain dangerous goods?  
No  Yes  As per attached Shipper's Declaration  Shipper's Declaration not required  
Dry Ice Dry Ice, 9 UN 1845 \_\_\_\_\_ kg  
Restrictions apply for dangerous goods — see the current FedEx Service Guide.  Cargo Aircraft Only

7 Payment Bill to:  
Enter FedEx Acct. No. below. Obtain recip. FedEx Acct. No.   
 Sender's Section  Recipient  Third Party  
Total Packages Total Weight

FedEx.com 1.800.GoFedEx 1.800.463.3339

# Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 570-84421-1

**Login Number: 84421**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Vitente, Precy**

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.	False	Thermal preservation not required.
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	

## Summa Canister Dilution Worksheet

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job No.: 570-84421-1

Lab Sample ID	Canister Volume (L)	Presampling Pressure ("Hg)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Pressure Gauge ID	Date	Analyst Initials
570-84421-1	1	-29.5	-3.8	0.87	0.87	-1.86639	0.87	0.87		1.00	1.00	air mg6	02/15/22 13:10	I9H5
570-84421-2	1	-29.5	-2.5	0.92	0.92	-1.22789	0.92	0.92		1.00	1.00	air mg6	02/15/22 13:11	I9H5

**Formulae:**

- Preadjusted Volume (L) = ((Preadjusted Pressure ("Hg) + 29.92 "Hg) \* Vol L) / 29.92 "Hg
- Adjusted Volume (L) = (( Adjusted Pressure (psig) + 14.7 psig ) \* Vol L) / 14.7 psig
- Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

**Where:**

- 29.92 "Hg = Standard atmospheric pressure in inches of Mercury ("Hg)
- 14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)



## ANALYTICAL REPORT

Eurofins Calscience  
2841 Dow Avenue, Suite 100  
Tustin, CA 92780  
Tel: (714)895-5494

Laboratory Job ID: 570-84301-1  
Client Project/Site: P66 Renton Terminal AOC 5228 / 12572873

For:  
GHD Services Inc.  
9725 3rd Avenue NE, Suite 204  
Seattle, Washington 98115

Attn: Matt Davis

*Vikas Patel*

---

Authorized for release by:  
2/28/2022 1:07:08 PM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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.*

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	9
QC Sample Results . . . . .	10
QC Association Summary . . . . .	13
Lab Chronicle . . . . .	14
Certification Summary . . . . .	15
Method Summary . . . . .	16
Sample Summary . . . . .	17
Chain of Custody . . . . .	18
Receipt Checklists . . . . .	20



# Definitions/Glossary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

---

## Job ID: 570-84301-1

---

### Laboratory: Eurofins Calscience

#### Narrative

---

#### Job Narrative 570-84301-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 2/11/2022 10:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.5° 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 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: GW-021022-JRL-MID 1 (570-84301-2) and GW-021022-JRL-MID 2 (570-84301-3). Elevated reporting limits (RLs) are provided.

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

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.

# Detection Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

## Client Sample ID: GW-021022-JRL-INF 1

Lab Sample ID: 570-84301-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	930		10	ug/L	20		8260C	Total/NA
Toluene	1500		20	ug/L	20		8260C	Total/NA
o-Xylene	980		20	ug/L	20		8260C	Total/NA
m,p-Xylene	2400		40	ug/L	20		8260C	Total/NA
Ethylbenzene	360		20	ug/L	20		8260C	Total/NA
Xylenes, Total	3400		40	ug/L	20		8260C	Total/NA
TPH as Gasoline (C4-C13)	16000		500	ug/L	5		NWTPH-Gx	Total/NA
TPH as Diesel Range	12		0.10	mg/L	1		NWTPH-Dx	Silica Gel Cleanup

## Client Sample ID: GW-021022-JRL-MID 1

Lab Sample ID: 570-84301-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	120		2.0	ug/L	4		8260C	Total/NA
Toluene	30		4.0	ug/L	4		8260C	Total/NA
o-Xylene	13		4.0	ug/L	4		8260C	Total/NA
m,p-Xylene	26		8.0	ug/L	4		8260C	Total/NA
Xylenes, Total	39		8.0	ug/L	4		8260C	Total/NA
TPH as Gasoline (C4-C13)	340		100	ug/L	1		NWTPH-Gx	Total/NA
TPH as Diesel Range	0.29		0.11	mg/L	1		NWTPH-Dx	Silica Gel Cleanup

## Client Sample ID: GW-021022-JRL-MID 2

Lab Sample ID: 570-84301-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Client Sample ID: GW-021022-JRL-INF 1**

**Date Collected: 02/10/22 12:00**

**Date Received: 02/11/22 10:45**

**Lab Sample ID: 570-84301-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	930		10	ug/L			02/23/22 08:17	20
Toluene	1500		20	ug/L			02/23/22 08:17	20
o-Xylene	980		20	ug/L			02/23/22 08:17	20
m,p-Xylene	2400		40	ug/L			02/23/22 08:17	20
Ethylbenzene	360		20	ug/L			02/23/22 08:17	20
Xylenes, Total	3400		40	ug/L			02/23/22 08:17	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 123		02/23/22 08:17	20
4-Bromofluorobenzene (Surr)	100		80 - 120		02/23/22 08:17	20
Dibromofluoromethane (Surr)	98		78 - 120		02/23/22 08:17	20
Toluene-d8 (Surr)	105		80 - 120		02/23/22 08:17	20

**Client Sample ID: GW-021022-JRL-MID 1**

**Date Collected: 02/10/22 11:45**

**Date Received: 02/11/22 10:45**

**Lab Sample ID: 570-84301-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	120		2.0	ug/L			02/23/22 07:22	4
Toluene	30		4.0	ug/L			02/23/22 07:22	4
o-Xylene	13		4.0	ug/L			02/23/22 07:22	4
m,p-Xylene	26		8.0	ug/L			02/23/22 07:22	4
Ethylbenzene	ND		4.0	ug/L			02/23/22 07:22	4
Xylenes, Total	39		8.0	ug/L			02/23/22 07:22	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 123		02/23/22 07:22	4
4-Bromofluorobenzene (Surr)	97		80 - 120		02/23/22 07:22	4
Dibromofluoromethane (Surr)	98		78 - 120		02/23/22 07:22	4
Toluene-d8 (Surr)	105		80 - 120		02/23/22 07:22	4

**Client Sample ID: GW-021022-JRL-MID 2**

**Date Collected: 02/10/22 11:30**

**Date Received: 02/11/22 10:45**

**Lab Sample ID: 570-84301-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0	ug/L			02/23/22 07:49	4
Toluene	ND		4.0	ug/L			02/23/22 07:49	4
o-Xylene	ND		4.0	ug/L			02/23/22 07:49	4
m,p-Xylene	ND		8.0	ug/L			02/23/22 07:49	4
Ethylbenzene	ND		4.0	ug/L			02/23/22 07:49	4
Xylenes, Total	ND		8.0	ug/L			02/23/22 07:49	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 123		02/23/22 07:49	4
4-Bromofluorobenzene (Surr)	97		80 - 120		02/23/22 07:49	4
Dibromofluoromethane (Surr)	97		78 - 120		02/23/22 07:49	4
Toluene-d8 (Surr)	103		80 - 120		02/23/22 07:49	4

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

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

**Client Sample ID: GW-021022-JRL-INF 1**

**Date Collected: 02/10/22 12:00**

**Date Received: 02/11/22 10:45**

**Lab Sample ID: 570-84301-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	16000		500	ug/L	-		02/17/22 02:20	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		50 - 150				02/17/22 02:20	5

**Client Sample ID: GW-021022-JRL-MID 1**

**Date Collected: 02/10/22 11:45**

**Date Received: 02/11/22 10:45**

**Lab Sample ID: 570-84301-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	340		100	ug/L	-		02/17/22 02:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		50 - 150				02/17/22 02:43	1

**Client Sample ID: GW-021022-JRL-MID 2**

**Date Collected: 02/10/22 11:30**

**Date Received: 02/11/22 10:45**

**Lab Sample ID: 570-84301-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L	-		02/17/22 03:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		50 - 150				02/17/22 03:07	1

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup - Silica Gel Cleanup

**Client Sample ID: GW-021022-JRL-INF 1**

**Date Collected: 02/10/22 12:00**

**Date Received: 02/11/22 10:45**

**Lab Sample ID: 570-84301-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	12		0.10	mg/L		02/18/22 16:09	02/26/22 19:58	1
TPH as Motor Oil Range	ND		0.10	mg/L		02/18/22 16:09	02/26/22 19:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n-Octacosane (Surr)</i>	106		50 - 150			02/18/22 16:09	02/26/22 19:58	1

**Client Sample ID: GW-021022-JRL-MID 1**

**Date Collected: 02/10/22 11:45**

**Date Received: 02/11/22 10:45**

**Lab Sample ID: 570-84301-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	0.29		0.11	mg/L		02/18/22 16:09	02/26/22 20:20	1
TPH as Motor Oil Range	ND		0.11	mg/L		02/18/22 16:09	02/26/22 20:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n-Octacosane (Surr)</i>	106		50 - 150			02/18/22 16:09	02/26/22 20:20	1

**Client Sample ID: GW-021022-JRL-MID 2**

**Date Collected: 02/10/22 11:30**

**Date Received: 02/11/22 10:45**

**Lab Sample ID: 570-84301-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.10	mg/L		02/18/22 16:09	02/26/22 20:41	1
TPH as Motor Oil Range	ND		0.10	mg/L		02/18/22 16:09	02/26/22 20:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n-Octacosane (Surr)</i>	111		50 - 150			02/18/22 16:09	02/26/22 20:41	1

# Surrogate Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-123)	BFB (80-120)	DBFM (78-120)	TOL (80-120)
570-84301-1	GW-021022-JRL-INF 1	94	100	98	105
570-84301-2	GW-021022-JRL-MID 1	96	97	98	105
570-84301-3	GW-021022-JRL-MID 2	94	97	97	103
LCS 570-214793/3	Lab Control Sample	105	102	99	100
LCSD 570-214793/4	Lab Control Sample Dup	105	104	100	102
MB 570-214793/7	Method Blank	96	95	97	103

#### 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

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1
		(50-150)
570-84301-1	GW-021022-JRL-INF 1	100
570-84301-2	GW-021022-JRL-MID 1	82
570-84301-3	GW-021022-JRL-MID 2	80
LCS 570-213719/18	Lab Control Sample	84
LCSD 570-213719/19	Lab Control Sample Dup	88
MB 570-213719/20	Method Blank	72

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Matrix: Water

Prep Type: Silica Gel Cleanup

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN
		(50-150)
570-84301-1	GW-021022-JRL-INF 1	106
570-84301-2	GW-021022-JRL-MID 1	106
570-84301-3	GW-021022-JRL-MID 2	111
LCS 570-214188/2-A	Lab Control Sample	107
LCSD 570-214188/3-A	Lab Control Sample Dup	96
MB 570-214188/1-A	Method Blank	99

#### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 570-214793/7**  
**Matrix: Water**  
**Analysis Batch: 214793**

**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			02/23/22 03:16	1
Toluene	ND		1.0	ug/L			02/23/22 03:16	1
o-Xylene	ND		1.0	ug/L			02/23/22 03:16	1
m,p-Xylene	ND		2.0	ug/L			02/23/22 03:16	1
Ethylbenzene	ND		1.0	ug/L			02/23/22 03:16	1
Xylenes, Total	ND		2.0	ug/L			02/23/22 03:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 123		02/23/22 03:16	1
4-Bromofluorobenzene (Surr)	95		80 - 120		02/23/22 03:16	1
Dibromofluoromethane (Surr)	97		78 - 120		02/23/22 03:16	1
Toluene-d8 (Surr)	103		80 - 120		02/23/22 03:16	1

**Lab Sample ID: LCS 570-214793/3**  
**Matrix: Water**  
**Analysis Batch: 214793**

**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	49.94		ug/L		100	76 - 120
Toluene	50.0	53.51		ug/L		107	76 - 120
o-Xylene	50.0	54.84		ug/L		110	80 - 121
m,p-Xylene	100	104.1		ug/L		104	74 - 122
Ethylbenzene	50.0	56.23		ug/L		112	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		70 - 123
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	99		78 - 120
Toluene-d8 (Surr)	100		80 - 120

**Lab Sample ID: LCSD 570-214793/4**  
**Matrix: Water**  
**Analysis Batch: 214793**

**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	48.52		ug/L		97	76 - 120	3	20
Toluene	50.0	51.82		ug/L		104	76 - 120	3	20
o-Xylene	50.0	52.95		ug/L		106	80 - 121	4	20
m,p-Xylene	100	98.95		ug/L		99	74 - 122	5	20
Ethylbenzene	50.0	53.90		ug/L		108	80 - 120	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		70 - 123
4-Bromofluorobenzene (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	100		78 - 120
Toluene-d8 (Surr)	102		80 - 120

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

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

**Lab Sample ID: MB 570-213719/20**  
**Matrix: Water**  
**Analysis Batch: 213719**

**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			02/16/22 19:11	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		50 - 150				02/16/22 19:11	1

**Lab Sample ID: LCS 570-213719/18**  
**Matrix: Water**  
**Analysis Batch: 213719**

**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)	1970	2029		ug/L		103	76 - 128
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	84		50 - 150				

**Lab Sample ID: LCSD 570-213719/19**  
**Matrix: Water**  
**Analysis Batch: 213719**

**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)	1970	2008		ug/L		102	76 - 128	1	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	88		50 - 150						

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

**Lab Sample ID: MB 570-214188/1-A**  
**Matrix: Water**  
**Analysis Batch: 215813**

**Client Sample ID: Method Blank**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 214188**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.10	mg/L		02/18/22 16:09	02/26/22 17:22	1
TPH as Motor Oil Range	ND		0.10	mg/L		02/18/22 16:09	02/26/22 17:22	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	99		50 - 150			02/18/22 16:09	02/26/22 17:22	1

**Lab Sample ID: LCS 570-214188/2-A**  
**Matrix: Water**  
**Analysis Batch: 215813**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 214188**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	4.00	4.072		mg/L		102	68 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
n-Octacosane (Surr)	107		50 - 150				

Eurofins Calscience



# QC Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup (Continued)

**Lab Sample ID: LCSD 570-214188/3-A**  
**Matrix: Water**  
**Analysis Batch: 215813**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 214188**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	4.00	3.387		mg/L		85	68 - 120	18	20
<b>Surrogate</b>									
<i>n</i> -Octacosane (Surr)									

	LCSD %Recovery	LCSD Qualifier	LCSD Limits
<i>n</i> -Octacosane (Surr)	96		50 - 150

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

## GC/MS VOA

### Analysis Batch: 214793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84301-1	GW-021022-JRL-INF 1	Total/NA	Water	8260C	
570-84301-2	GW-021022-JRL-MID 1	Total/NA	Water	8260C	
570-84301-3	GW-021022-JRL-MID 2	Total/NA	Water	8260C	
MB 570-214793/7	Method Blank	Total/NA	Water	8260C	
LCS 570-214793/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 570-214793/4	Lab Control Sample Dup	Total/NA	Water	8260C	

## GC VOA

### Analysis Batch: 213719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84301-1	GW-021022-JRL-INF 1	Total/NA	Water	NWTPH-Gx	
570-84301-2	GW-021022-JRL-MID 1	Total/NA	Water	NWTPH-Gx	
570-84301-3	GW-021022-JRL-MID 2	Total/NA	Water	NWTPH-Gx	
MB 570-213719/20	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 570-213719/18	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 570-213719/19	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

## GC Semi VOA

### Prep Batch: 214188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84301-1	GW-021022-JRL-INF 1	Silica Gel Cleanup	Water	3510C SGC	
570-84301-2	GW-021022-JRL-MID 1	Silica Gel Cleanup	Water	3510C SGC	
570-84301-3	GW-021022-JRL-MID 2	Silica Gel Cleanup	Water	3510C SGC	
MB 570-214188/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 570-214188/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 570-214188/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	

### Analysis Batch: 215813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84301-1	GW-021022-JRL-INF 1	Silica Gel Cleanup	Water	NWTPH-Dx	214188
570-84301-2	GW-021022-JRL-MID 1	Silica Gel Cleanup	Water	NWTPH-Dx	214188
570-84301-3	GW-021022-JRL-MID 2	Silica Gel Cleanup	Water	NWTPH-Dx	214188
MB 570-214188/1-A	Method Blank	Silica Gel Cleanup	Water	NWTPH-Dx	214188
LCS 570-214188/2-A	Lab Control Sample	Silica Gel Cleanup	Water	NWTPH-Dx	214188
LCSD 570-214188/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	NWTPH-Dx	214188

# Lab Chronicle

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

**Client Sample ID: GW-021022-JRL-INF 1**

**Lab Sample ID: 570-84301-1**

Date Collected: 02/10/22 12:00

Matrix: Water

Date Received: 02/11/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	5 mL	5 mL	214793	02/23/22 08:17	N1A	ECL 4
Instrument ID: GCMSW										
Total/NA	Analysis	NWTPH-Gx		5	5 mL	5 mL	213719	02/17/22 02:20	P1R	ECL 2
Instrument ID: GC1										
Silica Gel Cleanup	Prep	3510C SGC			245.5 mL	2.5 mL	214188	02/18/22 16:09	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			215813	02/26/22 19:58	N5Y3	ECL 4
Instrument ID: GC48										

**Client Sample ID: GW-021022-JRL-MID 1**

**Lab Sample ID: 570-84301-2**

Date Collected: 02/10/22 11:45

Matrix: Water

Date Received: 02/11/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	5 mL	5 mL	214793	02/23/22 07:22	N1A	ECL 4
Instrument ID: GCMSW										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	213719	02/17/22 02:43	P1R	ECL 2
Instrument ID: GC1										
Silica Gel Cleanup	Prep	3510C SGC			229 mL	2.5 mL	214188	02/18/22 16:09	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			215813	02/26/22 20:20	N5Y3	ECL 4
Instrument ID: GC48										

**Client Sample ID: GW-021022-JRL-MID 2**

**Lab Sample ID: 570-84301-3**

Date Collected: 02/10/22 11:30

Matrix: Water

Date Received: 02/11/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	5 mL	5 mL	214793	02/23/22 07:49	N1A	ECL 4
Instrument ID: GCMSW										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	213719	02/17/22 03:07	P1R	ECL 2
Instrument ID: GC1										
Silica Gel Cleanup	Prep	3510C SGC			242.5 mL	2.5 mL	214188	02/18/22 16:09	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			215813	02/26/22 20:41	N5Y3	ECL 4
Instrument ID: GC48										

**Laboratory References:**

- ECL 1 = Eurofins Calscience Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494
- ECL 2 = Eurofins Calscience Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494
- ECL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Accreditation/Certification Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

## Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	CA300001	01-31-23
Washington	State	C916-18	10-12-22

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Method Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ECL 4
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ECL 2
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	ECL 4
3510C SGC	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 4

#### 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 Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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

ECL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Sample Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84301-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-84301-1	GW-021022-JRL-INF 1	Water	02/10/22 12:00	02/11/22 10:45
570-84301-2	GW-021022-JRL-MID 1	Water	02/10/22 11:45	02/11/22 10:45
570-84301-3	GW-021022-JRL-MID 2	Water	02/10/22 11:30	02/11/22 10:45

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



Calscience

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: GHD Services Inc

ADDRESS: 9725 3rd Avenue NE Ste 204

CITY: Seattle STATE: WA ZIP: 98115

TEL: 253-507-6217 E-MAIL: matthew.davis@ghd

TURNAROUND TIME (Rush surcharges may apply to any TAT not 'STANDARD')

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

COELT EDF GLOBAL ID LOG CODE

SPECIAL INSTRUCTIONS

Laboratory composite EFF 1 2 3 4 samples for BTEX and TPHg  
Laboratory composite EFF 5, 6 7 samples for Oil & Grease

# CHAIN OF CUSTODY RECORD

DATE: 02-10-22

PAGE: 1 OF 1

WO # / LAB USE ONLY

CLIENT PROJECT NAME / NUMBER

P66 Renton Terminal AOC 5228 / 11226464

PO NO

11226464 2021-04

PROJECT CONTACT

546-Moise-425-569-9260  
Matt Davis 253-507-6217

SAMPLER(S) (PRINT)

Joe Lewandowski

## REQUESTED ANALYSES

Please check box or fill in blank as needed



570-84301 Chain of Custody

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO OF CONT	LOG CODE			Field Filtered	DRO/ORO (NWTPH-DX)	GRO (NWTPH-GX)	BTEX (8260)	Oil & Grease (1664)	Lab composite
		DATE	TIME			Unpreserved	Preserved							
	GW-021022-JUL-INF 1	02/10/22	1100	GW	8		X		X	X	X			Lab composite
	GW-021022-JUL-MID 1	02/10/22	1145	GW	8		X		X	X	X			Lab composite
	GW-021022-JUL-MID 2	02/10/22	1130	GW	8		X		X	X	X			Lab composite
	GW-EFF			GW			X		X	X	X			Lab composite
	GW-EFF 1			GW			X		X	X	X			Lab composite
	GW-EFF 2			GW			X		X	X	X			Lab composite
	GW-EFF 3			GW			X		X	X	X			Lab composite
	GW-EFF 4			GW			X		X	X	X			Lab composite
	GW-EFF 5			GW			X		X	X	X			Lab composite
	GW-EFF 6			GW			X		X	X	X			Lab composite
	GW-EFF 7			GW			X		X	X	X			Lab composite
Relinquished by (Signature)										Received by (Signature/Affiliation)			Date	Time
										P. Moise			2/11/22	10:45
Relinquished by (Signature)										Received by (Signature/Affiliation)			Date	Time
										P. Moise				
Relinquished by (Signature)										Received by (Signature/Affiliation)			Date	Time
										P. Moise				

2-0/3-5 JCB



54301



570-84301 Waybill

**FedEx** Express Package US Airbill  
Tracking Number: 8166 8704 6803

1 From  
Date: 2-10-22  
Sender's Name: LEWANDOSKI  
Company: GAD  
Address: 915 3RD AVE NE  
City: FARMERS  
State: VA ZIP: 24111

2 Your Internal Billing Reference  
3 To Recipient's Name: J...  
Company: ...  
Address: ...  
City: ... State: ... ZIP: ...

Address: ...  
City: ... State: ... ZIP: ...  
8166 8704 6803

Recipient's Copy

Packages up to 150 lbs.  
For packages over 150 lbs., see the  
FedEx Express Freight CD Manual.

Express Package Service  
2 or 3 Business Days  
FedEx 2Day A.M.  
FedEx 2Day  
FedEx Standard Overnight  
FedEx Express Saver

5 Packaging  
FedEx Envelope\*  
FedEx Pak\*  
FedEx Box  
FedEx Tube  
Other

6 Special Handling and Delivery Signature Options  
Saturday Delivery  
No Signature Required  
Direct Signature  
Indirect Signature  
Does this shipment contain dangerous goods?

7 Payment Bill to:  
Sender's Station  
Recipient  
Third Party  
Total Packages  
Total Weight

fedex.com 1800.GoFedEx 1800.763.3339





# Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 570-84301-1

**Login Number: 84301**  
**List Number: 1**  
**Creator: Patel, Jayesh**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Calscience  
2841 Dow Avenue, Suite 100  
Tustin, CA 92780  
Tel: (714)895-5494

Laboratory Job ID: 570-84297-1

Client Project/Site: P66 Renton Terminal AOC 5228 / 12572873

For:

GHD Services Inc.  
9725 3rd Avenue NE, Suite 204  
Seattle, Washington 98115

Attn: Matt Davis

*Vikas Patel*

---

Authorized for release by:  
2/28/2022 12:59:57 PM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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.*



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	12
QC Sample Results . . . . .	13
QC Association Summary . . . . .	16
Lab Chronicle . . . . .	18
Certification Summary . . . . .	20
Method Summary . . . . .	21
Sample Summary . . . . .	22
Chain of Custody . . . . .	23
Receipt Checklists . . . . .	25

# Definitions/Glossary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

---

## Job ID: 570-84297-1

---

### Laboratory: Eurofins Calscience

#### Narrative

---

#### Job Narrative 570-84297-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 2/11/2022 10:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.5° C.

#### GC/MS VOA

Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: Composite(GW-021022-JRL-EFF 1,2,3,4) (570-84297-9). Elevated reporting limits (RLs) are provided.

Method 8260C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-215156. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

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.

#### Metals

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

#### Organic Prep

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-213301. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.  
1664

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 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

**Client Sample ID: GW-021022-JRL-EFF** **Lab Sample ID: 570-84297-1**

No Detections.

**Client Sample ID: GW-021022-JRL-EFF 1** **Lab Sample ID: 570-84297-2**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes	H		NONE	1		Composite	Total/NA

**Client Sample ID: GW-021022-JRL-EFF 2** **Lab Sample ID: 570-84297-3**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes	H		NONE	1		Composite	Total/NA

**Client Sample ID: GW-021022-JRL-EFF 3** **Lab Sample ID: 570-84297-4**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes	H		NONE	1		Composite	Total/NA

**Client Sample ID: GW-021022-JRL-EFF 4** **Lab Sample ID: 570-84297-5**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes	H		NONE	1		Composite	Total/NA

**Client Sample ID: GW-021022-JRL-EFF 5** **Lab Sample ID: 570-84297-6**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes			NONE	1		Composite	Total/NA

**Client Sample ID: GW-021022-JRL-EFF 6** **Lab Sample ID: 570-84297-7**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes			NONE	1		Composite	Total/NA

**Client Sample ID: GW-021022-JRL-EFF 7** **Lab Sample ID: 570-84297-8**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes			NONE	1		Composite	Total/NA

**Client Sample ID: Composite(GW-021022-JRL-EFF 1,2,3,4)** **Lab Sample ID: 570-84297-9**

No Detections.

**Client Sample ID: Composite (GW-021022-JRL-EFF 5,6,7)** **Lab Sample ID: 570-84297-10**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Oil & Grease	1.14		0.952	mg/L	1		1664A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Client Sample ID: Composite(GW-021022-JRL-EFF 1,2,3,4)**  
**Date Collected: 02/10/22 00:00**  
**Date Received: 02/11/22 10:45**

**Lab Sample ID: 570-84297-9**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			02/24/22 05:18	2
Toluene	ND		2.0	ug/L			02/24/22 05:18	2
o-Xylene	ND		2.0	ug/L			02/24/22 05:18	2
m,p-Xylene	ND		4.0	ug/L			02/24/22 05:18	2
Ethylbenzene	ND		2.0	ug/L			02/24/22 05:18	2
Xylenes, Total	ND		4.0	ug/L			02/24/22 05:18	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 123		02/24/22 05:18	2
4-Bromofluorobenzene (Surr)	102		80 - 120		02/24/22 05:18	2
Dibromofluoromethane (Surr)	105		78 - 120		02/24/22 05:18	2
Toluene-d8 (Surr)	101		80 - 120		02/24/22 05:18	2

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

## Method: Composite - Sample Compositing

Client Sample ID: GW-021022-JRL-EFF 1

Date Collected: 02/10/22 10:30

Date Received: 02/11/22 10:45

Lab Sample ID: 570-84297-2

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes	H		NONE			02/24/22 14:26	1

Client Sample ID: GW-021022-JRL-EFF 2

Date Collected: 02/10/22 10:45

Date Received: 02/11/22 10:45

Lab Sample ID: 570-84297-3

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes	H		NONE			02/24/22 14:26	1

Client Sample ID: GW-021022-JRL-EFF 3

Date Collected: 02/10/22 11:00

Date Received: 02/11/22 10:45

Lab Sample ID: 570-84297-4

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes	H		NONE			02/24/22 14:26	1

Client Sample ID: GW-021022-JRL-EFF 4

Date Collected: 02/10/22 11:15

Date Received: 02/11/22 10:45

Lab Sample ID: 570-84297-5

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes	H		NONE			02/24/22 14:26	1



# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

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

Client Sample ID: Composite(GW-021022-JRL-EFF 1,2,3,4)

Lab Sample ID: 570-84297-9

Date Collected: 02/10/22 00:00

Matrix: Water

Date Received: 02/11/22 10:45

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			02/17/22 20:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		50 - 150				02/17/22 20:28	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup - Silica Gel Cleanup

Client Sample ID: GW-021022-JRL-EFF

Date Collected: 02/10/22 10:30

Date Received: 02/11/22 10:45

Lab Sample ID: 570-84297-1

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.10	mg/L		02/18/22 16:09	02/26/22 19:35	1
TPH as Motor Oil Range	ND		0.10	mg/L		02/18/22 16:09	02/26/22 19:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	107		50 - 150			02/18/22 16:09	02/26/22 19:35	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

## General Chemistry

Client Sample ID: Composite (GW-021022-JRL-EFF 5,6,7)  
Date Collected: 02/10/22 00:00  
Date Received: 02/11/22 10:45

Lab Sample ID: 570-84297-10  
Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	1.14		0.952	mg/L		02/15/22 12:24	02/15/22 12:24	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

## Method: Composite - Sample Compositing

Client Sample ID: GW-021022-JRL-EFF 5

Date Collected: 02/10/22 10:30

Date Received: 02/11/22 10:45

Lab Sample ID: 570-84297-6

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes			NONE			02/21/22 10:09	1

Client Sample ID: GW-021022-JRL-EFF 6

Date Collected: 02/10/22 10:45

Date Received: 02/11/22 10:45

Lab Sample ID: 570-84297-7

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes			NONE			02/21/22 10:09	1

Client Sample ID: GW-021022-JRL-EFF 7

Date Collected: 02/10/22 11:00

Date Received: 02/11/22 10:45

Lab Sample ID: 570-84297-8

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes			NONE			02/21/22 10:09	1

# Surrogate Summary

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-123)	BFB (80-120)	DBFM (78-120)	TOL (80-120)
570-84297-9	Composite(GW-021022-JRL-EF)	100	102	105	101
LCS 570-215156/4	Lab Control Sample	102	100	102	99
LCSD 570-215156/5	Lab Control Sample Dup	101	102	100	103
MB 570-215156/8	Method Blank	98	102	99	99

**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)
570-84297-9	Composite(GW-021022-JRL-EF)	79
570-84297-9 MS	Composite(GW-021022-JRL-EF F 1,2,3,4)	88
570-84297-9 MSD	Composite(GW-021022-JRL-EF F 1,2,3,4)	84
LCS 570-213854/6	Lab Control Sample	84
LCSD 570-213854/4	Lab Control Sample Dup	87
MB 570-213854/5	Method Blank	76

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Matrix: Water

Prep Type: Silica Gel Cleanup

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		OTCSN (50-150)
570-84297-1	GW-021022-JRL-EFF	107
LCS 570-214188/2-A	Lab Control Sample	107
LCSD 570-214188/3-A	Lab Control Sample Dup	96
MB 570-214188/1-A	Method Blank	99

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 570-215156/8**  
**Matrix: Water**  
**Analysis Batch: 215156**

**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			02/23/22 21:55	1
Toluene	ND		1.0	ug/L			02/23/22 21:55	1
o-Xylene	ND		1.0	ug/L			02/23/22 21:55	1
m,p-Xylene	ND		2.0	ug/L			02/23/22 21:55	1
Ethylbenzene	ND		1.0	ug/L			02/23/22 21:55	1
Xylenes, Total	ND		2.0	ug/L			02/23/22 21:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 123		02/23/22 21:55	1
4-Bromofluorobenzene (Surr)	102		80 - 120		02/23/22 21:55	1
Dibromofluoromethane (Surr)	99		78 - 120		02/23/22 21:55	1
Toluene-d8 (Surr)	99		80 - 120		02/23/22 21:55	1

**Lab Sample ID: LCS 570-215156/4**  
**Matrix: Water**  
**Analysis Batch: 215156**

**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	54.18		ug/L		108	76 - 120
Toluene	50.0	53.22		ug/L		106	76 - 120
o-Xylene	50.0	51.64		ug/L		103	80 - 121
m,p-Xylene	100	98.15		ug/L		98	74 - 122
Ethylbenzene	50.0	50.32		ug/L		101	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		70 - 123
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	102		78 - 120
Toluene-d8 (Surr)	99		80 - 120

**Lab Sample ID: LCSD 570-215156/5**  
**Matrix: Water**  
**Analysis Batch: 215156**

**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	54.73		ug/L		109	76 - 120	1	20
Toluene	50.0	53.81		ug/L		108	76 - 120	1	20
o-Xylene	50.0	51.44		ug/L		103	80 - 121	0	20
m,p-Xylene	100	98.79		ug/L		99	74 - 122	1	20
Ethylbenzene	50.0	50.45		ug/L		101	80 - 120	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 123
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	100		78 - 120
Toluene-d8 (Surr)	103		80 - 120

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

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

**Lab Sample ID: MB 570-213854/5**  
**Matrix: Water**  
**Analysis Batch: 213854**

**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			02/17/22 15:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		50 - 150				02/17/22 15:40	1

**Lab Sample ID: LCS 570-213854/6**  
**Matrix: Water**  
**Analysis Batch: 213854**

**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)	1970	1969		ug/L		100	76 - 128
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	84		50 - 150				

**Lab Sample ID: LCSD 570-213854/4**  
**Matrix: Water**  
**Analysis Batch: 213854**

**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)	1970	2017		ug/L		102	76 - 128	2	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	87		50 - 150						

**Lab Sample ID: 570-84297-9 MS**  
**Matrix: Water**  
**Analysis Batch: 213854**

**Client Sample ID: Composite(GW-021022-JRL-EFF 1,2,3,4)**  
**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)	ND		1970	2048		ug/L		104	69 - 132
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	88		50 - 150						

**Lab Sample ID: 570-84297-9 MSD**  
**Matrix: Water**  
**Analysis Batch: 213854**

**Client Sample ID: Composite(GW-021022-JRL-EFF 1,2,3,4)**  
**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)	ND		1970	2019		ug/L		102	69 - 132	1	15
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	84		50 - 150								

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

**Lab Sample ID: MB 570-214188/1-A**  
**Matrix: Water**  
**Analysis Batch: 215813**

**Client Sample ID: Method Blank**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 214188**

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
TPH as Diesel Range	ND		0.10	mg/L		02/18/22 16:09	02/26/22 17:22	1
TPH as Motor Oil Range	ND		0.10	mg/L		02/18/22 16:09	02/26/22 17:22	1
Surrogate		MB MB	Limits			Prepared	Analyzed	Dil Fac
		%Recovery Qualifier						
n-Octacosane (Surr)		99	50 - 150			02/18/22 16:09	02/26/22 17:22	1

**Lab Sample ID: LCS 570-214188/2-A**  
**Matrix: Water**  
**Analysis Batch: 215813**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 214188**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits	RPD
		Result	Qualifier					
C10-C28	4.00	4.072		mg/L		102	68 - 120	
Surrogate		LCS LCS	Limits			%Rec.		
		%Recovery Qualifier						
n-Octacosane (Surr)		107	50 - 150					

**Lab Sample ID: LCSD 570-214188/3-A**  
**Matrix: Water**  
**Analysis Batch: 215813**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 214188**

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
C10-C28	4.00	3.387		mg/L		85	68 - 120	18	20
Surrogate		LCSD LCSD	Limits			%Rec.			
		%Recovery Qualifier							
n-Octacosane (Surr)		96	50 - 150						

## Method: 1664A - Oil and Grease

**Lab Sample ID: MB 570-213301/1-A**  
**Matrix: Water**  
**Analysis Batch: 213423**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 213301**

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Oil & Grease	ND		1.00	mg/L		02/15/22 12:24	02/15/22 12:24	1

**Lab Sample ID: LCS 570-213301/2-A**  
**Matrix: Water**  
**Analysis Batch: 213423**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 213301**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits	RPD
		Result	Qualifier					
Oil & Grease	40.0	39.40		mg/L		99	78 - 114	

**Lab Sample ID: LCSD 570-213301/14-A**  
**Matrix: Water**  
**Analysis Batch: 213423**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 213301**

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
Oil & Grease	40.0	39.00		mg/L		98	78 - 114	1	18

Eurofins Calscience



# QC Association Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

## GC/MS VOA

### Analysis Batch: 215156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84297-9	Composite(GW-021022-JRL-EFF 1,2,3,4)	Total/NA	Water	8260C	
MB 570-215156/8	Method Blank	Total/NA	Water	8260C	
LCS 570-215156/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 570-215156/5	Lab Control Sample Dup	Total/NA	Water	8260C	

### Analysis Batch: 215368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84297-2	GW-021022-JRL-EFF 1	Total/NA	Water	Composite	
570-84297-3	GW-021022-JRL-EFF 2	Total/NA	Water	Composite	
570-84297-4	GW-021022-JRL-EFF 3	Total/NA	Water	Composite	
570-84297-5	GW-021022-JRL-EFF 4	Total/NA	Water	Composite	

## GC VOA

### Analysis Batch: 213854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84297-9	Composite(GW-021022-JRL-EFF 1,2,3,4)	Total/NA	Water	NWTPH-Gx	
MB 570-213854/5	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 570-213854/6	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 570-213854/4	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
570-84297-9 MS	Composite(GW-021022-JRL-EFF 1,2,3,4)	Total/NA	Water	NWTPH-Gx	
570-84297-9 MSD	Composite(GW-021022-JRL-EFF 1,2,3,4)	Total/NA	Water	NWTPH-Gx	

## GC Semi VOA

### Prep Batch: 214188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84297-1	GW-021022-JRL-EFF	Silica Gel Cleanup	Water	3510C SGC	
MB 570-214188/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 570-214188/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 570-214188/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	

### Analysis Batch: 215813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84297-1	GW-021022-JRL-EFF	Silica Gel Cleanup	Water	NWTPH-Dx	214188
MB 570-214188/1-A	Method Blank	Silica Gel Cleanup	Water	NWTPH-Dx	214188
LCS 570-214188/2-A	Lab Control Sample	Silica Gel Cleanup	Water	NWTPH-Dx	214188
LCSD 570-214188/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	NWTPH-Dx	214188

## General Chemistry

### Prep Batch: 213301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84297-10	Composite (GW-021022-JRL-EFF 5,6,7)	Total/NA	Water	1664A	
MB 570-213301/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-213301/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-213301/14-A	Lab Control Sample Dup	Total/NA	Water	1664A	

### Analysis Batch: 213423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84297-10	Composite (GW-021022-JRL-EFF 5,6,7)	Total/NA	Water	1664A	213301
MB 570-213301/1-A	Method Blank	Total/NA	Water	1664A	213301

Eurofins Calscience

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

## General Chemistry (Continued)

### Analysis Batch: 213423 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 570-213301/2-A	Lab Control Sample	Total/NA	Water	1664A	213301
LCSD 570-213301/14-A	Lab Control Sample Dup	Total/NA	Water	1664A	213301

## Organic Prep

### Analysis Batch: 214444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-84297-6	GW-021022-JRL-EFF 5	Total/NA	Water	Composite	
570-84297-7	GW-021022-JRL-EFF 6	Total/NA	Water	Composite	
570-84297-8	GW-021022-JRL-EFF 7	Total/NA	Water	Composite	

# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

**Client Sample ID: GW-021022-JRL-EFF**

**Lab Sample ID: 570-84297-1**

Date Collected: 02/10/22 10:30

Matrix: Water

Date Received: 02/11/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			245.2 mL	2.5 mL	214188	02/18/22 16:09	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			215813	02/26/22 19:35	N5Y3	ECL 4
Instrument ID: GC48										

**Client Sample ID: GW-021022-JRL-EFF 1**

**Lab Sample ID: 570-84297-2**

Date Collected: 02/10/22 10:30

Matrix: Water

Date Received: 02/11/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			215368	02/24/22 14:26	UJHB	ECL 2
Instrument ID: NOEQUIP										

**Client Sample ID: GW-021022-JRL-EFF 2**

**Lab Sample ID: 570-84297-3**

Date Collected: 02/10/22 10:45

Matrix: Water

Date Received: 02/11/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			215368	02/24/22 14:26	UJHB	ECL 2
Instrument ID: NOEQUIP										

**Client Sample ID: GW-021022-JRL-EFF 3**

**Lab Sample ID: 570-84297-4**

Date Collected: 02/10/22 11:00

Matrix: Water

Date Received: 02/11/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			215368	02/24/22 14:26	UJHB	ECL 2
Instrument ID: NOEQUIP										

**Client Sample ID: GW-021022-JRL-EFF 4**

**Lab Sample ID: 570-84297-5**

Date Collected: 02/10/22 11:15

Matrix: Water

Date Received: 02/11/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			215368	02/24/22 14:26	UJHB	ECL 2
Instrument ID: NOEQUIP										

**Client Sample ID: GW-021022-JRL-EFF 5**

**Lab Sample ID: 570-84297-6**

Date Collected: 02/10/22 10:30

Matrix: Water

Date Received: 02/11/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			214444	02/21/22 10:09	C4LT	ECL 1
Instrument ID: NOEQUIP										

# Lab Chronicle

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

**Client Sample ID: GW-021022-JRL-EFF 6**

**Lab Sample ID: 570-84297-7**

Date Collected: 02/10/22 10:45

Matrix: Water

Date Received: 02/11/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			214444	02/21/22 10:09	C4LT	ECL 1
Instrument ID: NOEQUIP										

**Client Sample ID: GW-021022-JRL-EFF 7**

**Lab Sample ID: 570-84297-8**

Date Collected: 02/10/22 11:00

Matrix: Water

Date Received: 02/11/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			214444	02/21/22 10:09	C4LT	ECL 1
Instrument ID: NOEQUIP										

**Client Sample ID: Composite(GW-021022-JRL-EFF 1,2,3,4)**

**Lab Sample ID: 570-84297-9**

Date Collected: 02/10/22 00:00

Matrix: Water

Date Received: 02/11/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	5 mL	5 mL	215156	02/24/22 05:18	AH8S	ECL 4
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	213854	02/17/22 20:28	P1R	ECL 2
Instrument ID: GC53										

**Client Sample ID: Composite (GW-021022-JRL-EFF 5,6,7)**

**Lab Sample ID: 570-84297-10**

Date Collected: 02/10/22 00:00

Matrix: Water

Date Received: 02/11/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1050 mL	1000 mL	213301	02/15/22 12:24	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			213423	02/15/22 12:24	L6IE	ECL 1
Instrument ID: ICPMS05										

**Laboratory References:**

- ECL 1 = Eurofins Calscience Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494
- ECL 2 = Eurofins Calscience Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494
- ECL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Accreditation/Certification Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

## Laboratory: Eurofins Calscience

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	CA300001	01-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Composite		Water	Composited
Washington	State		C916-18
			10-12-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Composite		Water	Composited

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Method Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ECL 4
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ECL 2
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	ECL 4
1664A	Oil and Grease	40CFR136A	ECL 1
Composite	Sample Compositing	None	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1
3510C SGC	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 4

#### Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

None = None

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

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

ECL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Sample Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-84297-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-84297-1	GW-021022-JRL-EFF	Water	02/10/22 10:30	02/11/22 10:45
570-84297-2	GW-021022-JRL-EFF 1	Water	02/10/22 10:30	02/11/22 10:45
570-84297-3	GW-021022-JRL-EFF 2	Water	02/10/22 10:45	02/11/22 10:45
570-84297-4	GW-021022-JRL-EFF 3	Water	02/10/22 11:00	02/11/22 10:45
570-84297-5	GW-021022-JRL-EFF 4	Water	02/10/22 11:15	02/11/22 10:45
570-84297-6	GW-021022-JRL-EFF 5	Water	02/10/22 10:30	02/11/22 10:45
570-84297-7	GW-021022-JRL-EFF 6	Water	02/10/22 10:45	02/11/22 10:45
570-84297-8	GW-021022-JRL-EFF 7	Water	02/10/22 11:00	02/11/22 10:45
570-84297-9	Composite(GW-021022-JRL-EFF 1,2,3,4)	Water	02/10/22 00:00	02/11/22 10:45
570-84297-10	Composite (GW-021022-JRL-EFF 5,6,7)	Water	02/10/22 00:00	02/11/22 10:45

1

2

3

4

5

6

7

8

9

10

11

12

13

14

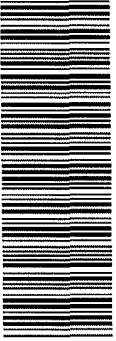
15

84297



Calscience

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



570-84297 Chain of Custody

CHAIN OF CUSTODY RECORD

DATE 02-10-22

PAGE 1 OF 1

LABORATORY CLIENT: GHD Services Inc

ADDRESS 9725 3rd Avenue NE Ste 204

CITY Seattle STATE WA ZIP 98115

TEL 253-507-6217 E-MAIL matthew.davis@ghd

CLIENT PROJECT NAME / NUMBER P66 Renton Terminal AOC 5228 / 11226464

PROJECT CONTACT ~~Eric Mateo 425-568-8200~~ Matt Davis 253-507-6217

P.O. NO 11226464-2021-04

SAMPLER(S) (PRINT) Joe Lewandowski

**REQUESTED ANALYSES**

Please check box or fill in blank as needed

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	LOG CODE			Field Filtered	Preserved	Unpreserved	DRO/ORO (NWTPH-Dx)	GRO (NWTPH-Gx)	BTEX (8260)	Oil & Grease (1664)	Date	Time
		DATE	TIME			GLOBAL ID	STANDARD	STANDARD									
	GW-021022	JUL-EFF	02/10/22	1030	2				X	X	X	X	X	X		2/10/22	10:45
	GW-021022	JUL-EFF 1	1030	GW	2				X	X	X	X	X	X			
	GW-021022	JUL-EFF 2	1045	GW	2				X	X	X	X	X	X			
	GW-021022	JUL-EFF 3	1100	GW	2				X	X	X	X	X	X			
	GW-021022	JUL-EFF 4	1115	GW	2				X	X	X	X	X	X			
	GW-021022	JUL-EFF 5	1030	GW	1				X	X	X	X	X	X			
	GW-021022	JUL-EFF 6	1045	GW	1				X	X	X	X	X	X			
	GW-021022	JUL-EFF 7	1100	GW	1				X	X	X	X	X	X			
Relinquished by (Signature)  2/10/22 1245 Received by (Signature/Affiliation) Date 2/11/22 Time 10:45																	
Relinquished by (Signature) _____ Received by (Signature/Affiliation) _____ Date _____ Time _____																	
Relinquished by (Signature) _____ Received by (Signature/Affiliation) _____ Date _____ Time _____																	





84297



570-84297 Waybill

**FedEx** Package  
Express **US Airbill** FedEx Tracking Label 8166 8704 6803

1 From  
Date 2-10-22

Sender's Name **JOE KWANDOWSKI** Phone 281-341-1025

Company **GHD**

Address **9715 SW IVE** City **SPARTA** State **VA** ZIP **22150**

Dept./Floor/State/Room

2 Your Internal Billing Reference

3 To Recipients Name **LUKAS SAMPIRO** Phone 11-455-1011

Company **F.C.S**

Address **744 W 2101** Dept./Floor/State/Room

Address **MARDEN GLEN** State **VA** ZIP **22150**

City **MARDEN GLEN** State **VA** ZIP **22150**

Hold Weekday  
FedEx location address  
REQUIRED. NOT available for  
FedEx First Overnight.

Hold Saturday  
FedEx location address  
REQUIRED. NOT available for  
FedEx Priority Overnight and  
FedEx 2Day to select locations.

8166 8704 6803

Recipient's Copy

Packages up to 50 lbs.  
For packages over 50 lbs., see the  
FedEx Express Freight US Airbill.

Express Package Service Not for international use.

**Next Business Day**

FedEx First Overnight  
Select next business morning delivery to select  
locations. Monday through Friday. Saturday  
Monday unless Saturday Delivery is selected.

FedEx Priority Overnight  
Next business morning. Friday shipments will be  
delivered on Monday unless Saturday Delivery  
is selected.

FedEx Standard Overnight  
Saturday Delivery NOT available.

**2 or 3 Business Days**

FedEx 2Day AM  
Second business morning.  
Saturday Delivery NOT available.

FedEx 2Day  
Second business afternoon. Thursday shipments  
delivered on Friday unless Saturday  
Delivery is selected.

FedEx Express Saver  
Third business day.  
Saturday Delivery NOT available.

**5 Packaging** \*Declared value limit \$500.

FedEx Envelope\*  FedEx Pak\*  FedEx Box  Other  FedEx Tube

**6 Special Handling and Delivery Signature Options** Fees may apply. See the FedEx Service Guide.

Saturday Delivery  
NOT available for FedEx Standard Overnight, FedEx 2Day AM, or FedEx Express Saver.

No Signature Required  
Packages may be left without  
obtaining a signature for delivery.

Direct Signature  
Someone at recipient's address  
may sign for delivery.

Indirect Signature  
If no one is available at recipient's  
address, someone at a neighboring  
address may sign for delivery. For  
residential deliveries only.

**Does this shipment contain dangerous goods?**

No  Yes  
One box must be checked.

Yes  
As per attached  
Shipper's Declaration,  
not required.

Dry Ice  
Dry Ice 5, UN 1845  Cargo Aircraft Only

Restrictions apply for dangerous goods — see the current FedEx Service Guide.

**7 Payment** Bill to:

Sender  Recipient  Third Party

Enter FedEx Acct. No. below:

Obtain recip. FedEx Acct. No.

Total Packages  Total Weight

Your liability is limited to US\$100 unless you declare a higher value. See the FedEx Service Guide for details.

Rev. Date 3/21 • Part #FB000 • ©2012-2021 FedEx • PRINTED IN U.S.A.

fedex.com 1.800.GoFedEx 1.800.463.3339



# Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 570-84297-1

**Login Number: 84297**  
**List Number: 1**  
**Creator: Patel, Jayesh**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Calscience  
2841 Dow Avenue, Suite 100  
Tustin, CA 92780  
Tel: (714)895-5494

Laboratory Job ID: 570-87725-1

Client Project/Site: P66 Renton Terminal AOC 5228 / 12572873

For:

GHD Services Inc.  
9725 3rd Avenue NE, Suite 204  
Seattle, Washington 98115

Attn: Matt Davis



Authorized for release by:

3/21/2022 4:49:41 PM

Erick Ovalle, Project Manager  
[erick.ovalle@eurofinset.com](mailto:erick.ovalle@eurofinset.com)

Designee for

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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.*

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	9
QC Sample Results . . . . .	10
QC Association Summary . . . . .	13
Lab Chronicle . . . . .	14
Certification Summary . . . . .	15
Method Summary . . . . .	16
Sample Summary . . . . .	17
Chain of Custody . . . . .	18
Receipt Checklists . . . . .	19
Air Canister Dilution . . . . .	20



# Definitions/Glossary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

---

**Job ID: 570-87725-1**

---

**Laboratory: Eurofins Calscience**

---

**Narrative**

**Job Narrative**  
**570-87725-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 3/10/2022 9:50 AM. Unless otherwise noted below, the samples arrived in good condition.

**Air Toxics**

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

# Detection Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

## Client Sample ID: A-030922-JRL-INF

## Lab Sample ID: 570-87725-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	53		0.50	ppb v/v	1		TO-15	Total/NA
o-Xylene	92		0.50	ppb v/v	1		TO-15	Total/NA
Benzene - DL	87		3.1	ppb v/v	6.25		TO-15	Total/NA
m,p-Xylene - DL	270		13	ppb v/v	6.25		TO-15	Total/NA
Toluene - DL	310		3.1	ppb v/v	6.25		TO-15	Total/NA
Xylenes, Total - DL	370		16	ppb v/v	6.25		TO-15	Total/NA
Gasoline Range Organics (C6-C12)	3.7		1.0	ppm v/v	1		TO3	Total/NA

## Client Sample ID: A-030922-JRL-EFF

## Lab Sample ID: 570-87725-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.64		0.50	ppb v/v	1		TO-15	Total/NA
Toluene	0.89		0.50	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Client Sample ID: A-030922-JRL-INF**

**Date Collected: 03/09/22 12:25**

**Date Received: 03/10/22 09:50**

**Sample Container: Summa Canister 1L**

**Lab Sample ID: 570-87725-1**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	53		0.50	ppb v/v			03/18/22 03:42	1
o-Xylene	92		0.50	ppb v/v			03/18/22 03:42	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)	101		66 - 132				03/18/22 03:42	1
4-Bromofluorobenzene (Surr)	104		70 - 130				03/18/22 03:42	1
Toluene-d8 (Surr)	125		70 - 130				03/18/22 03:42	1

**Client Sample ID: A-030922-JRL-EFF**

**Date Collected: 03/09/22 12:20**

**Date Received: 03/10/22 09:50**

**Sample Container: Summa Canister 1L**

**Lab Sample ID: 570-87725-2**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.64		0.50	ppb v/v			03/18/22 02:50	1
Ethylbenzene	ND		0.50	ppb v/v			03/18/22 02:50	1
o-Xylene	ND		0.50	ppb v/v			03/18/22 02:50	1
m,p-Xylene	ND		2.0	ppb v/v			03/18/22 02:50	1
Toluene	0.89		0.50	ppb v/v			03/18/22 02:50	1
Xylenes, Total	ND		2.5	ppb v/v			03/18/22 02:50	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		66 - 132				03/18/22 02:50	1
4-Bromofluorobenzene (Surr)	102		70 - 130				03/18/22 02:50	1
Toluene-d8 (Surr)	127		70 - 130				03/18/22 02:50	1



# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

**Client Sample ID: A-030922-JRL-INF**

**Lab Sample ID: 570-87725-1**

**Date Collected: 03/09/22 12:25**

**Matrix: Air**

**Date Received: 03/10/22 09:50**

**Sample Container: Summa Canister 1L**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	87		3.1	ppb v/v			03/19/22 03:30	6.25
m,p-Xylene	270		13	ppb v/v			03/19/22 03:30	6.25
Toluene	310		3.1	ppb v/v			03/19/22 03:30	6.25
<b>Xylenes, Total</b>	<b>370</b>		<b>16</b>	ppb v/v			03/19/22 03:30	6.25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		66 - 132		03/19/22 03:30	6.25
4-Bromofluorobenzene (Surr)	93		70 - 130		03/19/22 03:30	6.25
Toluene-d8 (Surr)	95		70 - 130		03/19/22 03:30	6.25

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

## Method: TO3 - Volatile Organic Compounds in Ambient Air, Cryogenic Pre-Conc Techniques (GC)

Client Sample ID: A-030922-JRL-INF

Date Collected: 03/09/22 12:25

Date Received: 03/10/22 09:50

Sample Container: Summa Canister 1L

Lab Sample ID: 570-87725-1

Matrix: Air

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C6-C12)	3.7		1.0	ppm v/v			03/15/22 13:12	1

Client Sample ID: A-030922-JRL-EFF

Date Collected: 03/09/22 12:20

Date Received: 03/10/22 09:50

Sample Container: Summa Canister 1L

Lab Sample ID: 570-87725-2

Matrix: Air

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C6-C12)	ND		1.0	ppm v/v			03/15/22 12:27	1

# Surrogate Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	TOL
		(66-132)	(70-130)	(70-130)
570-87725-1	A-030922-JRL-INF	101	104	125
570-87725-1 - DL	A-030922-JRL-INF	94	93	95
570-87725-2	A-030922-JRL-EFF	103	102	127
LCS 570-220426/3	Lab Control Sample	104	99	100
LCS 570-220595/28	Lab Control Sample	92	95	96
LCSD 570-220426/4	Lab Control Sample Dup	103	103	100
LCSD 570-220595/29	Lab Control Sample Dup	93	97	97
MB 570-220426/7	Method Blank	103	104	100
MB 570-220595/6	Method Blank	95	101	96

#### Surrogate Legend

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

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

# QC Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Lab Sample ID: MB 570-220426/7**  
**Matrix: Air**  
**Analysis Batch: 220426**

**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	ppb v/v			03/17/22 21:49	1
Ethylbenzene	ND		0.50	ppb v/v			03/17/22 21:49	1
o-Xylene	ND		0.50	ppb v/v			03/17/22 21:49	1
m,p-Xylene	ND		2.0	ppb v/v			03/17/22 21:49	1
Toluene	ND		0.50	ppb v/v			03/17/22 21:49	1
Xylenes, Total	ND		2.5	ppb v/v			03/17/22 21:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 132		03/17/22 21:49	1
4-Bromofluorobenzene (Surr)	104		70 - 130		03/17/22 21:49	1
Toluene-d8 (Surr)	100		70 - 130		03/17/22 21:49	1

**Lab Sample ID: LCS 570-220426/3**  
**Matrix: Air**  
**Analysis Batch: 220426**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	26.68		ppb v/v		107	68 - 134
Ethylbenzene	25.0	27.58		ppb v/v		110	70 - 130
o-Xylene	25.0	26.59		ppb v/v		106	68 - 130
m,p-Xylene	50.0	54.15		ppb v/v		108	70 - 130
Toluene	25.0	27.09		ppb v/v		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		66 - 132
4-Bromofluorobenzene (Surr)	99		70 - 130
Toluene-d8 (Surr)	100		70 - 130

**Lab Sample ID: LCSD 570-220426/4**  
**Matrix: Air**  
**Analysis Batch: 220426**

**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	25.0	26.71		ppb v/v		107	68 - 134	0	25
Ethylbenzene	25.0	27.53		ppb v/v		110	70 - 130	0	25
o-Xylene	25.0	27.05		ppb v/v		108	68 - 130	2	25
m,p-Xylene	50.0	55.03		ppb v/v		110	70 - 130	2	25
Toluene	25.0	27.40		ppb v/v		110	70 - 130	1	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		66 - 132
4-Bromofluorobenzene (Surr)	103		70 - 130
Toluene-d8 (Surr)	100		70 - 130

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: MB 570-220595/6**  
**Matrix: Air**  
**Analysis Batch: 220595**

**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	ppb v/v			03/18/22 19:17	1
Ethylbenzene	ND		0.50	ppb v/v			03/18/22 19:17	1
o-Xylene	ND		0.50	ppb v/v			03/18/22 19:17	1
m,p-Xylene	ND		2.0	ppb v/v			03/18/22 19:17	1
Toluene	ND		0.50	ppb v/v			03/18/22 19:17	1
Xylenes, Total	ND		2.5	ppb v/v			03/18/22 19:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		66 - 132		03/18/22 19:17	1
4-Bromofluorobenzene (Surr)	101		70 - 130		03/18/22 19:17	1
Toluene-d8 (Surr)	96		70 - 130		03/18/22 19:17	1

**Lab Sample ID: LCS 570-220595/28**  
**Matrix: Air**  
**Analysis Batch: 220595**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	24.81		ppb v/v		99	68 - 134
Ethylbenzene	25.0	26.97		ppb v/v		108	70 - 130
o-Xylene	25.0	26.52		ppb v/v		106	68 - 130
m,p-Xylene	50.0	52.92		ppb v/v		106	70 - 130
Toluene	25.0	26.84		ppb v/v		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		66 - 132
4-Bromofluorobenzene (Surr)	95		70 - 130
Toluene-d8 (Surr)	96		70 - 130

**Lab Sample ID: LCSD 570-220595/29**  
**Matrix: Air**  
**Analysis Batch: 220595**

**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	25.0	25.16		ppb v/v		101	68 - 134	1	25
Ethylbenzene	25.0	27.85		ppb v/v		111	70 - 130	3	25
o-Xylene	25.0	27.29		ppb v/v		109	68 - 130	3	25
m,p-Xylene	50.0	54.59		ppb v/v		109	70 - 130	3	25
Toluene	25.0	27.65		ppb v/v		111	70 - 130	3	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		66 - 132
4-Bromofluorobenzene (Surr)	97		70 - 130
Toluene-d8 (Surr)	97		70 - 130

# QC Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

## Method: TO3 - Volatile Organic Compounds in Ambient Air, Cryogenic Pre-Conc Techniques (GC)

**Lab Sample ID: MB 570-219614/3**  
**Matrix: Air**  
**Analysis Batch: 219614**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C6-C12)	ND		1.0	ppm v/v			03/15/22 11:28	1

**Lab Sample ID: LCS 570-219614/2**  
**Matrix: Air**  
**Analysis Batch: 219614**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C6-C12)	100	97.46		ppm v/v		97	80 - 120

**Lab Sample ID: 570-87725-1 DU**  
**Matrix: Air**  
**Analysis Batch: 219614**

**Client Sample ID: A-030922-JRL-INF**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Gasoline Range Organics (C6-C12)	3.7		4.191		ppm v/v		12	20

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

## Air - GC/MS VOA

### Analysis Batch: 220426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87725-1	A-030922-JRL-INF	Total/NA	Air	TO-15	
570-87725-2	A-030922-JRL-EFF	Total/NA	Air	TO-15	
MB 570-220426/7	Method Blank	Total/NA	Air	TO-15	
LCS 570-220426/3	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 570-220426/4	Lab Control Sample Dup	Total/NA	Air	TO-15	

### Analysis Batch: 220595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87725-1 - DL	A-030922-JRL-INF	Total/NA	Air	TO-15	
MB 570-220595/6	Method Blank	Total/NA	Air	TO-15	
LCS 570-220595/28	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 570-220595/29	Lab Control Sample Dup	Total/NA	Air	TO-15	

## Air - GC VOA

### Analysis Batch: 219614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87725-1	A-030922-JRL-INF	Total/NA	Air	TO3	
570-87725-2	A-030922-JRL-EFF	Total/NA	Air	TO3	
MB 570-219614/3	Method Blank	Total/NA	Air	TO3	
LCS 570-219614/2	Lab Control Sample	Total/NA	Air	TO3	
570-87725-1 DU	A-030922-JRL-INF	Total/NA	Air	TO3	

# Lab Chronicle

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

**Client Sample ID: A-030922-JRL-INF**

**Lab Sample ID: 570-87725-1**

**Date Collected: 03/09/22 12:25**

**Matrix: Air**

**Date Received: 03/10/22 09:50**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	250 mL	250 mL	220426	03/18/22 03:42	UJHY	ECL 4
Instrument ID: GCMSNN										
Total/NA	Analysis	TO-15	DL	6.25	250 mL	250 mL	220595	03/19/22 03:30	UG5A	ECL 4
Instrument ID: GCMSNN										
Total/NA	Analysis	TO3		1	10 mL	10 mL	219614	03/15/22 13:12	I9H5	ECL 4
Instrument ID: GC38										

**Client Sample ID: A-030922-JRL-EFF**

**Lab Sample ID: 570-87725-2**

**Date Collected: 03/09/22 12:20**

**Matrix: Air**

**Date Received: 03/10/22 09:50**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	250 mL	250 mL	220426	03/18/22 02:50	UJHY	ECL 4
Instrument ID: GCMSNN										
Total/NA	Analysis	TO3		1	10 mL	10 mL	219614	03/15/22 12:27	I9H5	ECL 4
Instrument ID: GC38										

**Laboratory References:**

ECL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494



# Accreditation/Certification Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

## Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	CA300001	01-31-23
Washington	State	C916-18	10-12-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO-15		Air	m,p-Xylene
TO-15		Air	o-Xylene



# Method Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	ECL 4
TO3	Volatile Organic Compounds in Ambient Air, Cryogenic Pre-Conc Techniques (GC)	EPA	ECL 4

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

ECL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

# Sample Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87725-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-87725-1	A-030922-JRL-INF	Air	03/09/22 12:25	03/10/22 09:50	Air Canister (1-Liter) #LC1231
570-87725-2	A-030922-JRL-EFF	Air	03/09/22 12:20	03/10/22 09:50	Air Canister (1-Liter) #LC381

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16



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



**CHAIN OF CUSTODY RECORD**  
 DATE 03-09-22  
 PAGE 1 OF 1

570-87725 Chain of Custody

LABORATORY CLIENT: GHD Services Inc		CLIENT PROJECT NAME / NUMBER: P66 Renton Terminal AOC 5228 / 11226464		P.O. NO: 11226464-2021-04	
ADDRESS: 9725 3rd Avenue NE Ste 204		PROJECT CONTACT: Eric Maise 425-563-3260 Matt Davis 253-507-6217		SAMPLER(S) (PRINT): Joe Lewandowski	
CITY: Seattle	STATE: WA	ZIP: 98115			
TEL: 253-507-6217	E-MAIL: matthew.davis@ghd				
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					
SPECIAL INSTRUCTIONS		LOG CODE			
COELT EDF		GLOBAL ID		Field Filled	
				Preserved	
				Unpreserved	
LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO OF CONT
1	A-030922 JOL - INF	3/9/22	1235	A	1
2	A-030922 JOL - EFF	3/9/22	1220	A	1
GRO (TO-3) X X BTEX (TO-15) X X (MISTER #) LC 1231 LC 381					
Relinquished by: (Signature)				Received by: (Signature/Affiliation)	
Relinquished by: (Signature)				Received by: (Signature/Affiliation)	
Relinquished by: (Signature)				Received by: (Signature/Affiliation)	
				Date	
				Date	
				Date	



# Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 570-87725-1

**Login Number: 87725**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Cruise, Noel**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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.	False	Thermal preservation not required.
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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Summa Canister Dilution Worksheet

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job No.: 570-87725-1

Lab Sample ID	Canister Volume (L)	Presampling Pressure ("Hg)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Final Pressure Gauge ID	Date	Analyst Initials
570-87725-1	1	-29.5	-3.4	0.89	0.89	-1.66992	0.89	0.89		1.00	1.00	air mg6	03/15/22 10:13	I9H5
570-87725-2	1	-29.5	-2.2	0.93	0.93	-1.08054	0.93	0.93		1.00	1.00	air mg6	03/15/22 10:13	I9H5

**Formulae:**

- Preadjusted Volume (L) = ((Preadjusted Pressure ("Hg) + 29.92 "Hg) \* Vol L) / 29.92 "Hg
- Adjusted Volume (L) = (( Adjusted Pressure (psig) + 14.7 psig) \* Vol L) / 14.7 psig
- Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

**Where:**

- 29.92 "Hg = Standard atmospheric pressure in inches of Mercury ("Hg)
- 14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)



## ANALYTICAL REPORT

Eurofins Calscience  
2841 Dow Avenue, Suite 100  
Tustin, CA 92780  
Tel: (714)895-5494

Laboratory Job ID: 570-87588-1

Client Project/Site: P66 Renton Terminal AOC 5228 / 11226464

For:

GHD Services Inc.  
9725 3rd Avenue NE, Suite 204  
Seattle, Washington 98115

Attn: Matt Davis

*Vikas Patel*

---

Authorized for release by:  
3/24/2022 6:00:47 PM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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.*

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	9
QC Sample Results . . . . .	10
QC Association Summary . . . . .	13
Lab Chronicle . . . . .	14
Certification Summary . . . . .	15
Method Summary . . . . .	16
Sample Summary . . . . .	17
Chain of Custody . . . . .	18
Receipt Checklists . . . . .	19





# Definitions/Glossary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

---

## Job ID: 570-87588-1

---

### Laboratory: Eurofins Calscience

#### Narrative

---

#### Job Narrative 570-87588-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/10/2022 9:50 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.2° C.

#### GC/MS VOA

Method 8260C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-221251. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: GW-030922-JRL-MID 2 (570-87588-3). Elevated reporting limits (RLs) are provided.

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

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.

# Detection Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

## Client Sample ID: GW-030922-JRL-INF 1

## Lab Sample ID: 570-87588-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1300		10	ug/L	20		8260C	Total/NA
Toluene	2200		20	ug/L	20		8260C	Total/NA
o-Xylene	1200		20	ug/L	20		8260C	Total/NA
m,p-Xylene	3100		40	ug/L	20		8260C	Total/NA
Ethylbenzene	320		20	ug/L	20		8260C	Total/NA
Xylenes, Total	4300		40	ug/L	20		8260C	Total/NA
TPH as Gasoline (C4-C13)	17000		1000	ug/L	10		NWTPH-Gx	Total/NA
TPH as Diesel Range	13		0.10	mg/L	1		NWTPH-Dx	Silica Gel Cleanup
TPH as Motor Oil Range	0.28		0.10	mg/L	1		NWTPH-Dx	Silica Gel Cleanup

## Client Sample ID: GW-030922-JRL-MID 1

## Lab Sample ID: 570-87588-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	150		2.0	ug/L	4		8260C	Total/NA
Toluene	37		4.0	ug/L	4		8260C	Total/NA
o-Xylene	11		4.0	ug/L	4		8260C	Total/NA
m,p-Xylene	22		8.0	ug/L	4		8260C	Total/NA
Xylenes, Total	33		8.0	ug/L	4		8260C	Total/NA
TPH as Gasoline (C4-C13)	360		100	ug/L	1		NWTPH-Gx	Total/NA
TPH as Diesel Range	0.23		0.10	mg/L	1		NWTPH-Dx	Silica Gel Cleanup

## Client Sample ID: GW-030922-JRL-MID 2

## Lab Sample ID: 570-87588-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Client Sample ID: GW-030922-JRL-INF 1**

**Date Collected: 03/09/22 12:00**

**Date Received: 03/10/22 09:50**

**Lab Sample ID: 570-87588-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1300		10	ug/L			03/22/22 21:14	20
Toluene	2200		20	ug/L			03/22/22 21:14	20
o-Xylene	1200		20	ug/L			03/22/22 21:14	20
m,p-Xylene	3100		40	ug/L			03/22/22 21:14	20
Ethylbenzene	320		20	ug/L			03/22/22 21:14	20
Xylenes, Total	4300		40	ug/L			03/22/22 21:14	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 123		03/22/22 21:14	20
4-Bromofluorobenzene (Surr)	99		80 - 120		03/22/22 21:14	20
Dibromofluoromethane (Surr)	99		78 - 120		03/22/22 21:14	20
Toluene-d8 (Surr)	99		80 - 120		03/22/22 21:14	20

**Client Sample ID: GW-030922-JRL-MID 1**

**Date Collected: 03/09/22 11:45**

**Date Received: 03/10/22 09:50**

**Lab Sample ID: 570-87588-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	150		2.0	ug/L			03/22/22 20:24	4
Toluene	37		4.0	ug/L			03/22/22 20:24	4
o-Xylene	11		4.0	ug/L			03/22/22 20:24	4
m,p-Xylene	22		8.0	ug/L			03/22/22 20:24	4
Ethylbenzene	ND		4.0	ug/L			03/22/22 20:24	4
Xylenes, Total	33		8.0	ug/L			03/22/22 20:24	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 123		03/22/22 20:24	4
4-Bromofluorobenzene (Surr)	95		80 - 120		03/22/22 20:24	4
Dibromofluoromethane (Surr)	100		78 - 120		03/22/22 20:24	4
Toluene-d8 (Surr)	99		80 - 120		03/22/22 20:24	4

**Client Sample ID: GW-030922-JRL-MID 2**

**Date Collected: 03/09/22 11:30**

**Date Received: 03/10/22 09:50**

**Lab Sample ID: 570-87588-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0	ug/L			03/22/22 20:49	4
Toluene	ND		4.0	ug/L			03/22/22 20:49	4
o-Xylene	ND		4.0	ug/L			03/22/22 20:49	4
m,p-Xylene	ND		8.0	ug/L			03/22/22 20:49	4
Ethylbenzene	ND		4.0	ug/L			03/22/22 20:49	4
Xylenes, Total	ND		8.0	ug/L			03/22/22 20:49	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 123		03/22/22 20:49	4
4-Bromofluorobenzene (Surr)	95		80 - 120		03/22/22 20:49	4
Dibromofluoromethane (Surr)	100		78 - 120		03/22/22 20:49	4
Toluene-d8 (Surr)	100		80 - 120		03/22/22 20:49	4

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

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

**Client Sample ID: GW-030922-JRL-INF 1**

**Date Collected: 03/09/22 12:00**

**Date Received: 03/10/22 09:50**

**Lab Sample ID: 570-87588-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	17000		1000	ug/L	-		03/17/22 20:56	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		50 - 150				03/17/22 20:56	10

**Client Sample ID: GW-030922-JRL-MID 1**

**Date Collected: 03/09/22 11:45**

**Date Received: 03/10/22 09:50**

**Lab Sample ID: 570-87588-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	360		100	ug/L	-		03/17/22 18:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		50 - 150				03/17/22 18:12	1

**Client Sample ID: GW-030922-JRL-MID 2**

**Date Collected: 03/09/22 11:30**

**Date Received: 03/10/22 09:50**

**Lab Sample ID: 570-87588-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L	-		03/17/22 19:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		50 - 150				03/17/22 19:46	1

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup - Silica Gel Cleanup

**Client Sample ID: GW-030922-JRL-INF 1**

**Date Collected: 03/09/22 12:00**

**Date Received: 03/10/22 09:50**

**Lab Sample ID: 570-87588-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	13		0.10	mg/L		03/11/22 13:58	03/13/22 00:58	1
TPH as Motor Oil Range	0.28		0.10	mg/L		03/11/22 13:58	03/13/22 00:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	123		50 - 150			03/11/22 13:58	03/13/22 00:58	1

**Client Sample ID: GW-030922-JRL-MID 1**

**Date Collected: 03/09/22 11:45**

**Date Received: 03/10/22 09:50**

**Lab Sample ID: 570-87588-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	0.23		0.10	mg/L		03/11/22 13:58	03/13/22 01:22	1
TPH as Motor Oil Range	ND		0.10	mg/L		03/11/22 13:58	03/13/22 01:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	108		50 - 150			03/11/22 13:58	03/13/22 01:22	1

**Client Sample ID: GW-030922-JRL-MID 2**

**Date Collected: 03/09/22 11:30**

**Date Received: 03/10/22 09:50**

**Lab Sample ID: 570-87588-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.099	mg/L		03/11/22 13:58	03/13/22 01:46	1
TPH as Motor Oil Range	ND		0.099	mg/L		03/11/22 13:58	03/13/22 01:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	105		50 - 150			03/11/22 13:58	03/13/22 01:46	1

# Surrogate Summary

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-123)	BFB (80-120)	DBFM (78-120)	TOL (80-120)
570-87588-1	GW-030922-JRL-INF 1	103	99	99	99
570-87588-2	GW-030922-JRL-MID 1	104	95	100	99
570-87588-3	GW-030922-JRL-MID 2	105	95	100	100
LCS 570-221251/4	Lab Control Sample	99	102	98	100
LCSD 570-221251/5	Lab Control Sample Dup	99	101	99	100
MB 570-221251/8	Method Blank	104	95	100	100

### 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)
570-87588-1	GW-030922-JRL-INF 1	101
570-87588-2	GW-030922-JRL-MID 1	85
570-87588-3	GW-030922-JRL-MID 2	81
570-87588-3 MS	GW-030922-JRL-MID 2	102
570-87588-3 MSD	GW-030922-JRL-MID 2	92
LCS 570-220341/3	Lab Control Sample	98
LCSD 570-220341/4	Lab Control Sample Dup	98
MB 570-220341/5	Method Blank	83

### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Matrix: Water

Prep Type: Silica Gel Cleanup

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		OTCSN (50-150)
570-87588-1	GW-030922-JRL-INF 1	123
570-87588-2	GW-030922-JRL-MID 1	108
570-87588-3	GW-030922-JRL-MID 2	105
LCS 570-218926/2-A	Lab Control Sample	110
LCSD 570-218926/3-A	Lab Control Sample Dup	110
MB 570-218926/1-A	Method Blank	108

### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 570-221251/8**  
**Matrix: Water**  
**Analysis Batch: 221251**

**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			03/22/22 13:33	1
Toluene	ND		1.0	ug/L			03/22/22 13:33	1
o-Xylene	ND		1.0	ug/L			03/22/22 13:33	1
m,p-Xylene	ND		2.0	ug/L			03/22/22 13:33	1
Ethylbenzene	ND		1.0	ug/L			03/22/22 13:33	1
Xylenes, Total	ND		2.0	ug/L			03/22/22 13:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 123		03/22/22 13:33	1
4-Bromofluorobenzene (Surr)	95		80 - 120		03/22/22 13:33	1
Dibromofluoromethane (Surr)	100		78 - 120		03/22/22 13:33	1
Toluene-d8 (Surr)	100		80 - 120		03/22/22 13:33	1

**Lab Sample ID: LCS 570-221251/4**  
**Matrix: Water**  
**Analysis Batch: 221251**

**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	48.10		ug/L		96	76 - 120
Toluene	50.0	49.93		ug/L		100	76 - 120
o-Xylene	50.0	51.01		ug/L		102	80 - 121
m,p-Xylene	100	100.3		ug/L		100	74 - 122
Ethylbenzene	50.0	50.99		ug/L		102	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 123
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	98		78 - 120
Toluene-d8 (Surr)	100		80 - 120

**Lab Sample ID: LCSD 570-221251/5**  
**Matrix: Water**  
**Analysis Batch: 221251**

**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	49.29		ug/L		99	76 - 120	2	20
Toluene	50.0	50.95		ug/L		102	76 - 120	2	20
o-Xylene	50.0	51.49		ug/L		103	80 - 121	1	20
m,p-Xylene	100	101.5		ug/L		102	74 - 122	1	20
Ethylbenzene	50.0	51.42		ug/L		103	80 - 120	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 123
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	99		78 - 120
Toluene-d8 (Surr)	100		80 - 120



# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

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

**Lab Sample ID: MB 570-220341/5**  
**Matrix: Water**  
**Analysis Batch: 220341**

**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			03/17/22 15:27	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		50 - 150				03/17/22 15:27	1

**Lab Sample ID: LCS 570-220341/3**  
**Matrix: Water**  
**Analysis Batch: 220341**

**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)	1970	1860		ug/L		94	76 - 128
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	98		50 - 150				

**Lab Sample ID: LCSD 570-220341/4**  
**Matrix: Water**  
**Analysis Batch: 220341**

**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)	1970	1858		ug/L		94	76 - 128	0	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	98		50 - 150						

**Lab Sample ID: 570-87588-3 MS**  
**Matrix: Water**  
**Analysis Batch: 220341**

**Client Sample ID: GW-030922-JRL-MID 2**  
**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)	ND		1970	1962		ug/L		100	69 - 132
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	102		50 - 150						

**Lab Sample ID: 570-87588-3 MSD**  
**Matrix: Water**  
**Analysis Batch: 220341**

**Client Sample ID: GW-030922-JRL-MID 2**  
**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)	ND		1970	1831		ug/L		93	69 - 132	7	15
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	92		50 - 150								

# QC Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

**Lab Sample ID: MB 570-218926/1-A**  
**Matrix: Water**  
**Analysis Batch: 218993**

**Client Sample ID: Method Blank**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 218926**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
TPH as Diesel Range	ND		0.10	mg/L		03/11/22 13:58	03/12/22 11:38	1
TPH as Motor Oil Range	ND		0.10	mg/L		03/11/22 13:58	03/12/22 11:38	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	108		50 - 150			03/11/22 13:58	03/12/22 11:38	1

**Lab Sample ID: LCS 570-218926/2-A**  
**Matrix: Water**  
**Analysis Batch: 218993**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 218926**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
C10-C28	4.00	4.007		mg/L		100	68 - 120
Surrogate	LCS	LCS	Limits				
<i>n</i> -Octacosane (Surr)	110		50 - 150				

**Lab Sample ID: LCSD 570-218926/3-A**  
**Matrix: Water**  
**Analysis Batch: 218993**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 218926**

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
		Result	Qualifier						
C10-C28	4.00	4.094		mg/L		102	68 - 120	2	20
Surrogate	LCSD	LCSD	Limits						
<i>n</i> -Octacosane (Surr)	110		50 - 150						

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

## GC/MS VOA

### Analysis Batch: 221251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87588-1	GW-030922-JRL-INF 1	Total/NA	Water	8260C	
570-87588-2	GW-030922-JRL-MID 1	Total/NA	Water	8260C	
570-87588-3	GW-030922-JRL-MID 2	Total/NA	Water	8260C	
MB 570-221251/8	Method Blank	Total/NA	Water	8260C	
LCS 570-221251/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 570-221251/5	Lab Control Sample Dup	Total/NA	Water	8260C	

## GC VOA

### Analysis Batch: 220341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87588-1	GW-030922-JRL-INF 1	Total/NA	Water	NWTPH-Gx	
570-87588-2	GW-030922-JRL-MID 1	Total/NA	Water	NWTPH-Gx	
570-87588-3	GW-030922-JRL-MID 2	Total/NA	Water	NWTPH-Gx	
MB 570-220341/5	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 570-220341/3	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 570-220341/4	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
570-87588-3 MS	GW-030922-JRL-MID 2	Total/NA	Water	NWTPH-Gx	
570-87588-3 MSD	GW-030922-JRL-MID 2	Total/NA	Water	NWTPH-Gx	

## GC Semi VOA

### Prep Batch: 218926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87588-1	GW-030922-JRL-INF 1	Silica Gel Cleanup	Water	3510C SGC	
570-87588-2	GW-030922-JRL-MID 1	Silica Gel Cleanup	Water	3510C SGC	
570-87588-3	GW-030922-JRL-MID 2	Silica Gel Cleanup	Water	3510C SGC	
MB 570-218926/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 570-218926/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 570-218926/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	

### Analysis Batch: 218993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87588-1	GW-030922-JRL-INF 1	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-87588-2	GW-030922-JRL-MID 1	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-87588-3	GW-030922-JRL-MID 2	Silica Gel Cleanup	Water	NWTPH-Dx	218926
MB 570-218926/1-A	Method Blank	Silica Gel Cleanup	Water	NWTPH-Dx	218926
LCS 570-218926/2-A	Lab Control Sample	Silica Gel Cleanup	Water	NWTPH-Dx	218926
LCSD 570-218926/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	NWTPH-Dx	218926

# Lab Chronicle

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

## Client Sample ID: GW-030922-JRL-INF 1

## Lab Sample ID: 570-87588-1

Date Collected: 03/09/22 12:00

Matrix: Water

Date Received: 03/10/22 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	5 mL	5 mL	221251	03/22/22 21:14	KHF2	ECL 4
Instrument ID: GCMSXX										
Total/NA	Analysis	NWTPH-Gx		10	5 mL	5 mL	220341	03/17/22 20:56	P1R	ECL 4
Instrument ID: GC1										
Silica Gel Cleanup	Prep	3510C SGC			245.1 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/13/22 00:58	N5Y3	ECL 4
Instrument ID: GC48										

## Client Sample ID: GW-030922-JRL-MID 1

## Lab Sample ID: 570-87588-2

Date Collected: 03/09/22 11:45

Matrix: Water

Date Received: 03/10/22 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	5 mL	5 mL	221251	03/22/22 20:24	KHF2	ECL 4
Instrument ID: GCMSXX										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	220341	03/17/22 18:12	P1R	ECL 4
Instrument ID: GC1										
Silica Gel Cleanup	Prep	3510C SGC			249.3 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/13/22 01:22	N5Y3	ECL 4
Instrument ID: GC48										

## Client Sample ID: GW-030922-JRL-MID 2

## Lab Sample ID: 570-87588-3

Date Collected: 03/09/22 11:30

Matrix: Water

Date Received: 03/10/22 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	5 mL	5 mL	221251	03/22/22 20:49	KHF2	ECL 4
Instrument ID: GCMSXX										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	220341	03/17/22 19:46	P1R	ECL 4
Instrument ID: GC1										
Silica Gel Cleanup	Prep	3510C SGC			252.1 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/13/22 01:46	N5Y3	ECL 4
Instrument ID: GC48										

**Laboratory References:**

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

ECL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Accreditation/Certification Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

## Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	CA300001	01-31-23
Washington	State	C916-18	10-12-22

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Method Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ECL 4
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ECL 4
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	ECL 4
3510C SGC	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 4

#### 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 Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Sample Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 11226464

Job ID: 570-87588-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-87588-1	GW-030922-JRL-INF 1	Water	03/09/22 12:00	03/10/22 09:50
570-87588-2	GW-030922-JRL-MID 1	Water	03/09/22 11:45	03/10/22 09:50
570-87588-3	GW-030922-JRL-MID 2	Water	03/09/22 11:30	03/10/22 09:50

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



Calscience

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

LABORATORY CLIENT:

GHD Services Inc

ADDRESS 9725 3rd Avenue NE Ste 204

CITY Seattle STATE WA ZIP 98115

TEL 253-507-6217 E-MAIL matthew.davis@ghd

TURNAROUND TIME (Rush surcharges may apply to any TAT not STANDARD\*)

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

LOG CODE

COELT EDF

UNPRESERVED

PRESERVED

FIELD FILTERED

SPECIAL INSTRUCTIONS  
Laboratory composite EFF 1 2 3 4 samples for BTEX and TPHg  
Laboratory composite EFF 5 6 7 samples for Oil & Grease

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO OF CONT
		DATE	TIME		
	GW-030922 JAL - INF 1	3/9/22	1200	GW	8
	GW-030922 JAL - MID 1		1145	GW	8
	GW-030922 JAL - MID 2		1130	GW	8
	GW-030922 JAL - EFF 1			GW	
	GW-030922 JAL - EFF 2			GW	
	GW-030922 JAL - EFF 3			GW	
	GW-030922 JAL - EFF 4			GW	
	GW-030922 JAL - EFF 5			GW	
	GW-030922 JAL - EFF 6			GW	
	GW-030922 JAL - EFF 7			GW	

Received by (Signature)

*[Signature]* 3/9/22 1245

Received by (Signature)

*[Signature]*

Received by (Signature)

*[Signature]*

# CHAIN OF CUSTODY RECORD

DATE 03-09-22

PAGE 1 OF 1

WO # / LAB USE ONLY

CLIENT PROJECT NAME / NUMBER  
P66 Renton Terminal AOC 5228 / 11226464

PROJECT CONTACT  
Eric Maisie 425-563-3260  
Matt Davis 253-507-6217

P O NO  
11226464-2021-04

SAMPLER(S) (PRINT)  
Joe Lewandowski

## REQUESTED ANALYSES

Please check box or fill in blank as needed

ANALYSIS	DR/O/RO (NWTPH-Dx)	GRO (NWTPH-Gx)	BTEX (8260)	Oil & Grease (1664)	LAB composite
	X	X	X		Lab composite
	X	X	X		Lab composite
	X	X	X		Lab composite
	X	X	X		Lab composite
	X	X	X		Lab composite
	X	X	X		Lab composite
	X	X	X		Lab composite
	X	X	X		Lab composite
	X	X	X		Lab composite
	X	X	X		Lab composite
	X	X	X		Lab composite
	X	X	X		Lab composite
	X	X	X		Lab composite
	X	X	X		Lab composite
	X	X	X		Lab composite
	X	X	X		Lab composite



570-87588 Chain of Custody

Date 3/10/22

Time 9:50

Date

Time

Date

Time

87588

17102566 8166 8704 6755

8/25/21 Revision





# Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 570-87588-1

**Login Number: 87588**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Ortiz-Luis, Michael**

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	



## ANALYTICAL REPORT

Eurofins Calscience  
2841 Dow Avenue, Suite 100  
Tustin, CA 92780  
Tel: (714)895-5494

Laboratory Job ID: 570-87595-1

Client Project/Site: P66 Renton Terminal AOC 5228 / 12572873

For:

GHD Services Inc.  
9725 3rd Avenue NE, Suite 204  
Seattle, Washington 98115

Attn: Matt Davis

*Vik Patel*

---

Authorized for release by:  
3/29/2022 10:34:26 AM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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.*



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	12
QC Sample Results . . . . .	13
QC Association Summary . . . . .	16
Lab Chronicle . . . . .	18
Certification Summary . . . . .	20
Method Summary . . . . .	21
Sample Summary . . . . .	22
Chain of Custody . . . . .	23
Receipt Checklists . . . . .	25

# Definitions/Glossary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

---

## Job ID: 570-87595-1

---

### Laboratory: Eurofins Calscience

#### Narrative

---

#### Job Narrative 570-87595-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/10/2022 9:50 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.2° 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 8260C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-221251. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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.

#### Metals

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

#### Organic Prep

Method 1664A: The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-219856. (EPA 1664)

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 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

## Client Sample ID: GW-030922-JRL-EFF

Lab Sample ID: 570-87595-1

No Detections.

## Client Sample ID: GW-030922-JRL-EFF 1

Lab Sample ID: 570-87595-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes	H		NONE	1		Composite	Total/NA

## Client Sample ID: GW-030922-JRL-EFF 2

Lab Sample ID: 570-87595-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes	H		NONE	1		Composite	Total/NA

## Client Sample ID: GW-030922-JRL-EFF 3

Lab Sample ID: 570-87595-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes	H		NONE	1		Composite	Total/NA

## Client Sample ID: GW-030922-JRL-EFF 4

Lab Sample ID: 570-87595-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes	H		NONE	1		Composite	Total/NA

## Client Sample ID: GW-030922-JRL-EFF 5

Lab Sample ID: 570-87595-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes			NONE	1		Composite	Total/NA

## Client Sample ID: GW-030922-JRL-EFF 6

Lab Sample ID: 570-87595-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes			NONE	1		Composite	Total/NA

## Client Sample ID: GW-030922-JRL-EFF 7

Lab Sample ID: 570-87595-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Composited	yes			NONE	1		Composite	Total/NA

## Client Sample ID: GW-011722-JRL-EFF-1,2,3,4 (COMPOSITE)

Lab Sample ID: 570-87595-9

No Detections.

## Client Sample ID: GW-011722-JRL-EFF-5,6,7 (COMPOSITE)

Lab Sample ID: 570-87595-10

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Client Sample ID: GW-011722-JRL-EFF-1,2,3,4 (COMPOSITE)**

**Lab Sample ID: 570-87595-9**

**Date Collected: 03/09/22 10:30**

**Matrix: Water**

**Date Received: 03/10/22 09:50**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			03/22/22 19:35	1
Toluene	ND		1.0	ug/L			03/22/22 19:35	1
o-Xylene	ND		1.0	ug/L			03/22/22 19:35	1
m,p-Xylene	ND		2.0	ug/L			03/22/22 19:35	1
Ethylbenzene	ND		1.0	ug/L			03/22/22 19:35	1
Xylenes, Total	ND		2.0	ug/L			03/22/22 19:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		70 - 123		03/22/22 19:35	1
4-Bromofluorobenzene (Surr)	94		80 - 120		03/22/22 19:35	1
Dibromofluoromethane (Surr)	102		78 - 120		03/22/22 19:35	1
Toluene-d8 (Surr)	99		80 - 120		03/22/22 19:35	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

## Method: Composite - Sample Compositing

Client Sample ID: GW-030922-JRL-EFF 1

Date Collected: 03/09/22 10:30

Date Received: 03/10/22 09:50

Lab Sample ID: 570-87595-2

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes	H		NONE			03/29/22 10:20	1

Client Sample ID: GW-030922-JRL-EFF 2

Date Collected: 03/09/22 10:45

Date Received: 03/10/22 09:50

Lab Sample ID: 570-87595-3

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes	H		NONE			03/29/22 10:20	1

Client Sample ID: GW-030922-JRL-EFF 3

Date Collected: 03/09/22 11:00

Date Received: 03/10/22 09:50

Lab Sample ID: 570-87595-4

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes	H		NONE			03/29/22 10:20	1

Client Sample ID: GW-030922-JRL-EFF 4

Date Collected: 03/09/22 11:15

Date Received: 03/10/22 09:50

Lab Sample ID: 570-87595-5

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes	H		NONE			03/29/22 10:20	1



# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

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

**Client Sample ID: GW-011722-JRL-EFF-1,2,3,4 (COMPOSITE)**

**Lab Sample ID: 570-87595-9**

**Date Collected: 03/09/22 10:30**

**Matrix: Water**

**Date Received: 03/10/22 09:50**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L	-		03/16/22 20:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		50 - 150				03/16/22 20:29	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup - Silica Gel Cleanup

**Client Sample ID: GW-030922-JRL-EFF**  
**Date Collected: 03/09/22 10:30**  
**Date Received: 03/10/22 09:50**

**Lab Sample ID: 570-87595-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.10	mg/L		03/11/22 14:02	03/13/22 03:59	1
TPH as Motor Oil Range	ND		0.10	mg/L		03/11/22 14:02	03/13/22 03:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n-Octacosane (Surr)</i>	99		50 - 150			03/11/22 14:02	03/13/22 03:59	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

## General Chemistry

Client Sample ID: GW-011722-JRL-EFF-5,6,7 (COMPOSITE)

Date Collected: 03/09/22 10:30

Date Received: 03/10/22 09:50

Lab Sample ID: 570-87595-10

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		0.952	mg/L		03/16/22 09:08	03/16/22 09:08	1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

## Method: Composite - Sample Compositing

Client Sample ID: GW-030922-JRL-EFF 5

Date Collected: 03/09/22 10:30

Date Received: 03/10/22 09:50

Lab Sample ID: 570-87595-6

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes			NONE			03/11/22 10:10	1

Client Sample ID: GW-030922-JRL-EFF 6

Date Collected: 03/09/22 10:45

Date Received: 03/10/22 09:50

Lab Sample ID: 570-87595-7

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes			NONE			03/11/22 10:10	1

Client Sample ID: GW-030922-JRL-EFF 7

Date Collected: 03/09/22 11:00

Date Received: 03/10/22 09:50

Lab Sample ID: 570-87595-8

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Composited	yes			NONE			03/11/22 10:10	1

# Surrogate Summary

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-123)	BFB (80-120)	DBFM (78-120)	TOL (80-120)
570-87595-9	GW-011722-JRL-EFF-1,2,3,4 (C)	106	94	102	99
LCS 570-221251/4	Lab Control Sample	99	102	98	100
LCSD 570-221251/5	Lab Control Sample Dup	99	101	99	100
MB 570-221251/8	Method Blank	104	95	100	100

**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)
570-87595-9	GW-011722-JRL-EFF-1,2,3,4 (C)	78
570-87595-9 MS	GW-011722-JRL-EFF-1,2,3,4 (COMPOSITE)	88
570-87595-9 MSD	GW-011722-JRL-EFF-1,2,3,4 (COMPOSITE)	90
LCS 570-219916/4	Lab Control Sample	81
LCSD 570-219916/5	Lab Control Sample Dup	83
MB 570-219916/6	Method Blank	78

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Matrix: Water

Prep Type: Silica Gel Cleanup

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		OTCSN (50-150)
570-87595-1	GW-030922-JRL-EFF	99
LCS 570-218926/2-A	Lab Control Sample	110
LCSD 570-218926/3-A	Lab Control Sample Dup	110
MB 570-218926/1-A	Method Blank	108

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 570-221251/8**  
**Matrix: Water**  
**Analysis Batch: 221251**

**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			03/22/22 13:33	1
Toluene	ND		1.0	ug/L			03/22/22 13:33	1
o-Xylene	ND		1.0	ug/L			03/22/22 13:33	1
m,p-Xylene	ND		2.0	ug/L			03/22/22 13:33	1
Ethylbenzene	ND		1.0	ug/L			03/22/22 13:33	1
Xylenes, Total	ND		2.0	ug/L			03/22/22 13:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 123		03/22/22 13:33	1
4-Bromofluorobenzene (Surr)	95		80 - 120		03/22/22 13:33	1
Dibromofluoromethane (Surr)	100		78 - 120		03/22/22 13:33	1
Toluene-d8 (Surr)	100		80 - 120		03/22/22 13:33	1

**Lab Sample ID: LCS 570-221251/4**  
**Matrix: Water**  
**Analysis Batch: 221251**

**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	48.10		ug/L		96	76 - 120
Toluene	50.0	49.93		ug/L		100	76 - 120
o-Xylene	50.0	51.01		ug/L		102	80 - 121
m,p-Xylene	100	100.3		ug/L		100	74 - 122
Ethylbenzene	50.0	50.99		ug/L		102	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 123
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	98		78 - 120
Toluene-d8 (Surr)	100		80 - 120

**Lab Sample ID: LCSD 570-221251/5**  
**Matrix: Water**  
**Analysis Batch: 221251**

**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	49.29		ug/L		99	76 - 120	2	20
Toluene	50.0	50.95		ug/L		102	76 - 120	2	20
o-Xylene	50.0	51.49		ug/L		103	80 - 121	1	20
m,p-Xylene	100	101.5		ug/L		102	74 - 122	1	20
Ethylbenzene	50.0	51.42		ug/L		103	80 - 120	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 123
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	99		78 - 120
Toluene-d8 (Surr)	100		80 - 120

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

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

**Lab Sample ID: MB 570-219916/6**  
**Matrix: Water**  
**Analysis Batch: 219916**

**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			03/16/22 14:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		50 - 150				03/16/22 14:12	1

**Lab Sample ID: LCS 570-219916/4**  
**Matrix: Water**  
**Analysis Batch: 219916**

**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)	1970	2091		ug/L		106	76 - 128
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	81		50 - 150				

**Lab Sample ID: LCSD 570-219916/5**  
**Matrix: Water**  
**Analysis Batch: 219916**

**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)	1970	2149		ug/L		109	76 - 128	3	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	83		50 - 150						

**Lab Sample ID: 570-87595-9 MS**  
**Matrix: Water**  
**Analysis Batch: 219916**

**Client Sample ID: GW-011722-JRL-EFF-1,2,3,4 (COMPOSITE)**  
**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)	ND		1970	1954		ug/L		99	69 - 132
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	88		50 - 150						

**Lab Sample ID: 570-87595-9 MSD**  
**Matrix: Water**  
**Analysis Batch: 219916**

**Client Sample ID: GW-011722-JRL-EFF-1,2,3,4 (COMPOSITE)**  
**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)	ND		1970	1972		ug/L		100	69 - 132	1	15
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	90		50 - 150								

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

**Lab Sample ID: MB 570-218926/1-A**  
**Matrix: Water**  
**Analysis Batch: 218993**

**Client Sample ID: Method Blank**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 218926**

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
TPH as Diesel Range	ND		0.10	mg/L		03/11/22 13:58	03/12/22 11:38	1
TPH as Motor Oil Range	ND		0.10	mg/L		03/11/22 13:58	03/12/22 11:38	1
Surrogate	MB MB		Limits			Prepared	Analyzed	Dil Fac
%Recovery	Qualifier							
n-Octacosane (Surr)	108		50 - 150			03/11/22 13:58	03/12/22 11:38	1

**Lab Sample ID: LCS 570-218926/2-A**  
**Matrix: Water**  
**Analysis Batch: 218993**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 218926**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits		
		Result	Qualifier					RPD	Limit
C10-C28	4.00	4.007		mg/L		100	68 - 120		
Surrogate	LCS LCS		Limits			%Rec	%Rec. Limits		
%Recovery	Qualifier								
n-Octacosane (Surr)	110		50 - 150						

**Lab Sample ID: LCSD 570-218926/3-A**  
**Matrix: Water**  
**Analysis Batch: 218993**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 218926**

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
C10-C28	4.00	4.094		mg/L		102	68 - 120	2	20
Surrogate	LCSD LCSD		Limits			%Rec	%Rec. Limits		
%Recovery	Qualifier								
n-Octacosane (Surr)	110		50 - 150						

## Method: 1664A - Oil and Grease

**Lab Sample ID: MB 570-219856/1-A**  
**Matrix: Water**  
**Analysis Batch: 220026**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 219856**

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Oil & Grease	ND		1.00	mg/L		03/16/22 09:08	03/16/22 09:08	1

**Lab Sample ID: LCS 570-219856/2-A**  
**Matrix: Water**  
**Analysis Batch: 220026**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 219856**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits		
		Result	Qualifier					RPD	Limit
Oil & Grease	40.0	38.10		mg/L		95	78 - 114		

**Lab Sample ID: LCSD 570-219856/3-A**  
**Matrix: Water**  
**Analysis Batch: 220026**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 219856**

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Oil & Grease	40.0	36.70		mg/L		92	78 - 114	4	18

Eurofins Calscience



# QC Association Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

## GC/MS VOA

### Analysis Batch: 221251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87595-9	GW-011722-JRL-EFF-1,2,3,4 (COMPOSITE)	Total/NA	Water	8260C	
MB 570-221251/8	Method Blank	Total/NA	Water	8260C	
LCS 570-221251/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 570-221251/5	Lab Control Sample Dup	Total/NA	Water	8260C	

### Analysis Batch: 222865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87595-2	GW-030922-JRL-EFF 1	Total/NA	Water	Composite	
570-87595-3	GW-030922-JRL-EFF 2	Total/NA	Water	Composite	
570-87595-4	GW-030922-JRL-EFF 3	Total/NA	Water	Composite	
570-87595-5	GW-030922-JRL-EFF 4	Total/NA	Water	Composite	

## GC VOA

### Analysis Batch: 219916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87595-9	GW-011722-JRL-EFF-1,2,3,4 (COMPOSITE)	Total/NA	Water	NWTPH-Gx	
MB 570-219916/6	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 570-219916/4	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 570-219916/5	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
570-87595-9 MS	GW-011722-JRL-EFF-1,2,3,4 (COMPOSITE)	Total/NA	Water	NWTPH-Gx	
570-87595-9 MSD	GW-011722-JRL-EFF-1,2,3,4 (COMPOSITE)	Total/NA	Water	NWTPH-Gx	

## GC Semi VOA

### Prep Batch: 218926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87595-1	GW-030922-JRL-EFF	Silica Gel Cleanup	Water	3510C SGC	
MB 570-218926/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 570-218926/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 570-218926/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	

### Analysis Batch: 218993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87595-1	GW-030922-JRL-EFF	Silica Gel Cleanup	Water	NWTPH-Dx	218926
MB 570-218926/1-A	Method Blank	Silica Gel Cleanup	Water	NWTPH-Dx	218926
LCS 570-218926/2-A	Lab Control Sample	Silica Gel Cleanup	Water	NWTPH-Dx	218926
LCSD 570-218926/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	NWTPH-Dx	218926

## General Chemistry

### Prep Batch: 219856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87595-10	GW-011722-JRL-EFF-5,6,7 (COMPOSITE)	Total/NA	Water	1664A	
MB 570-219856/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-219856/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-219856/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

### Analysis Batch: 220026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87595-10	GW-011722-JRL-EFF-5,6,7 (COMPOSITE)	Total/NA	Water	1664A	219856
MB 570-219856/1-A	Method Blank	Total/NA	Water	1664A	219856

Eurofins Calscience

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

## General Chemistry (Continued)

### Analysis Batch: 220026 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 570-219856/2-A	Lab Control Sample	Total/NA	Water	1664A	219856
LCSD 570-219856/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	219856

## Organic Prep

### Analysis Batch: 218841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-87595-6	GW-030922-JRL-EFF 5	Total/NA	Water	Composite	
570-87595-7	GW-030922-JRL-EFF 6	Total/NA	Water	Composite	
570-87595-8	GW-030922-JRL-EFF 7	Total/NA	Water	Composite	

# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

**Client Sample ID: GW-030922-JRL-EFF**

**Lab Sample ID: 570-87595-1**

Date Collected: 03/09/22 10:30

Matrix: Water

Date Received: 03/10/22 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			248 mL	2.5 mL	218926	03/11/22 14:02	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/13/22 03:59	N5Y3	ECL 4
Instrument ID: GC48										

**Client Sample ID: GW-030922-JRL-EFF 1**

**Lab Sample ID: 570-87595-2**

Date Collected: 03/09/22 10:30

Matrix: Water

Date Received: 03/10/22 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			222865	03/29/22 10:20	C4LT	ECL 4
Instrument ID: NOEQUIP										

**Client Sample ID: GW-030922-JRL-EFF 2**

**Lab Sample ID: 570-87595-3**

Date Collected: 03/09/22 10:45

Matrix: Water

Date Received: 03/10/22 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			222865	03/29/22 10:20	C4LT	ECL 4
Instrument ID: NOEQUIP										

**Client Sample ID: GW-030922-JRL-EFF 3**

**Lab Sample ID: 570-87595-4**

Date Collected: 03/09/22 11:00

Matrix: Water

Date Received: 03/10/22 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			222865	03/29/22 10:20	C4LT	ECL 4
Instrument ID: NOEQUIP										

**Client Sample ID: GW-030922-JRL-EFF 4**

**Lab Sample ID: 570-87595-5**

Date Collected: 03/09/22 11:15

Matrix: Water

Date Received: 03/10/22 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			222865	03/29/22 10:20	C4LT	ECL 4
Instrument ID: NOEQUIP										

**Client Sample ID: GW-030922-JRL-EFF 5**

**Lab Sample ID: 570-87595-6**

Date Collected: 03/09/22 10:30

Matrix: Water

Date Received: 03/10/22 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			218841	03/11/22 10:10	C4LT	ECL 4
Instrument ID: NOEQUIP										

# Lab Chronicle

Client: GHD Services Inc.  
 Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

**Client Sample ID: GW-030922-JRL-EFF 6**

**Lab Sample ID: 570-87595-7**

Date Collected: 03/09/22 10:45

Matrix: Water

Date Received: 03/10/22 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			218841	03/11/22 10:10	C4LT	ECL 4
Instrument ID: NOEQUIP										

**Client Sample ID: GW-030922-JRL-EFF 7**

**Lab Sample ID: 570-87595-8**

Date Collected: 03/09/22 11:00

Matrix: Water

Date Received: 03/10/22 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Composite		1			218841	03/11/22 10:10	C4LT	ECL 4
Instrument ID: NOEQUIP										

**Client Sample ID: GW-011722-JRL-EFF-1,2,3,4 (COMPOSITE)**

**Lab Sample ID: 570-87595-9**

Date Collected: 03/09/22 10:30

Matrix: Water

Date Received: 03/10/22 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	221251	03/22/22 19:35	KHF2	ECL 4
Instrument ID: GCMSXX										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	219916	03/16/22 20:29	P1R	ECL 4
Instrument ID: GC53										

**Client Sample ID: GW-011722-JRL-EFF-5,6,7 (COMPOSITE)**

**Lab Sample ID: 570-87595-10**

Date Collected: 03/09/22 10:30

Matrix: Water

Date Received: 03/10/22 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1050 mL	1000 mL	219856	03/16/22 09:08	UWEZ	ECL 4
Total/NA	Analysis	1664A		1			220026	03/16/22 09:08	L6IE	ECL 4
Instrument ID: NOEQUIP										

**Laboratory References:**

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

ECL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Accreditation/Certification Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

## Laboratory: Eurofins Calscience

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	CA300001	01-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Composite		Water	Composited
Washington	State		C916-18
			10-12-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Composite		Water	Composited



# Method Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ECL 4
Composite	Sample Compositing	None	ECL 4
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ECL 4
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	ECL 4
1664A	Oil and Grease	40CFR136A	ECL 4
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 4
3510C SGC	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 4

#### Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

None = None

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

ECL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Sample Summary

Client: GHD Services Inc.  
Project/Site: P66 Renton Terminal AOC 5228 / 12572873

Job ID: 570-87595-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-87595-1	GW-030922-JRL-EFF	Water	03/09/22 10:30	03/10/22 09:50
570-87595-2	GW-030922-JRL-EFF 1	Water	03/09/22 10:30	03/10/22 09:50
570-87595-3	GW-030922-JRL-EFF 2	Water	03/09/22 10:45	03/10/22 09:50
570-87595-4	GW-030922-JRL-EFF 3	Water	03/09/22 11:00	03/10/22 09:50
570-87595-5	GW-030922-JRL-EFF 4	Water	03/09/22 11:15	03/10/22 09:50
570-87595-6	GW-030922-JRL-EFF 5	Water	03/09/22 10:30	03/10/22 09:50
570-87595-7	GW-030922-JRL-EFF 6	Water	03/09/22 10:45	03/10/22 09:50
570-87595-8	GW-030922-JRL-EFF 7	Water	03/09/22 11:00	03/10/22 09:50
570-87595-9	GW-011722-JRL-EFF-1,2,3,4 (COMPOSITE)	Water	03/09/22 10:30	03/10/22 09:50
570-87595-10	GW-011722-JRL-EFF-5,6,7 (COMPOSITE)	Water	03/09/22 10:30	03/10/22 09:50

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

87595



Calscience

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

CHAIN OF CUSTODY RECORD

DATE 03-09-22

PAGE 1 OF 1

WO # / LAB USE ONLY

LABORATORY CLIENT: **GHD Services Inc**  
 ADDRESS: 9725 3rd Avenue NE Ste 204  
 CITY: Seattle STATE: WA ZIP: 98115  
 TEL: 253-507-6217 E-MAIL: [matthew.davis@ghd](mailto:matthew.davis@ghd)

CLIENT PROJECT NAME / NUMBER: P66 Renton Terminal AOC 5228 / 11226464  
 PROJECT CONTACT: Eric Maise 425-563-3260, Matt Davis 253-507-6217  
 P.O. NO: 11226464-2021-04  
 SAMPLER(S) (PRINT): Joe Lewandowski

REQUESTED ANALYSES

Please check box or fill in blank as needed

<input type="checkbox"/> COELT EDF	GLOBAL ID	LOG CODE	UNPRESERVED	PRESERVED	FIELD FILTERED
SPECIAL INSTRUCTIONS					
Laboratory composite EFF 1, 2, 3, 4 samples for BTEX and TPHg Laboratory composite EFF 5, 6, 7 samples for Oil & Grease					



570-87595 Chain of Custody

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO OF CONT	LOG CODE	UNPRESERVED	PRESERVED	FIELD FILTERED	DRO/RO (NWTPH-Dx)	GRO (NWTPH-Gx)	BTEX (8260)	Oil & Grease (1664)	Date	Time
		DATE	TIME												
1	GW-030922-JUL-EFF	3/9/22	1030	GW	2		X	X		X	X	X	X	3/10/22	9:50
2	GW-030922-EFF 1		1030	GW	2		X	X		X	X	X	X		
3	GW-030922-EFF 2		1045	GW	2		X	X		X	X	X	X		
4	GW-030922-EFF 3		1100	GW	2		X	X		X	X	X	X		
5	GW-030922-EFF 4		1115	GW	2		X	X		X	X	X	X		
6	GW-030922-EFF 5		1030	GW	1		X	X		X	X	X	X		
7	GW-030922-EFF 6		1045	GW	1		X	X		X	X	X	X		
8	GW-030922-EFF 7		1100	GW	1		X	X		X	X	X	X		

Relinquished by (Signature): *[Signature]* Date: 3/9/22  
 Received by (Signature/Affiliation): *[Signature]* EC Date: 3/10/22 Time: 9:50  
 Relinquished by (Signature): *[Signature]* Date: 12/45  
 Received by (Signature/Affiliation): *[Signature]*  
 Relinquished by (Signature): *[Signature]* Date: *[Blank]*  
 Received by (Signature/Affiliation): *[Signature]* Date: *[Blank]*

17/0.2 SC6 8166 8709 8/25/21 Revision 6755





**FedEx** Package Express  
US Airbill

FedEx Tracking Number

8166 8704 6755

1 From

Date

Sender's Name

Company

Address

City

State

ZIP

Dept./Floor/Suite/Room

2 Your Internal Billing Reference

3 To

Recipient's Name

Company

Address

We cannot deliver to PO, boxes or P.O. ZIP code.

Address

Use this line for the HMO location address or for continuation of your shipping address.

City

State

ZIP

Hold Weekday  
FedEx  
REQUIRED. NOT available for  
FedEx First Overnight.

Hold Saturday  
FedEx  
REQUIRED. Available ONLY for  
FedEx Priority Overnight and  
FedEx 2Day to select locations.

Dept./Floor/Suite/Room

Address

We cannot deliver to PO, boxes or P.O. ZIP code.

Address

Use this line for the HMO location address or for continuation of your shipping address.

City

State

ZIP

fedex.com 1800 GoFedEx 1800 463 3339

Form ID No. 0200

Recipient Copy

4 Express Package Service \*To most locations.

Packages up to 150 lbs.  
For packages over 150 lbs., use the  
FedEx Express Freight US Airbill.

Next Business Day

FedEx First Overnight  
Earliest next business morning delivery to select  
locations. Friday shipments will be delivered on  
Monday unless Saturday Delivery is selected.

FedEx Priority Overnight  
Next business morning. Friday shipments will be  
delivered on Monday unless Saturday Delivery  
is selected.

FedEx Standard Overnight  
Next business afternoon.  
Saturday delivery NOT available.

2 or 3 Business Days

FedEx 2Day AM  
Second business morning.  
Saturday Delivery NOT available.

FedEx 2Day  
Second business afternoon. Thursday shipments  
will be delivered on Monday unless Saturday  
Delivery is selected.

FedEx Express Saver  
Third business day.  
Saturday Delivery NOT available.

5 Packaging \*Declared value limit \$500.

FedEx Envelope\*  FedEx Pak\*  FedEx Box  Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.

Saturday Delivery NOT available for FedEx Standard Overnight, FedEx 2Day AM, or FedEx Express Saver.

No Signature Required Package may be left without obtaining a signature for delivery.

Direct Signature Someone at recipient's address may sign for delivery.

Indirect Signature Use one of the recipient's address, someone at a neighboring residential address only.

Does this shipment contain dangerous goods?  
 No  Yes - Shipped in accordance with Department of Transportation regulations. Dry Ice (per UN 1845)  Cargo Aircraft Only

7 Payment Bill to:  Sender  Recipient  Third Party

Enter FedEx Acct. No. below. Obtain recip. FedEx Acct. No.

Total Packages Total Weight lbs. **644**

Your liability is limited to US\$100 unless you declare a higher value. See the current FedEx Service Guide for details.  
Rev. Date 3/21 • Form #16702 • ©2013-2021 FedEx • PRINTED IN U.S.A.

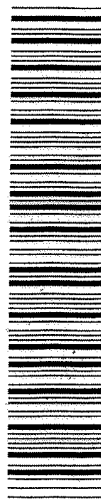
THU - 10 MAR AA  
PRIORITY OVERNIGHT

FedEx  
TRK# 0200 8166 8704 6755

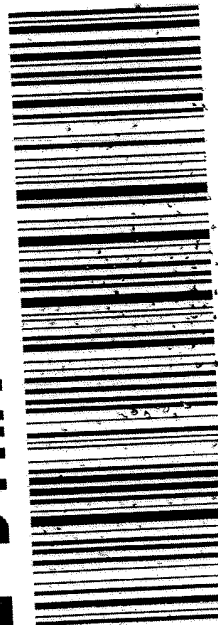
92780  
CA-US  
SNA

92 DTHA

570-87595 Waybill



8166 8704 6755



- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 570-87595-1

**Login Number: 87595**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Ortiz-Luis, Michael**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	False	Sample compositing requested.
Residual Chlorine Checked.	N/A	

# **Appendix B**

**King County Self-Monitoring Reports and  
Flow Meter Calibration Record**



King County

# Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program  
201 S. Jackson Street, Suite 513  
Seattle, WA 98104-3855  
Phone 206-477-5300 / FAX 206-263-3001  
Email: [info.KCIW@kingcounty.gov](mailto:info.KCIW@kingcounty.gov)

Company Name: Phillips 66 Company - Renton Terminal

Sample Site No. A81491

Permit/DA No.: 7910-02

Please Specify Month & Year: Month: January 2022

This form is available at [www.kingcounty.gov/industrialwaste](http://www.kingcounty.gov/industrialwaste)

All units are mg/l unless otherwise noted.

Sample Date (circle)	Sample Type (Composite) C (Grab) G (batch) BC (batch)	pH	Benzene CAS 71-43-2	Ethylbenzene CAS 100-41-4	Toluene CAS 108-88-3	Total Xylenes CAS 1330-20-7	Non Polar Fats, Oils, and Grease (Avg. of 3 grabs)	Daily Flow (GPD) Industrial	Notes (indicate Batch Discharge where applicable)
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17	G	6.9	<0.0005	<0.001	<0.001	<0.002	<0.952	15,288	
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

2/9/2022  
Date

Reed Solomon  
Signature of Principal Executive or Authorized Agent

Monthly Min pH 6.9 & Date 1/17/22  
Monthly Max pH 6.9 & Date 1/17/22

Total Monthly Flow (gallons) 452,280  
Maximum Daily Flow 19,840 & Date 1/23/22

**PLEASE CIRCLE ALL PERMIT VIOLATIONS**

**Due Date:** Monthly report is due by the 15th each month.



King County

# Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program  
201 S. Jackson Street, Suite 513  
Seattle, WA 98104-3855  
Phone 206-477-5300 / FAX 206-263-3001  
Email: [info.KCIW@kingcounty.gov](mailto:info.KCIW@kingcounty.gov)

Company Name: Phillips 66 Company - Renton Terminal

Sample Site No. A81491

Permit/DA No.: 7910-02

Please Specify Month & Year: Month: February 2022

This form is available at [www.kingcounty.gov/industrialwaste](http://www.kingcounty.gov/industrialwaste)

All units are mg/l unless otherwise noted.

Sample Date (circle)	Sample Type C (Composite) G (Grab) BC (batch)	pH	Benzene CAS 71-43-2	Ethylbenzene CAS 100-41-4	Toluene CAS 108-88-3	Total Xylenes CAS 1330-20-7	Non Polar Fats, Oils, and Grease (Avg. of 3 grabs)	Daily Flow (GPD) Industrial	Notes (indicate Batch Discharge where applicable)
1									
2									
3									
4									
5									
6									
7									
8									
9									
10	G	6.7	<1.0	<2.0	<2.0	<4.0	1,140	18,650	
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

3/9/2022

*Eli Jurian*

Signature of Principal Executive or Authorized Agent

Date

Monthly Min pH 6.7 & Date 2/10/22  
Monthly Max pH 6.7 & Date 2/10/22

Total Monthly Flow (gallons) 405,330  
Maximum Daily Flow 22,940 & Date 2/22/22

**PLEASE CIRCLE ALL PERMIT VIOLATIONS**

**Due Date:** Monthly report is due by the 15th each month.



King County

# Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program  
201 S. Jackson Street, Suite 513  
Seattle, WA 98104-3855  
Phone 206-477-5300 / FAX 206-263-3001  
Email: [info.KCIW@kingcounty.gov](mailto:info.KCIW@kingcounty.gov)

Company Name: Phillips 66 Company - Renton Terminal

Sample Site No. A81491

Permit/DA No.: 7910-02

Please Specify Month & Year: Month: March 2022

This form is available at [www.kingcounty.gov/industrialwaste](http://www.kingcounty.gov/industrialwaste)

All units are mg/l unless otherwise noted.

Sample Date (circle)	Sample Type C (Composite) G (Grab) BC (batch)	pH	Benzene CAS 71-43-2	Ethylbenzene CAS 100-41-4	Toluene CAS 108-88-3	Total Xylenes CAS 1330-20-7	Non Polar Fats, Oils, and Grease (Avg. of 3 grabs)	Daily Flow (GPD) Industrial	Notes (indicate Batch Discharge where applicable)
1									
2									
3									
4									
5									
6									
7									
8									
9	G	7.1	<0.5	<1.0	<1.0	<2.0	<952	16,140	
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
Monthly Min pH	7.1	& Date	3/9/22	Total Monthly Flow (gallons)				337,140	
Monthly Max pH	7.1	& Date	3/9/22	Maximum Daily Flow				18,620	& Date 3/5/22

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Signature of Principal Executive or Authorized Agent

Date

**PLEASE CIRCLE ALL PERMIT VIOLATIONS**

**Due Date:** Monthly report is due by the 15th each month.

# **Appendix C**

**Groundwater Monitoring Field Data Sheets**

Well No.: D-1RSampling Event: 2022Q1-WG

SSOW Code:

Monitoring Well Record for Low-Flow Purging

Project Name: P66 Renton TerminalRef. No.: 12572873Personnel: NAGHDDate: 2/14/2022 3:20 PM**Monitoring Well Data**

Well Diameter: 2 Constructed Well Depth: 20.0 ft Measured Well Depth: 20.0 ft  
 Screen Material: PVC Screen Volume: 2.45 gal Water Column Length: 14.29 ft  
 Screen Start Depth: 5 Ref Point Elev: ft  
 Screen End Depth: 20 Static Water Depth: 5.71 ft Measurement Type: Screen  
 Screen Length: 15 Static Water Elev: User Entry ft Sampling Method: Peristaltic pump

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	± 10	± 0.1		± 10		
3/4 7:54	150	5.71	0.00								0	
3/4 8:20	150	5.85	0.14	10.24	0.721	4.0	0.20	6.76		-108	1.01	
3/4 8:25	150	5.85	0.14	10.22	0.722	4.1	0.20	6.76		-109	1.2	
3/4 8:30	150	5.85	0.14	10.29	0.722	3.3	0.20	6.76		-110	1.4	

Field Parameters:

Comments:

Total Volume Purged (gal): 1.4

Iron:

Sulfide:

# of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

GW-030422-NA-D1R	N	WG	G	3/4 8:51							8
GW-030422-NA-DUP1	N	WG	G	3/4 8:51							8

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
3/4 8:30	150	5.85	0.14	10.29	0.722	3.3	0.20	6.76	-110		



Well No.: LAI-13

Sampling Event: 2022Q1-WG

SSOW Code:

Monitoring Well Record for Low-Flow Purging

Project Name:

Ref. No.: 12572873

Personnel: Nick

GHD

Date: 2/28/2022 2:48:57 PM

## Monitoring Well Data

Well Diameter: 2 Constructed Well Depth: 11.5 ft Measured Well Depth: 11.5 ft  
 Screen Material: PVC Screen Volume: 1.63 gal Water Column Length: 8.37 ft  
 Screen Start Depth: 1.5 Ref Point Elev: ft  
 Screen End Depth: 11.5 Static Water Depth: 3.13 ft Measurement Type: Screen  
 Screen Length: 10 Static Water Elev: User Entry ft Sampling Method: Peristaltic pump

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	± 10	± 0.1		± 10		
3/3 14:49	150	3.13	0.00								0	
3/3 15:19	150	3.68	0.55	11.64	0.117	32.5	7.52	7.17		27	1.2	
3/3 15:24	150	3.74	0.61	11.64	0.118	32.1	7.50	7.17		26	1.34	
3/3 15:29	150	3.76	0.63	11.57	0.118	31.5	7.42	7.16		26	1.48	

## Field Parameters:

Comments: No bolts in well. J-plug loose.

Total Volume Purged (gal): 1.48

Iron:

Sulfide:

# of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

GW-030322-NA-LAI13	N	WG	G	3/3 15:40							8

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
3/3 15:45	150	3.76	0.63	11.57	0.118	31.5	7.42	7.16	26		

Well No.: LAI-14

Sampling Event: 2022Q1-WG

SSOW Code:

Monitoring Well Record for Low-Flow Purging

Project Name:

Ref. No.: 12572873

Personnel: Nick

GHD

Date: 2/28/2022 2:57:47 PM

## Monitoring Well Data

Well Diameter: 2 Constructed Well Depth: 11.5 ft Measured Well Depth: 11.5 ft  
 Screen Material: PVC Screen Volume: 1.63 gal Water Column Length: ft  
 Screen Start Depth: 1.5 Ref Point Elev: ft  
 Screen End Depth: 11.5 Static Water Depth: ft Measurement Type: Screen  
 Screen Length: 10 Static Water Elev: 4.03 ft Sampling Method: Peristaltic pump

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	± 10	± 0.1		± 10		
3/3 13:50	150	4.03	4.03								0	
3/3 14:18	150	4.83	4.83	11.08	0.282	16.0	7.10	7.25		37	1.09	
3/3 14:23	150	4.94	4.94	11.08	0.280	15.9	7.12	7.25		40	1.25	
3/3 14:28	150	5.03	5.03	11.08	0.279	15.8	7.13	7.23		42	1.43	

## Field Parameters:

Comments: Turbidity did not yield &lt;15 NTU. Iron deposits in well.

Total Volume Purged (gal): 1.43

Iron:

Sulfide:

# of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

GW-030322-NA-LAI14	N	WG	G	3/3 14:39							8

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
3/3 14:28	150	5.03	5.03	11.08	0.279	15.8	7.13	7.23	42		

Well No.: MW-1

Sampling Event: 2022Q1-WG

SSOW Code:

Monitoring Well Record for Low-Flow Purging

Project Name: P66 Renton Terminal

Ref. No.: 12572873

Personnel: JRL

GHD

Date: 2/28/2022 2:47:05 PM

**Monitoring Well Data**

Well Diameter: 2 In      Constructed Well Depth: 20.0 ft      Measured Well Depth: 20.0 ft  
 Screen Material: PVC      Screen Volume: 2.45 gal      Water Column Length: 15.72 ft  
 Screen Start Depth: 5 Ft      Ref Point Elev: ft  
 Screen End Depth: 20 Ft      Static Water Depth: 4.28 ft      Measurement Type: Screen  
 Screen Length: 15 Ft      Static Water Elev: User Entry ft      Sampling Method: Peristaltic pump

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	± 10	± 0.1		± 10		
3/3 9:04		4.30	0.02								0	
3/3 9:10	100	4.31	0.03	10.9	588	5.2	1.68	6.58		-110.6	2.54	
3/3 9:15	100	4.31	0.03	10.9	588	4.9	1.36	6.44		-104.6	2.67	
3/3 9:20	100	4.32	0.04	11.0	588	4.7	1.29	6.24		-98.8	3.48	
3/3 9:25	100	4.33	0.05	11.0	587	5.7	1.38	6.24		-95.2	4.31	
3/3 9:30	100	4.33	0.05	10.9	585	4.8	1.36	6.20		-91.3	4.44	

**Field Parameters:**

**Comments:**

Total Volume Purged (gal): 1.06

Iron:

Sulfide:

# of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

GW-030322-JRL-MW1	N	WG	G	3/3 9:30							8

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
3/3 9:25	100	4.33	0.05	10.9	585	4.8	1.36	6.20	-91.3		

Well No.: MW-10Sampling Event: 2022Q1-WG

SSOW Code:

Monitoring Well Record for Low-Flow Purging

Project Name: P66 Renton TerminalRef. No.: 12572873Personnel: NickGHDDate: 3/3/2022 7:18:33 AM**Monitoring Well Data**

Well Diameter: 2 Constructed Well Depth: 20.0 ft Measured Well Depth: 20.0 ft  
 Screen Material: PVC Screen Volume: 2.45 gal Water Column Length: 13.82 ft  
 Screen Start Depth: 5 Ref Point Elev: ft  
 Screen End Depth: 20 Static Water Depth: 6.18 ft Measurement Type: Screen  
 Screen Length: 15 Static Water Elev: User Entry ft Sampling Method: Peristaltic pump

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	± 10	± 0. 1		± 10		
3/3 12:44	150	6.18	0.00								0	
3/3 13:07	150	7.08	0.90	11.95	1.67	17.2	0.28	6.59		-7	.88	
3/3 13:12	150	7.08	0.90	12.00	1.68	16.8	0.23	6.59		-10	1.07	
3/3 13:17	150	7.12	0.94	12.06	1.68	16.7	0.20	6.60		-13	1.27	

**Field Parameters:****Comments:** Tubing changed. Turbidity would not yield <16 NTUTotal Volume Purged (gal): 1.27

Iron:

Sulfide:

# of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

GW-030322-NA-MW10	N	WG	G	3/3 13:27							8

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
3/3 13:17	150	7.12	0.94	12.06	1.68	16.7	0.20	6.60	-13		

Well No.: MW-11Sampling Event: 2022Q1-WG

SSOW Code:

Monitoring Well Record for Low-Flow Purging

Project Name: P66 Renton TerminalRef. No.: 12572873Personnel: NickGHDDate: 3/3/2022 7:17:36 AM**Monitoring Well Data**

Well Diameter: 2 Constructed Well Depth: 20.0 ft Measured Well Depth: 20.0 ft  
 Screen Material: PVC Screen Volume: 2.45 gal Water Column Length: 18.04 ft  
 Screen Start Depth: 5 Ref Point Elev: ft  
 Screen End Depth: 20 Static Water Depth: 1.96 ft Measurement Type: Screen  
 Screen Length: 15 Static Water Elev: User Entry ft Sampling Method: Peristaltic pump

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	± 10	± 0. 1		± 10		
3/3 11:48	150	1.96	0.00								0	
3/3 12:10	150	2.04	0.08	10.80	0.417	3.5	0.40	6.33		-114	.89	
3/3 12:15	150	2.05	0.09	10.78	0.414	3.6	0.39	6.34		-115	1.08	
3/3 12:20	150	2.05	0.09	10.79	0.420	3.8	0.38	6.35		-116	1.25	

**Field Parameters:****Comments:**Total Volume Purged (gal): 1.25

Iron:

Sulfide:

# of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

GW-030322-NA-MW11	N	WG	G	3/3 12:34							8

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
3/3 12:20	150	2.05	0.09	10.79	0.420	3.8	0.38	6.35	-116		

Well No.: MW-12Sampling Event: 2022Q1-WG

SSOW Code:

Monitoring Well Record for Low-Flow Purging

Project Name: P66 Renton TerminalRef. No.: 12572873Personnel: NickGHDDate: 3/3/2022 7:26:38 AM**Monitoring Well Data**

Well Diameter: 2 Constructed Well Depth: 20.0 ft Measured Well Depth: 20.0 ft  
 Screen Material: PVC Screen Volume: 2.45 gal Water Column Length: 15.55 ft  
 Screen Start Depth: 5 Ref Point Elev: ft  
 Screen End Depth: 20 Static Water Depth: 4.45 ft Measurement Type: Screen  
 Screen Length: 15 Static Water Elev: User Entry ft Sampling Method: Peristaltic pump

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			<b>Precision Required</b>	±% 3	± 5 Or ± 10	< 5 Or ±% 10	± 10	± 0.1		± 10		
3/3 10:55	150	4.45	0.00								0	
3/3 11:21	150	4.68	0.23	11.65	0.263	9.7	0.22	6.05		-31	1.05	
3/3 11:26	150	4.68	0.23	11.67	0.263	9.0	0.20	6.05		-32	1.21	
3/3 11:30	150	4.68	0.23	11.65	0.264	9.0	0.20	6.05		-33	1.41	

**Field Parameters:****Comments:**Total Volume Purged (gal): 1.41

Iron:

Sulfide:

# of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

GW-030322-NA-MW12	N	WG	G	3/3 11:42								8

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
3/3 11:48	150	4.68	0.23	11.65	0.264	9.0	0.20	6.05	-33		

Well No.: MW-13Sampling Event: 2022Q1-WG

SSOW Code:

Monitoring Well Record for Low-Flow Purging

Project Name: P66 Renton TerminalRef. No.: 12572873Personnel: NickGHDDate: 3/3/2022 7:27:13 AM**Monitoring Well Data**

Well Diameter: 2 Constructed Well Depth: 20.0 ft Measured Well Depth: 20.0 ft  
 Screen Material: PVC Screen Volume: 2.45 gal Water Column Length: 15.78 ft  
 Screen Start Depth: 5 Ref Point Elev: ft  
 Screen End Depth: 20 Static Water Depth: 4.22 ft Measurement Type: Screen  
 Screen Length: 15 Static Water Elev: User Entry ft Sampling Method: Peristaltic pump

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	± 10	± 0.1		± 10		
3/3 9:50	150	4.22	0.00								0	
3/3 10:29	150	4.25	0.03	10.04	0.110	8.5	4.37	6.38		42	1.51	
3/3 10:34	150	4.25	0.03	10.10	0.110	8.5	4.40	6.38		42	1.68	
3/3 10:38	150	4.25	0.03	10.18	0.110	8.2	4.43	6.37		42	1.85	

**Field Parameters:**

Comments: Tubing changed.

Total Volume Purged (gal): 1.85

Iron:

Sulfide:

# of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

GW-030322-NA-MW13	N	WG	G	3/3 10:50							8

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
3/3 10:38	150	4.25	0.03	10.18	0.110	8.2	4.43	6.37	42		

Well No.: MW-15Sampling Event: 2022Q1-WG

SSOW Code:

Monitoring Well Record for Low-Flow Purging

Project Name: P66 Renton TerminalRef. No.: 12572873Personnel: NickGHDDate: 3/3/2022 7:15:32 AM**Monitoring Well Data**

Well Diameter: 2 Constructed Well Depth: 20.0 ft Measured Well Depth: 20.0 ft  
 Screen Material: PVC Screen Volume: gal Water Column Length: 14.49 ft  
 Screen Start Depth: 5 Ref Point Elev: ft  
 Screen End Depth: 20 Static Water Depth: 5.51 ft Measurement Type: Screen  
 Screen Length: User Entry Static Water Elev: User Entry ft Sampling Method: Peristaltic pump

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			<b>Precision Required</b>	±% 3	± 5 Or ± 10	< 5 Or ±% 10	± 10	± 0.1		± 10		
3/4 9:00	150	4.51	-1.00								0	
3/4 9:17	150	4.82	-0.69	9.98	0.398	1.0	0.15	6.49		-95	.69	
3/4 9:22	150	4.82	-0.69	9.98	0.398	1.1	0.16	6.49		-97	.88	
3/4 9:26	150	4.82	-0.69	9.94	0.395	1.2	0.13	6.49		-98	1.06	

**Field Parameters:****Comments:**Total Volume Purged (gal): 1.06

Iron:

Sulfide:

# of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

GW-030422-NA-MW15	N	WG	G	3/4 9:38							8

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
3/4 9:26	150	4.82	-0.69	9.94	0.395	1.2	0.13	6.49	-98		



Well No.: **MW-16**Sampling Event: **2022Q1-WG**

SSOW Code:

Monitoring Well Record for Low-Flow Purging

Project Name: P66 Renton TerminalRef. No.: 12572873Personnel: NickGHDDate: 3/3/2022 7:27:55 AM**Monitoring Well Data**

Well Diameter: 2 Constructed Well Depth: 20.0 ft Measured Well Depth: 20.0 ft  
 Screen Material: PVC Screen Volume: 2.45 gal Water Column Length: 14.64 ft  
 Screen Start Depth: 5 Ref Point Elev: ft  
 Screen End Depth: 20 Static Water Depth: 5.36 ft Measurement Type: Screen  
 Screen Length: 15 Static Water Elev: User Entry ft Sampling Method: Peristaltic pump

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	± 10	± 0.1		± 10		
3/3 8:40	150	5.36	0.00								0	
3/3 9:15	150	5.97	0.61	9.39	0.151	15.5	2.20	6.40		-57	1.38	
3/3 9:20	150	5.98	0.62	9.40	0.150	14.7	2.14	6.39		-58	1.59	
3/3 9:25	150	5.98	0.62	9.43	0.150	14.2	2.21	6.39		-60	3.46	

**Field Parameters:****Comments:** Tubing changed. Iron deposits in well.Total Volume Purged (gal): 3.46

Iron:

Sulfide:

# of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

GW-030322-NA-MW16	N	WG	G	3/3 9:40							8

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
3/3 9:25	150	5.98	0.62	9.43	0.150	14.2	2.21	6.39	-60		

Well No.: MW-2Sampling Event: 2022Q1-WG

SSOW Code:

Monitoring Well Record for Low-Flow Purging

Project Name: P66 Renton TerminalRef. No.: 12572873Personnel: JRLGHDDate: 3/3/2022 7:28:32 AM**Monitoring Well Data**

Well Diameter: 2 In Constructed Well Depth: 21.5 ft Measured Well Depth: 21.5 ft  
 Screen Material: PVC Screen Volume: 2.45 gal Water Column Length: 15.75 ft  
 Screen Start Depth: 5 Ft Ref Point Elev: ft  
 Screen End Depth: 20 Ft Static Water Depth: 5.75 ft Measurement Type: Screen  
 Screen Length: 15 Ft Static Water Elev: User Entry ft Sampling Method: Peristaltic pump

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			<b>Precision Required</b>	±% 3	± 5 Or ± 10	< 5 Or ±% 10	± 10	± 0. 1		± 10		
3/3 11:20		5.85	2.48									
3/3 11:25	100	5.86	2.49	10.6	174.5	256	.94	6.2		4.8	.16	
3/3 11:30	100	5.89	2.52	10.6	161.2	76	.81	6.00		28.4	.27	
3/3 11:35	100	5.90	0.15	10.5	158.9	41	.82	5.96		31.1	.4	
3/3 11:40	100	5.90	0.15	10.6	158.6	44	.80	5.91		33.9	.51	
3/3 11:45	100	5.91	0.16	10.6	158.2	40	.78	5.88		38.6	.64	

**Field Parameters:****Comments:**Total Volume Purged (gal): .63

Iron:

Sulfide:

# of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

GW-030322-JRL-MW2	N	WG	G	3/3 11:45							8

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
3/3 11:45	100	5.91	0.16	10.6	158.2	40	.78	5.88	38.6		

Well No.: MW-3Sampling Event: 2022Q1-WG

SSOW Code:

Monitoring Well Record for Low-Flow Purging

Project Name: P66 Renton TerminalRef. No.: 12572873Personnel: JoeGHDDate: 3/3/2022 7:15:07 AM**Monitoring Well Data**

Well Diameter: 2 In Constructed Well Depth: 20.0 ft Measured Well Depth: 20.0 ft  
 Screen Material: PVC Screen Volume: 2.45 gal Water Column Length: 14.63 ft  
 Screen Start Depth: 5 Ft Ref Point Elev: ft  
 Screen End Depth: 20 Ft Static Water Depth: 5.37 ft Measurement Type: Screen  
 Screen Length: 15 Ft Static Water Elev: User Entry ft Sampling Method: Peristaltic pump

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	± 10	± 0.1		± 10		
3/3 12:08		5.77	0.40								0	
3/3 12:15	100	5.78	0.41	8.4	105.0	17	1.69	5.95		32.0	.21	
3/3 12:20	100	5.79	0.42	8.2	94.8	13	1.49	5.96		44.3	.33	
3/3 12:25	100	5.79	0.42	8.2	88.4	13	2.08	5.94		51.9	.51	
3/3 12:30	100	5.80	0.43	8.2	86.2	11	3.35	5.90		57.1	.66	

**Field Parameters:****Comments:**Total Volume Purged (gal): .66

Iron:

Sulfide:

# of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

GW-030322-JRL-MW3	N	WG	G	3/3 12:30							8

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
3/3 12:30	100	5.80	0.43	8.2	86.2	11	3.35	5.90	57.1		

Well No.: MW-4Sampling Event: 2022Q1-WG

SSOW Code:

Monitoring Well Record for Low-Flow Purging

Project Name: P66 Renton TerminalRef. No.: 12572873Personnel: JRLGHDDate: 3/3/2022 7:39:14 AM

## Monitoring Well Data

Well Diameter: 2 In Constructed Well Depth: 20.0 ft Measured Well Depth: 20.0 ft  
 Screen Material: PVC Screen Volume: 2.45 gal Water Column Length: 14.85 ft  
 Screen Start Depth: 5 Ft Ref Point Elev: ft  
 Screen End Depth: 20 Ft Static Water Depth: 5.15 ft Measurement Type: Screen  
 Screen Length: 15 Ft Static Water Elev: User Entry ft Sampling Method: Peristaltic pump

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	± 10	± 0.1		± 10		
3/3 12:49		5.32	0.17									
3/3 12:55	100	5.33	0.18	9.4	35.6	11	3.93	5.85		75.0	.16	
3/3 13:00	100	5.33	0.18	9.4	32.6	13	3.79	5.84		86.8	.3	
3/3 13:05	100	5.35	0.20	9.3	32.6	9	3.72	5.66		95.3	.44	
3/3 13:10	100	5.36	0.21	9.2	33.7	8	3.64	5.63		99.5	.57	
3/3 13:15	100	5.36	0.21	9.2	35.2	10	3.53	5.61		101.7	.69	
3/3 13:20	100	5.36	0.21	9.2	37.5	8	3.47	5.62		102.8	.82	

## Field Parameters:

## Comments:

Total Volume Purged (gal): .82

Iron:

Sulfide:

# of Screen Volumes: 2

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

GW-030322-JRL-MW4	N	WG	G	3/3 13:25							8

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
3/3 13:20	100	5.36	0.21	9.2	37.5	8	3.47	5.62	102.8		

Well No.: MW-6Sampling Event: 2022Q1-WG

SSOW Code:

Monitoring Well Record for Low-Flow Purging

Project Name: P66 Renton TerminalRef. No.: 12572873Personnel: JRLGHDDate: 3/3/2022 7:15:22 AM**Monitoring Well Data**

Well Diameter: 2 In Constructed Well Depth: 20.0 ft Measured Well Depth: 20.0 ft  
 Screen Material: PVC Screen Volume: 2.45 gal Water Column Length: 11.56 ft  
 Screen Start Depth: 5 Ft Ref Point Elev: ft  
 Screen End Depth: 20 Ft Static Water Depth: 8.44 ft Measurement Type: Screen  
 Screen Length: 15 Ft Static Water Elev: User Entry ft Sampling Method: Peristaltic pump

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			<b>Precision Required</b>	±% 3	± 5 Or ± 10	< 5 Or ±% 10	± 10	± 0.1		± 10		
3/4 8:26		8.62	0.18									
3/4 8:35	100	8.63	0.19	9.8	352.1	1	0.71	6.75		-112.0	.24	
3/4 8:40	100	8.63	0.19	10.4	353.4	1	0.59	6.74		-121.8	.37	
3/4 8:45	100	8.64	0.20	10.5	353.2	1	.54	6.69		-119.0	.51	
3/4 8:50	100	8.65	0.21	10.3	350.2	1	.50	6.67		-112.5	.64	

**Field Parameters:****Comments:** MS/MSD sample was taken on this well.Total Volume Purged (gal): .64

Iron:

Sulfide:

# of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

GW-030422-JRL-MW6	N	WG	G	3/4 8:50							8

Time	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
3/4 8:50	100	8.65	0.21	10.3	350.2	1	.50	6.67	-112.5		

# **Appendix D**

## **Groundwater Sampling Analytical Report**

## ANALYTICAL REPORT

Eurofins Calscience  
2841 Dow Avenue, Suite 100  
Tustin, CA 92780  
Tel: (714)895-5494

Laboratory Job ID: 570-86947-1  
Client Project/Site: Renton Terminal / 1257287

For:  
GHD Services Inc.  
9725 3rd Avenue NE, Suite 204  
Seattle, Washington 98115

Attn: Matt Davis

*Vikas Patel*

---

Authorized for release by:  
3/17/2022 10:33:22 AM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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.*



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	7
Surrogate Summary . . . . .	19
QC Sample Results . . . . .	21
QC Association Summary . . . . .	27
Lab Chronicle . . . . .	30
Certification Summary . . . . .	34
Method Summary . . . . .	35
Sample Summary . . . . .	36
Chain of Custody . . . . .	37
Receipt Checklists . . . . .	41



# Definitions/Glossary

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: Renton Terminal / 1257287

Job ID: 570-86947-1

---

## Job ID: 570-86947-1

---

### Laboratory: Eurofins Calscience

#### Narrative

---

#### Job Narrative 570-86947-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/5/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.2° C and 4.0° C.

#### GC/MS VOA

Method 8260C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-219799. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8260C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-220014. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: GW-030322-JRL-MW1 (570-86947-1). Elevated reporting limits (RLs) are provided.

Method 8260C: The matrix spike/ matrix spike duplicate (MS/MSD) associated with parent sample 570-86947-A-12 was analyzed outside of the 12-hour tune window. The associated laboratory control sample and duplicate (LCS/LCSD) were analyzed within the 12-hour tune window. Precision and accuracy met acceptance criteria.

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

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.

# Detection Summary

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

**Client Sample ID: GW-030322-JRL-MW1** **Lab Sample ID: 570-86947-1**

No Detections.

**Client Sample ID: GW-030322-NA-MW16** **Lab Sample ID: 570-86947-2**

No Detections.

**Client Sample ID: GW-030322-NA-MW13** **Lab Sample ID: 570-86947-3**

No Detections.

**Client Sample ID: GW-030322-NA-MW12** **Lab Sample ID: 570-86947-4**

No Detections.

**Client Sample ID: GW-030322-JRL-MW2** **Lab Sample ID: 570-86947-5**

No Detections.

**Client Sample ID: GW-030322-JRL-MW3** **Lab Sample ID: 570-86947-6**

No Detections.

**Client Sample ID: GW-030322-NA-MW11** **Lab Sample ID: 570-86947-7**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
TPH as Gasoline (C4-C13)	130		100	ug/L	1		NWTPH-Gx	Total/NA

**Client Sample ID: GW-030322-JRL-MW4** **Lab Sample ID: 570-86947-8**

No Detections.

**Client Sample ID: GW-030322-NA-MW10** **Lab Sample ID: 570-86947-9**

No Detections.

**Client Sample ID: GW-030322-NA-LAI14** **Lab Sample ID: 570-86947-10**

No Detections.

**Client Sample ID: GW-030322-NA-LAI13** **Lab Sample ID: 570-86947-11**

No Detections.

**Client Sample ID: GW-030322-JRL-MW6** **Lab Sample ID: 570-86947-12**

No Detections.

**Client Sample ID: GW-030322-NA-D1R** **Lab Sample ID: 570-86947-13**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
TPH as Gasoline (C4-C13)	340		100	ug/L	1		NWTPH-Gx	Total/NA
TPH as Diesel Range	0.31		0.094	mg/L	1		NWTPH-Dx	Silica Gel Cleanup

**Client Sample ID: GW-030322-NA-MW15** **Lab Sample ID: 570-86947-14**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	12		0.50	ug/L	1		8260C	Total/NA
TPH as Gasoline (C4-C13)	130		100	ug/L	1		NWTPH-Gx	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Detection Summary

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Client Sample ID: GW-030322-NA-DUP1

## Lab Sample ID: 570-86947-15

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
TPH as Gasoline (C4-C13)	340		100	ug/L	1		NWTPH-Gx	Total/NA
TPH as Diesel Range	0.29		0.096	mg/L	1		NWTPH-Dx	Silica Gel Cleanup

## Client Sample ID: TRIP BLANK

## Lab Sample ID: 570-86947-16

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Calscience



# Client Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Client Sample ID: GW-030322-JRL-MW1**

**Date Collected: 03/03/22 09:30**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			03/17/22 00:25	2
Toluene	ND		2.0	ug/L			03/17/22 00:25	2
o-Xylene	ND		2.0	ug/L			03/17/22 00:25	2
m,p-Xylene	ND		4.0	ug/L			03/17/22 00:25	2
Ethylbenzene	ND		2.0	ug/L			03/17/22 00:25	2
Xylenes, Total	ND		4.0	ug/L			03/17/22 00:25	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 123		03/17/22 00:25	2
4-Bromofluorobenzene (Surr)	96		80 - 120		03/17/22 00:25	2
Dibromofluoromethane (Surr)	115		78 - 120		03/17/22 00:25	2
Toluene-d8 (Surr)	100		80 - 120		03/17/22 00:25	2

**Client Sample ID: GW-030322-NA-MW16**

**Date Collected: 03/03/22 09:40**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			03/16/22 06:01	1
Toluene	ND		1.0	ug/L			03/16/22 06:01	1
o-Xylene	ND		1.0	ug/L			03/16/22 06:01	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 06:01	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 06:01	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 06:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 123		03/16/22 06:01	1
4-Bromofluorobenzene (Surr)	98		80 - 120		03/16/22 06:01	1
Dibromofluoromethane (Surr)	104		78 - 120		03/16/22 06:01	1
Toluene-d8 (Surr)	97		80 - 120		03/16/22 06:01	1

**Client Sample ID: GW-030322-NA-MW13**

**Date Collected: 03/03/22 10:50**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			03/16/22 06:29	1
Toluene	ND		1.0	ug/L			03/16/22 06:29	1
o-Xylene	ND		1.0	ug/L			03/16/22 06:29	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 06:29	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 06:29	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 06:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 123		03/16/22 06:29	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/16/22 06:29	1
Dibromofluoromethane (Surr)	105		78 - 120		03/16/22 06:29	1
Toluene-d8 (Surr)	99		80 - 120		03/16/22 06:29	1

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Client Sample ID: GW-030322-NA-MW12**

**Date Collected: 03/03/22 11:42**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			03/16/22 06:58	1
Toluene	ND		1.0	ug/L			03/16/22 06:58	1
o-Xylene	ND		1.0	ug/L			03/16/22 06:58	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 06:58	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 06:58	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 06:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		70 - 123		03/16/22 06:58	1
4-Bromofluorobenzene (Surr)	98		80 - 120		03/16/22 06:58	1
Dibromofluoromethane (Surr)	106		78 - 120		03/16/22 06:58	1
Toluene-d8 (Surr)	100		80 - 120		03/16/22 06:58	1

**Client Sample ID: GW-030322-JRL-MW2**

**Date Collected: 03/03/22 11:45**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			03/16/22 18:53	1
Toluene	ND		1.0	ug/L			03/16/22 18:53	1
o-Xylene	ND		1.0	ug/L			03/16/22 18:53	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 18:53	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 18:53	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 18:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 123		03/16/22 18:53	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/16/22 18:53	1
Dibromofluoromethane (Surr)	106		78 - 120		03/16/22 18:53	1
Toluene-d8 (Surr)	99		80 - 120		03/16/22 18:53	1

**Client Sample ID: GW-030322-JRL-MW3**

**Date Collected: 03/03/22 12:30**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-6**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			03/16/22 19:20	1
Toluene	ND		1.0	ug/L			03/16/22 19:20	1
o-Xylene	ND		1.0	ug/L			03/16/22 19:20	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 19:20	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 19:20	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 19:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 123		03/16/22 19:20	1
4-Bromofluorobenzene (Surr)	95		80 - 120		03/16/22 19:20	1
Dibromofluoromethane (Surr)	105		78 - 120		03/16/22 19:20	1
Toluene-d8 (Surr)	100		80 - 120		03/16/22 19:20	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Client Sample ID: GW-030322-NA-MW11**

**Date Collected: 03/03/22 12:34**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			03/16/22 07:26	1
Toluene	ND		1.0	ug/L			03/16/22 07:26	1
o-Xylene	ND		1.0	ug/L			03/16/22 07:26	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 07:26	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 07:26	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 07:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 123		03/16/22 07:26	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/16/22 07:26	1
Dibromofluoromethane (Surr)	105		78 - 120		03/16/22 07:26	1
Toluene-d8 (Surr)	97		80 - 120		03/16/22 07:26	1

**Client Sample ID: GW-030322-JRL-MW4**

**Date Collected: 03/03/22 13:25**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			03/16/22 19:48	1
Toluene	ND		1.0	ug/L			03/16/22 19:48	1
o-Xylene	ND		1.0	ug/L			03/16/22 19:48	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 19:48	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 19:48	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 19:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 123		03/16/22 19:48	1
4-Bromofluorobenzene (Surr)	96		80 - 120		03/16/22 19:48	1
Dibromofluoromethane (Surr)	109		78 - 120		03/16/22 19:48	1
Toluene-d8 (Surr)	100		80 - 120		03/16/22 19:48	1

**Client Sample ID: GW-030322-NA-MW10**

**Date Collected: 03/03/22 13:27**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-9**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			03/16/22 07:54	1
Toluene	ND		1.0	ug/L			03/16/22 07:54	1
o-Xylene	ND		1.0	ug/L			03/16/22 07:54	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 07:54	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 07:54	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 07:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 123		03/16/22 07:54	1
4-Bromofluorobenzene (Surr)	98		80 - 120		03/16/22 07:54	1
Dibromofluoromethane (Surr)	106		78 - 120		03/16/22 07:54	1
Toluene-d8 (Surr)	100		80 - 120		03/16/22 07:54	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Client Sample ID: GW-030322-NA-LAI14**

**Date Collected: 03/03/22 14:39**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-10**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			03/16/22 08:22	1
Toluene	ND		1.0	ug/L			03/16/22 08:22	1
o-Xylene	ND		1.0	ug/L			03/16/22 08:22	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 08:22	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 08:22	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 08:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 123		03/16/22 08:22	1
4-Bromofluorobenzene (Surr)	98		80 - 120		03/16/22 08:22	1
Dibromofluoromethane (Surr)	103		78 - 120		03/16/22 08:22	1
Toluene-d8 (Surr)	98		80 - 120		03/16/22 08:22	1

**Client Sample ID: GW-030322-NA-LAI13**

**Date Collected: 03/03/22 15:40**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			03/16/22 08:51	1
Toluene	ND		1.0	ug/L			03/16/22 08:51	1
o-Xylene	ND		1.0	ug/L			03/16/22 08:51	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 08:51	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 08:51	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 08:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 123		03/16/22 08:51	1
4-Bromofluorobenzene (Surr)	95		80 - 120		03/16/22 08:51	1
Dibromofluoromethane (Surr)	104		78 - 120		03/16/22 08:51	1
Toluene-d8 (Surr)	100		80 - 120		03/16/22 08:51	1

**Client Sample ID: GW-030322-JRL-MW6**

**Date Collected: 03/04/22 08:50**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			03/16/22 19:13	1
Toluene	ND		1.0	ug/L			03/16/22 19:13	1
o-Xylene	ND		1.0	ug/L			03/16/22 19:13	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 19:13	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 19:13	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 19:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 123		03/16/22 19:13	1
4-Bromofluorobenzene (Surr)	108		80 - 120		03/16/22 19:13	1
Dibromofluoromethane (Surr)	106		78 - 120		03/16/22 19:13	1
Toluene-d8 (Surr)	106		80 - 120		03/16/22 19:13	1

Eurolins Calscience



# Client Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Client Sample ID: GW-030322-NA-D1R**

**Date Collected: 03/04/22 08:51**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-13**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			03/16/22 19:40	1
Toluene	ND		1.0	ug/L			03/16/22 19:40	1
o-Xylene	ND		1.0	ug/L			03/16/22 19:40	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 19:40	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 19:40	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 123		03/16/22 19:40	1
4-Bromofluorobenzene (Surr)	107		80 - 120		03/16/22 19:40	1
Dibromofluoromethane (Surr)	104		78 - 120		03/16/22 19:40	1
Toluene-d8 (Surr)	106		80 - 120		03/16/22 19:40	1

**Client Sample ID: GW-030322-NA-MW15**

**Date Collected: 03/04/22 09:38**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-14**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>12</b>		0.50	ug/L			03/16/22 20:07	1
Toluene	ND		1.0	ug/L			03/16/22 20:07	1
o-Xylene	ND		1.0	ug/L			03/16/22 20:07	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 20:07	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 20:07	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 20:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		70 - 123		03/16/22 20:07	1
4-Bromofluorobenzene (Surr)	107		80 - 120		03/16/22 20:07	1
Dibromofluoromethane (Surr)	107		78 - 120		03/16/22 20:07	1
Toluene-d8 (Surr)	106		80 - 120		03/16/22 20:07	1

**Client Sample ID: GW-030322-NA-DUP1**

**Date Collected: 03/04/22 00:00**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-15**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			03/16/22 20:34	1
Toluene	ND		1.0	ug/L			03/16/22 20:34	1
o-Xylene	ND		1.0	ug/L			03/16/22 20:34	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 20:34	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 20:34	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 20:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		70 - 123		03/16/22 20:34	1
4-Bromofluorobenzene (Surr)	106		80 - 120		03/16/22 20:34	1
Dibromofluoromethane (Surr)	104		78 - 120		03/16/22 20:34	1
Toluene-d8 (Surr)	106		80 - 120		03/16/22 20:34	1

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

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

**Client Sample ID: GW-030322-JRL-MW1**

**Date Collected: 03/03/22 09:30**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			03/10/22 11:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		50 - 150				03/10/22 11:34	1

**Client Sample ID: GW-030322-NA-MW16**

**Date Collected: 03/03/22 09:40**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			03/10/22 06:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		50 - 150				03/10/22 06:46	1

**Client Sample ID: GW-030322-NA-MW13**

**Date Collected: 03/03/22 10:50**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			03/10/22 07:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		50 - 150				03/10/22 07:10	1

**Client Sample ID: GW-030322-NA-MW12**

**Date Collected: 03/03/22 11:42**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			03/10/22 07:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		50 - 150				03/10/22 07:34	1

**Client Sample ID: GW-030322-JRL-MW2**

**Date Collected: 03/03/22 11:45**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			03/10/22 07:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		50 - 150				03/10/22 07:58	1

**Client Sample ID: GW-030322-JRL-MW3**

**Date Collected: 03/03/22 12:30**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-6**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			03/10/22 08:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		50 - 150				03/10/22 08:22	1

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

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

**Client Sample ID: GW-030322-NA-MW11**

**Date Collected: 03/03/22 12:34**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	130		100	ug/L			03/10/22 08:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		50 - 150				03/10/22 08:46	1

**Client Sample ID: GW-030322-JRL-MW4**

**Date Collected: 03/03/22 13:25**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			03/10/22 09:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		50 - 150				03/10/22 09:10	1

**Client Sample ID: GW-030322-NA-MW10**

**Date Collected: 03/03/22 13:27**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-9**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			03/10/22 09:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		50 - 150				03/10/22 09:34	1

**Client Sample ID: GW-030322-NA-LAI14**

**Date Collected: 03/03/22 14:39**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-10**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			03/10/22 09:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		50 - 150				03/10/22 09:58	1

**Client Sample ID: GW-030322-NA-LAI13**

**Date Collected: 03/03/22 15:40**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			03/10/22 11:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		50 - 150				03/10/22 11:10	1

**Client Sample ID: GW-030322-JRL-MW6**

**Date Collected: 03/04/22 08:50**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			03/10/22 05:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		50 - 150				03/10/22 05:34	1

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

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

**Client Sample ID: GW-030322-NA-D1R**

**Date Collected: 03/04/22 08:51**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-13**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	340		100	ug/L	-		03/10/22 11:58	1
Surrogate	%Recovery	Qualifier	Limits					
4-Bromofluorobenzene (Surr)	94		50 - 150				03/10/22 11:58	1

**Client Sample ID: GW-030322-NA-MW15**

**Date Collected: 03/04/22 09:38**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-14**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	130		100	ug/L	-		03/10/22 12:22	1
Surrogate	%Recovery	Qualifier	Limits					
4-Bromofluorobenzene (Surr)	86		50 - 150				03/10/22 12:22	1

**Client Sample ID: GW-030322-NA-DUP1**

**Date Collected: 03/04/22 00:00**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-15**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	340		100	ug/L	-		03/10/22 12:46	1
Surrogate	%Recovery	Qualifier	Limits					
4-Bromofluorobenzene (Surr)	92		50 - 150				03/10/22 12:46	1

**Client Sample ID: TRIP BLANK**

**Date Collected: 03/04/22 00:00**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-16**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L	-		03/10/22 13:10	1
Surrogate	%Recovery	Qualifier	Limits					
4-Bromofluorobenzene (Surr)	75		50 - 150				03/10/22 13:10	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup - Silica Gel Cleanup

**Client Sample ID: GW-030322-NA-MW16**

**Date Collected: 03/03/22 09:40**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.098	mg/L		03/11/22 13:58	03/12/22 18:54	1
TPH as Motor Oil Range	ND		0.098	mg/L		03/11/22 13:58	03/12/22 18:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n-Octacosane (Surr)</i>	111		50 - 150			03/11/22 13:58	03/12/22 18:54	1

**Client Sample ID: GW-030322-NA-MW13**

**Date Collected: 03/03/22 10:50**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.097	mg/L		03/11/22 13:58	03/12/22 19:17	1
TPH as Motor Oil Range	ND		0.097	mg/L		03/11/22 13:58	03/12/22 19:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n-Octacosane (Surr)</i>	114		50 - 150			03/11/22 13:58	03/12/22 19:17	1

**Client Sample ID: GW-030322-NA-MW12**

**Date Collected: 03/03/22 11:42**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.097	mg/L		03/11/22 13:58	03/12/22 19:40	1
TPH as Motor Oil Range	ND		0.097	mg/L		03/11/22 13:58	03/12/22 19:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n-Octacosane (Surr)</i>	115		50 - 150			03/11/22 13:58	03/12/22 19:40	1

**Client Sample ID: GW-030322-JRL-MW2**

**Date Collected: 03/03/22 11:45**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.11	mg/L		03/11/22 13:58	03/12/22 20:03	1
TPH as Motor Oil Range	ND		0.11	mg/L		03/11/22 13:58	03/12/22 20:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n-Octacosane (Surr)</i>	105		50 - 150			03/11/22 13:58	03/12/22 20:03	1

**Client Sample ID: GW-030322-NA-MW11**

**Date Collected: 03/03/22 12:34**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.098	mg/L		03/11/22 13:58	03/12/22 20:48	1
TPH as Motor Oil Range	ND		0.098	mg/L		03/11/22 13:58	03/12/22 20:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n-Octacosane (Surr)</i>	107		50 - 150			03/11/22 13:58	03/12/22 20:48	1

**Client Sample ID: GW-030322-JRL-MW4**

**Date Collected: 03/03/22 13:25**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.10	mg/L		03/11/22 13:58	03/12/22 21:11	1

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup - Silica Gel Cleanup (Continued)

**Client Sample ID: GW-030322-JRL-MW4**

**Date Collected: 03/03/22 13:25**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Motor Oil Range	ND		0.10	mg/L		03/11/22 13:58	03/12/22 21:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	107		50 - 150			03/11/22 13:58	03/12/22 21:11	1

**Client Sample ID: GW-030322-NA-MW10**

**Date Collected: 03/03/22 13:27**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-9**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.097	mg/L		03/11/22 13:58	03/12/22 21:34	1
TPH as Motor Oil Range	ND		0.097	mg/L		03/11/22 13:58	03/12/22 21:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	95		50 - 150			03/11/22 13:58	03/12/22 21:34	1

**Client Sample ID: GW-030322-NA-LAI14**

**Date Collected: 03/03/22 14:39**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-10**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.097	mg/L		03/11/22 13:58	03/12/22 21:56	1
TPH as Motor Oil Range	ND		0.097	mg/L		03/11/22 13:58	03/12/22 21:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	108		50 - 150			03/11/22 13:58	03/12/22 21:56	1

**Client Sample ID: GW-030322-NA-LAI13**

**Date Collected: 03/03/22 15:40**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.10	mg/L		03/11/22 13:58	03/12/22 22:19	1
TPH as Motor Oil Range	ND		0.10	mg/L		03/11/22 13:58	03/12/22 22:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	114		50 - 150			03/11/22 13:58	03/12/22 22:19	1

**Client Sample ID: GW-030322-JRL-MW6**

**Date Collected: 03/04/22 08:50**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.11	mg/L		03/11/22 13:58	03/12/22 22:41	1
TPH as Motor Oil Range	ND		0.11	mg/L		03/11/22 13:58	03/12/22 22:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	110		50 - 150			03/11/22 13:58	03/12/22 22:41	1

**Client Sample ID: GW-030322-NA-D1R**

**Date Collected: 03/04/22 08:51**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-13**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	0.31		0.094	mg/L		03/11/22 13:58	03/12/22 23:49	1
TPH as Motor Oil Range	ND		0.094	mg/L		03/11/22 13:58	03/12/22 23:49	1

Eurofins Calscience

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup - Silica Gel Cleanup

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	105		50 - 150	03/11/22 13:58	03/12/22 23:49	1

**Client Sample ID: GW-030322-NA-MW15**  
**Date Collected: 03/04/22 09:38**  
**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-14**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.096	mg/L	-	03/11/22 13:58	03/13/22 00:11	1
TPH as Motor Oil Range	ND		0.096	mg/L	-	03/11/22 13:58	03/13/22 00:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	111		50 - 150	03/11/22 13:58	03/13/22 00:11	1

**Client Sample ID: GW-030322-NA-DUP1**  
**Date Collected: 03/04/22 00:00**  
**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-15**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>TPH as Diesel Range</b>	<b>0.29</b>		0.096	mg/L	-	03/11/22 13:58	03/13/22 00:34	1
TPH as Motor Oil Range	ND		0.096	mg/L	-	03/11/22 13:58	03/13/22 00:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	98		50 - 150	03/11/22 13:58	03/13/22 00:34	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup - Silica Gel Cleanup - RA

**Client Sample ID: GW-030322-JRL-MW1**

**Date Collected: 03/03/22 09:30**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.099	mg/L		03/11/22 13:58	03/13/22 16:37	1
TPH as Motor Oil Range	ND		0.099	mg/L		03/11/22 13:58	03/13/22 16:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n-Octacosane (Surr)</i>	135		50 - 150			03/11/22 13:58	03/13/22 16:37	1

**Client Sample ID: GW-030322-JRL-MW3**

**Date Collected: 03/03/22 12:30**

**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-6**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.098	mg/L		03/11/22 13:58	03/13/22 17:00	1
TPH as Motor Oil Range	ND		0.098	mg/L		03/11/22 13:58	03/13/22 17:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n-Octacosane (Surr)</i>	132		50 - 150			03/11/22 13:58	03/13/22 17:00	1



# Surrogate Summary

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-123)	BFB (80-120)	DBFM (78-120)	TOL (80-120)
570-86947-1	GW-030322-JRL-MW1	114	96	115	100
570-86947-2	GW-030322-NA-MW16	104	98	104	97
570-86947-3	GW-030322-NA-MW13	104	97	105	99
570-86947-4	GW-030322-NA-MW12	109	98	106	100
570-86947-5	GW-030322-JRL-MW2	107	97	106	99
570-86947-6	GW-030322-JRL-MW3	104	95	105	100
570-86947-7	GW-030322-NA-MW11	102	97	105	97
570-86947-8	GW-030322-JRL-MW4	107	96	109	100
570-86947-9	GW-030322-NA-MW10	108	98	106	100
570-86947-10	GW-030322-NA-LAI14	102	98	103	98
570-86947-11	GW-030322-NA-LAI13	104	95	104	100
570-86947-12	GW-030322-JRL-MW6	108	108	106	106
570-86947-12 MS	GW-030322-JRL-MW6	109	113	105	106
570-86947-12 MSD	GW-030322-JRL-MW6	111	115	105	103
570-86947-13	GW-030322-NA-D1R	107	107	104	106
570-86947-14	GW-030322-NA-MW15	109	107	107	106
570-86947-15	GW-030322-NA-DUP1	106	106	104	106
LCS 570-219799/4	Lab Control Sample	103	101	103	104
LCS 570-220007/4	Lab Control Sample	109	112	104	102
LCS 570-220014/4	Lab Control Sample	100	103	101	102
LCSD 570-219799/5	Lab Control Sample Dup	100	104	100	101
LCSD 570-220007/5	Lab Control Sample Dup	104	117	102	103
LCSD 570-220014/5	Lab Control Sample Dup	104	100	105	100
MB 570-219799/8	Method Blank	100	100	102	100
MB 570-220007/11	Method Blank	108	107	105	105
MB 570-220014/8	Method Blank	107	95	107	98

#### 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

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1
		(50-150)
570-86947-1	GW-030322-JRL-MW1	75
570-86947-2	GW-030322-NA-MW16	81
570-86947-3	GW-030322-NA-MW13	82
570-86947-4	GW-030322-NA-MW12	86
570-86947-5	GW-030322-JRL-MW2	82
570-86947-6	GW-030322-JRL-MW3	90
570-86947-7	GW-030322-NA-MW11	83
570-86947-8	GW-030322-JRL-MW4	83
570-86947-9	GW-030322-NA-MW10	81
570-86947-10	GW-030322-NA-LAI14	78
570-86947-11	GW-030322-NA-LAI13	74

# Surrogate Summary

Client: GHD Services Inc.  
 Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## 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 (50-150)
570-86947-12	GW-030322-JRL-MW6	75
570-86947-12 MS	GW-030322-JRL-MW6	86
570-86947-12 MSD	GW-030322-JRL-MW6	84
570-86947-13	GW-030322-NA-D1R	94
570-86947-14	GW-030322-NA-MW15	86
570-86947-15	GW-030322-NA-DUP1	92
570-86947-16	TRIP BLANK	75
LCS 570-218404/30	Lab Control Sample	92
LCSD 570-218404/31	Lab Control Sample Dup	93
MB 570-218404/32	Method Blank	77

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Matrix: Water

Prep Type: Silica Gel Cleanup

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN (50-150)
570-86947-1 - RA	GW-030322-JRL-MW1	135
570-86947-2	GW-030322-NA-MW16	111
570-86947-3	GW-030322-NA-MW13	114
570-86947-4	GW-030322-NA-MW12	115
570-86947-5	GW-030322-JRL-MW2	105
570-86947-6 - RA	GW-030322-JRL-MW3	132
570-86947-7	GW-030322-NA-MW11	107
570-86947-8	GW-030322-JRL-MW4	107
570-86947-9	GW-030322-NA-MW10	95
570-86947-10	GW-030322-NA-LAI14	108
570-86947-11	GW-030322-NA-LAI13	114
570-86947-12	GW-030322-JRL-MW6	110
570-86947-12 MS	GW-030322-JRL-MW6	104
570-86947-12 MSD	GW-030322-JRL-MW6	108
570-86947-13	GW-030322-NA-D1R	105
570-86947-14	GW-030322-NA-MW15	111
570-86947-15	GW-030322-NA-DUP1	98
LCS 570-218926/2-A	Lab Control Sample	110
LCSD 570-218926/3-A	Lab Control Sample Dup	110
MB 570-218926/1-A	Method Blank	108

#### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 570-219799/8**  
**Matrix: Water**  
**Analysis Batch: 219799**

**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			03/16/22 04:09	1
Toluene	ND		1.0	ug/L			03/16/22 04:09	1
o-Xylene	ND		1.0	ug/L			03/16/22 04:09	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 04:09	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 04:09	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 04:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 123		03/16/22 04:09	1
4-Bromofluorobenzene (Surr)	100		80 - 120		03/16/22 04:09	1
Dibromofluoromethane (Surr)	102		78 - 120		03/16/22 04:09	1
Toluene-d8 (Surr)	100		80 - 120		03/16/22 04:09	1

**Lab Sample ID: LCS 570-219799/4**  
**Matrix: Water**  
**Analysis Batch: 219799**

**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	52.59		ug/L		105	76 - 120
Toluene	50.0	51.48		ug/L		103	76 - 120
o-Xylene	50.0	52.57		ug/L		105	80 - 121
m,p-Xylene	100	102.3		ug/L		102	74 - 122
Ethylbenzene	50.0	51.41		ug/L		103	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		70 - 123
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	103		78 - 120
Toluene-d8 (Surr)	104		80 - 120

**Lab Sample ID: LCSD 570-219799/5**  
**Matrix: Water**  
**Analysis Batch: 219799**

**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	55.04		ug/L		110	76 - 120	5	20
Toluene	50.0	53.01		ug/L		106	76 - 120	3	20
o-Xylene	50.0	54.56		ug/L		109	80 - 121	4	20
m,p-Xylene	100	107.8		ug/L		108	74 - 122	5	20
Ethylbenzene	50.0	54.49		ug/L		109	80 - 120	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 123
4-Bromofluorobenzene (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	100		78 - 120
Toluene-d8 (Surr)	101		80 - 120

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

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

**Lab Sample ID: MB 570-220007/11**  
**Matrix: Water**  
**Analysis Batch: 220007**

**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			03/16/22 18:20	1
Toluene	ND		1.0	ug/L			03/16/22 18:20	1
o-Xylene	ND		1.0	ug/L			03/16/22 18:20	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 18:20	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 18:20	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 18:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 123		03/16/22 18:20	1
4-Bromofluorobenzene (Surr)	107		80 - 120		03/16/22 18:20	1
Dibromofluoromethane (Surr)	105		78 - 120		03/16/22 18:20	1
Toluene-d8 (Surr)	105		80 - 120		03/16/22 18:20	1

**Lab Sample ID: LCS 570-220007/4**  
**Matrix: Water**  
**Analysis Batch: 220007**

**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	44.44		ug/L		89	76 - 120
Toluene	50.0	48.71		ug/L		97	76 - 120
o-Xylene	50.0	51.45		ug/L		103	80 - 121
m,p-Xylene	100	95.47		ug/L		95	74 - 122
Ethylbenzene	50.0	46.64		ug/L		93	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	109		70 - 123
4-Bromofluorobenzene (Surr)	112		80 - 120
Dibromofluoromethane (Surr)	104		78 - 120
Toluene-d8 (Surr)	102		80 - 120

**Lab Sample ID: LCSD 570-220007/5**  
**Matrix: Water**  
**Analysis Batch: 220007**

**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	46.97		ug/L		94	76 - 120	6	20
Toluene	50.0	51.25		ug/L		102	76 - 120	5	20
o-Xylene	50.0	53.90		ug/L		108	80 - 121	5	20
m,p-Xylene	100	99.82		ug/L		100	74 - 122	4	20
Ethylbenzene	50.0	49.45		ug/L		99	80 - 120	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		70 - 123
4-Bromofluorobenzene (Surr)	117		80 - 120
Dibromofluoromethane (Surr)	102		78 - 120
Toluene-d8 (Surr)	103		80 - 120

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

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

**Lab Sample ID: 570-86947-12 MS**  
**Matrix: Water**  
**Analysis Batch: 220007**

**Client Sample ID: GW-030322-JRL-MW6**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Benzene	ND		50.0	41.25		ug/L		83		75 - 125
Toluene	ND		50.0	45.02		ug/L		90		75 - 125
o-Xylene	ND		50.0	48.08		ug/L		96		75 - 128
m,p-Xylene	ND		100	87.72		ug/L		88		75 - 128
Ethylbenzene	ND		50.0	43.39		ug/L		87		75 - 127
<b>MS MS</b>										
Surrogate	%Recovery	Qualifier	Limits							
1,2-Dichloroethane-d4 (Surr)	109		70 - 123							
4-Bromofluorobenzene (Surr)	113		80 - 120							
Dibromofluoromethane (Surr)	105		78 - 120							
Toluene-d8 (Surr)	106		80 - 120							

**Lab Sample ID: 570-86947-12 MSD**  
**Matrix: Water**  
**Analysis Batch: 220007**

**Client Sample ID: GW-030322-JRL-MW6**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						Limit	
Benzene	ND		50.0	48.30		ug/L		97		75 - 125	16	20
Toluene	ND		50.0	53.15		ug/L		106		75 - 125	17	20
o-Xylene	ND		50.0	55.20		ug/L		110		75 - 128	14	20
m,p-Xylene	ND		100	101.9		ug/L		102		75 - 128	15	20
Ethylbenzene	ND		50.0	50.73		ug/L		101		75 - 127	16	20
<b>MSD MSD</b>												
Surrogate	%Recovery	Qualifier	Limits									
1,2-Dichloroethane-d4 (Surr)	111		70 - 123									
4-Bromofluorobenzene (Surr)	115		80 - 120									
Dibromofluoromethane (Surr)	105		78 - 120									
Toluene-d8 (Surr)	103		80 - 120									

**Lab Sample ID: MB 570-220014/8**  
**Matrix: Water**  
**Analysis Batch: 220014**

**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			03/16/22 17:29	1
Toluene	ND		1.0	ug/L			03/16/22 17:29	1
o-Xylene	ND		1.0	ug/L			03/16/22 17:29	1
m,p-Xylene	ND		2.0	ug/L			03/16/22 17:29	1
Ethylbenzene	ND		1.0	ug/L			03/16/22 17:29	1
Xylenes, Total	ND		2.0	ug/L			03/16/22 17:29	1
<b>MB MB</b>								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1,2-Dichloroethane-d4 (Surr)	107		70 - 123		03/16/22 17:29	1		
4-Bromofluorobenzene (Surr)	95		80 - 120		03/16/22 17:29	1		
Dibromofluoromethane (Surr)	107		78 - 120		03/16/22 17:29	1		
Toluene-d8 (Surr)	98		80 - 120		03/16/22 17:29	1		

Eurofins Calscience

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

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

**Lab Sample ID: LCS 570-220014/4**  
**Matrix: Water**  
**Analysis Batch: 220014**

**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	52.64		ug/L		105	76 - 120
Toluene	50.0	50.89		ug/L		102	76 - 120
o-Xylene	50.0	51.91		ug/L		104	80 - 121
m,p-Xylene	100	102.1		ug/L		102	74 - 122
Ethylbenzene	50.0	51.53		ug/L		103	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 123
4-Bromofluorobenzene (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	101		78 - 120
Toluene-d8 (Surr)	102		80 - 120

**Lab Sample ID: LCSD 570-220014/5**  
**Matrix: Water**  
**Analysis Batch: 220014**

**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	52.84		ug/L		106	76 - 120	0	20
Toluene	50.0	51.25		ug/L		103	76 - 120	1	20
o-Xylene	50.0	53.00		ug/L		106	80 - 121	2	20
m,p-Xylene	100	103.9		ug/L		104	74 - 122	2	20
Ethylbenzene	50.0	52.44		ug/L		105	80 - 120	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		70 - 123
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	105		78 - 120
Toluene-d8 (Surr)	100		80 - 120

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

**Lab Sample ID: MB 570-218404/32**  
**Matrix: Water**  
**Analysis Batch: 218404**

**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			03/10/22 05:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		50 - 150		03/10/22 05:10	1

**Lab Sample ID: LCS 570-218404/30**  
**Matrix: Water**  
**Analysis Batch: 218404**

**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)	1970	2120		ug/L		108	76 - 128

Eurofins Calscience

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

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

**Lab Sample ID: LCS 570-218404/30**  
**Matrix: Water**  
**Analysis Batch: 218404**

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

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		50 - 150

**Lab Sample ID: LCSD 570-218404/31**  
**Matrix: Water**  
**Analysis Batch: 218404**

**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)	1970	2172		ug/L		110	76 - 128	2	10

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		50 - 150

**Lab Sample ID: 570-86947-12 MS**  
**Matrix: Water**  
**Analysis Batch: 218404**

**Client Sample ID: GW-030322-JRL-MW6**  
**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)	ND		1970	2097		ug/L		106	69 - 132

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		50 - 150

**Lab Sample ID: 570-86947-12 MSD**  
**Matrix: Water**  
**Analysis Batch: 218404**

**Client Sample ID: GW-030322-JRL-MW6**  
**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)	ND		1970	2143		ug/L		109	69 - 132	2	15

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	84		50 - 150

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

**Lab Sample ID: MB 570-218926/1-A**  
**Matrix: Water**  
**Analysis Batch: 218993**

**Client Sample ID: Method Blank**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 218926**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.10	mg/L		03/11/22 13:58	03/12/22 11:38	1
TPH as Motor Oil Range	ND		0.10	mg/L		03/11/22 13:58	03/12/22 11:38	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
n-Octacosane (Surr)	108		50 - 150	03/11/22 13:58	03/12/22 11:38	1

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup (Continued)

**Lab Sample ID: LCS 570-218926/2-A**  
**Matrix: Water**  
**Analysis Batch: 218993**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 218926**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	4.00	4.007		mg/L		100	68 - 120
<b>Surrogate</b>		<b>LCS %Recovery</b>	<b>LCS Qualifier</b>				<b>Limits</b>
<i>n-Octacosane (Surr)</i>		110					50 - 150

**Lab Sample ID: LCSD 570-218926/3-A**  
**Matrix: Water**  
**Analysis Batch: 218993**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 218926**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	4.00	4.094		mg/L		102	68 - 120	2	20
<b>Surrogate</b>		<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>				<b>Limits</b>		
<i>n-Octacosane (Surr)</i>		110					50 - 150		

**Lab Sample ID: 570-86947-12 MS**  
**Matrix: Water**  
**Analysis Batch: 218993**

**Client Sample ID: GW-030322-JRL-MW6**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 218926**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	ND		4.56	2.580		mg/L		57	55 - 133
<b>Surrogate</b>		<b>MS %Recovery</b>	<b>MS Qualifier</b>						<b>Limits</b>
<i>n-Octacosane (Surr)</i>		104							50 - 150

**Lab Sample ID: 570-86947-12 MSD**  
**Matrix: Water**  
**Analysis Batch: 218993**

**Client Sample ID: GW-030322-JRL-MW6**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 218926**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		4.20	2.632		mg/L		63	55 - 133	2	30
<b>Surrogate</b>		<b>MSD %Recovery</b>	<b>MSD Qualifier</b>						<b>Limits</b>		
<i>n-Octacosane (Surr)</i>		108							50 - 150		



# QC Association Summary

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## GC/MS VOA

### Analysis Batch: 219799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-86947-2	GW-030322-NA-MW16	Total/NA	Water	8260C	
570-86947-3	GW-030322-NA-MW13	Total/NA	Water	8260C	
570-86947-4	GW-030322-NA-MW12	Total/NA	Water	8260C	
570-86947-7	GW-030322-NA-MW11	Total/NA	Water	8260C	
570-86947-9	GW-030322-NA-MW10	Total/NA	Water	8260C	
570-86947-10	GW-030322-NA-LAI14	Total/NA	Water	8260C	
570-86947-11	GW-030322-NA-LAI13	Total/NA	Water	8260C	
MB 570-219799/8	Method Blank	Total/NA	Water	8260C	
LCS 570-219799/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 570-219799/5	Lab Control Sample Dup	Total/NA	Water	8260C	

### Analysis Batch: 220007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-86947-12	GW-030322-JRL-MW6	Total/NA	Water	8260C	
570-86947-13	GW-030322-NA-D1R	Total/NA	Water	8260C	
570-86947-14	GW-030322-NA-MW15	Total/NA	Water	8260C	
570-86947-15	GW-030322-NA-DUP1	Total/NA	Water	8260C	
MB 570-220007/11	Method Blank	Total/NA	Water	8260C	
LCS 570-220007/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 570-220007/5	Lab Control Sample Dup	Total/NA	Water	8260C	
570-86947-12 MS	GW-030322-JRL-MW6	Total/NA	Water	8260C	
570-86947-12 MSD	GW-030322-JRL-MW6	Total/NA	Water	8260C	

### Analysis Batch: 220014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-86947-1	GW-030322-JRL-MW1	Total/NA	Water	8260C	
570-86947-5	GW-030322-JRL-MW2	Total/NA	Water	8260C	
570-86947-6	GW-030322-JRL-MW3	Total/NA	Water	8260C	
570-86947-8	GW-030322-JRL-MW4	Total/NA	Water	8260C	
MB 570-220014/8	Method Blank	Total/NA	Water	8260C	
LCS 570-220014/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 570-220014/5	Lab Control Sample Dup	Total/NA	Water	8260C	

## GC VOA

### Analysis Batch: 218404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-86947-1	GW-030322-JRL-MW1	Total/NA	Water	NWTPH-Gx	
570-86947-2	GW-030322-NA-MW16	Total/NA	Water	NWTPH-Gx	
570-86947-3	GW-030322-NA-MW13	Total/NA	Water	NWTPH-Gx	
570-86947-4	GW-030322-NA-MW12	Total/NA	Water	NWTPH-Gx	
570-86947-5	GW-030322-JRL-MW2	Total/NA	Water	NWTPH-Gx	
570-86947-6	GW-030322-JRL-MW3	Total/NA	Water	NWTPH-Gx	
570-86947-7	GW-030322-NA-MW11	Total/NA	Water	NWTPH-Gx	
570-86947-8	GW-030322-JRL-MW4	Total/NA	Water	NWTPH-Gx	
570-86947-9	GW-030322-NA-MW10	Total/NA	Water	NWTPH-Gx	
570-86947-10	GW-030322-NA-LAI14	Total/NA	Water	NWTPH-Gx	
570-86947-11	GW-030322-NA-LAI13	Total/NA	Water	NWTPH-Gx	
570-86947-12	GW-030322-JRL-MW6	Total/NA	Water	NWTPH-Gx	
570-86947-13	GW-030322-NA-D1R	Total/NA	Water	NWTPH-Gx	
570-86947-14	GW-030322-NA-MW15	Total/NA	Water	NWTPH-Gx	

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## GC VOA (Continued)

### Analysis Batch: 218404 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-86947-15	GW-030322-NA-DUP1	Total/NA	Water	NWTPH-Gx	
570-86947-16	TRIP BLANK	Total/NA	Water	NWTPH-Gx	
MB 570-218404/32	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 570-218404/30	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 570-218404/31	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
570-86947-12 MS	GW-030322-JRL-MW6	Total/NA	Water	NWTPH-Gx	
570-86947-12 MSD	GW-030322-JRL-MW6	Total/NA	Water	NWTPH-Gx	

## GC Semi VOA

### Prep Batch: 218926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-86947-1 - RA	GW-030322-JRL-MW1	Silica Gel Cleanup	Water	3510C SGC	
570-86947-2	GW-030322-NA-MW16	Silica Gel Cleanup	Water	3510C SGC	
570-86947-3	GW-030322-NA-MW13	Silica Gel Cleanup	Water	3510C SGC	
570-86947-4	GW-030322-NA-MW12	Silica Gel Cleanup	Water	3510C SGC	
570-86947-5	GW-030322-JRL-MW2	Silica Gel Cleanup	Water	3510C SGC	
570-86947-6 - RA	GW-030322-JRL-MW3	Silica Gel Cleanup	Water	3510C SGC	
570-86947-7	GW-030322-NA-MW11	Silica Gel Cleanup	Water	3510C SGC	
570-86947-8	GW-030322-JRL-MW4	Silica Gel Cleanup	Water	3510C SGC	
570-86947-9	GW-030322-NA-MW10	Silica Gel Cleanup	Water	3510C SGC	
570-86947-10	GW-030322-NA-LAI14	Silica Gel Cleanup	Water	3510C SGC	
570-86947-11	GW-030322-NA-LAI13	Silica Gel Cleanup	Water	3510C SGC	
570-86947-12	GW-030322-JRL-MW6	Silica Gel Cleanup	Water	3510C SGC	
570-86947-13	GW-030322-NA-D1R	Silica Gel Cleanup	Water	3510C SGC	
570-86947-14	GW-030322-NA-MW15	Silica Gel Cleanup	Water	3510C SGC	
570-86947-15	GW-030322-NA-DUP1	Silica Gel Cleanup	Water	3510C SGC	
MB 570-218926/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 570-218926/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 570-218926/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
570-86947-12 MS	GW-030322-JRL-MW6	Silica Gel Cleanup	Water	3510C SGC	
570-86947-12 MSD	GW-030322-JRL-MW6	Silica Gel Cleanup	Water	3510C SGC	

### Analysis Batch: 218993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-86947-2	GW-030322-NA-MW16	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-86947-3	GW-030322-NA-MW13	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-86947-4	GW-030322-NA-MW12	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-86947-5	GW-030322-JRL-MW2	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-86947-7	GW-030322-NA-MW11	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-86947-8	GW-030322-JRL-MW4	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-86947-9	GW-030322-NA-MW10	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-86947-10	GW-030322-NA-LAI14	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-86947-11	GW-030322-NA-LAI13	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-86947-12	GW-030322-JRL-MW6	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-86947-13	GW-030322-NA-D1R	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-86947-14	GW-030322-NA-MW15	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-86947-15	GW-030322-NA-DUP1	Silica Gel Cleanup	Water	NWTPH-Dx	218926
MB 570-218926/1-A	Method Blank	Silica Gel Cleanup	Water	NWTPH-Dx	218926
LCS 570-218926/2-A	Lab Control Sample	Silica Gel Cleanup	Water	NWTPH-Dx	218926
LCSD 570-218926/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	NWTPH-Dx	218926

Eurofins Calscience

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## GC Semi VOA (Continued)

### Analysis Batch: 218993 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-86947-12 MS	GW-030322-JRL-MW6	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-86947-12 MSD	GW-030322-JRL-MW6	Silica Gel Cleanup	Water	NWTPH-Dx	218926

### Analysis Batch: 219220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-86947-1 - RA	GW-030322-JRL-MW1	Silica Gel Cleanup	Water	NWTPH-Dx	218926
570-86947-6 - RA	GW-030322-JRL-MW3	Silica Gel Cleanup	Water	NWTPH-Dx	218926

# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Client Sample ID: GW-030322-JRL-MW1

## Lab Sample ID: 570-86947-1

Date Collected: 03/03/22 09:30

Matrix: Water

Date Received: 03/05/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	5 mL	5 mL	220014	03/17/22 00:25	P3GT	ECL 4
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 11:34	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC	RA		252.6 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx	RA	1			219220	03/13/22 16:37	N5Y3	ECL 4
Instrument ID: GC48										

## Client Sample ID: GW-030322-NA-MW16

## Lab Sample ID: 570-86947-2

Date Collected: 03/03/22 09:40

Matrix: Water

Date Received: 03/05/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	219799	03/16/22 06:01	A1W	ECL 4
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 06:46	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC			255.9 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/12/22 18:54	N5Y3	ECL 4
Instrument ID: GC48										

## Client Sample ID: GW-030322-NA-MW13

## Lab Sample ID: 570-86947-3

Date Collected: 03/03/22 10:50

Matrix: Water

Date Received: 03/05/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	219799	03/16/22 06:29	A1W	ECL 4
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 07:10	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC			257.6 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/12/22 19:17	N5Y3	ECL 4
Instrument ID: GC48										

## Client Sample ID: GW-030322-NA-MW12

## Lab Sample ID: 570-86947-4

Date Collected: 03/03/22 11:42

Matrix: Water

Date Received: 03/05/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	219799	03/16/22 06:58	A1W	ECL 4
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 07:34	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC			257.7 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/12/22 19:40	N5Y3	ECL 4
Instrument ID: GC48										

Eurofins Calscience

# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

**Client Sample ID: GW-030322-JRL-MW2**  
**Date Collected: 03/03/22 11:45**  
**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-5**  
**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	8260C		1	5 mL	5 mL	220014	03/16/22 18:53	P3GT	ECL 4
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 07:58	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC			233.6 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/12/22 20:03	N5Y3	ECL 4
Instrument ID: GC48										

**Client Sample ID: GW-030322-JRL-MW3**  
**Date Collected: 03/03/22 12:30**  
**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-6**  
**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	8260C		1	5 mL	5 mL	220014	03/16/22 19:20	P3GT	ECL 4
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 08:22	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC	RA		254.3 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx	RA	1			219220	03/13/22 17:00	N5Y3	ECL 4
Instrument ID: GC48										

**Client Sample ID: GW-030322-NA-MW11**  
**Date Collected: 03/03/22 12:34**  
**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-7**  
**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	8260C		1	5 mL	5 mL	219799	03/16/22 07:26	A1W	ECL 4
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 08:46	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC			254 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/12/22 20:48	N5Y3	ECL 4
Instrument ID: GC48										

**Client Sample ID: GW-030322-JRL-MW4**  
**Date Collected: 03/03/22 13:25**  
**Date Received: 03/05/22 10:00**

**Lab Sample ID: 570-86947-8**  
**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	8260C		1	5 mL	5 mL	220014	03/16/22 19:48	P3GT	ECL 4
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 09:10	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC			245.7 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/12/22 21:11	N5Y3	ECL 4
Instrument ID: GC48										

Eurofins Calscience

# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

**Client Sample ID: GW-030322-NA-MW10**

**Lab Sample ID: 570-86947-9**

**Date Collected: 03/03/22 13:27**

**Matrix: Water**

**Date Received: 03/05/22 10:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	219799	03/16/22 07:54	A1W	ECL 4
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 09:34	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC			257.7 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/12/22 21:34	N5Y3	ECL 4
Instrument ID: GC48										

**Client Sample ID: GW-030322-NA-LAI14**

**Lab Sample ID: 570-86947-10**

**Date Collected: 03/03/22 14:39**

**Matrix: Water**

**Date Received: 03/05/22 10:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	219799	03/16/22 08:22	A1W	ECL 4
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 09:58	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC			258.2 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/12/22 21:56	N5Y3	ECL 4
Instrument ID: GC48										

**Client Sample ID: GW-030322-NA-LAI13**

**Lab Sample ID: 570-86947-11**

**Date Collected: 03/03/22 15:40**

**Matrix: Water**

**Date Received: 03/05/22 10:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	219799	03/16/22 08:51	A1W	ECL 4
Instrument ID: GCMSJJ										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 11:10	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC			243.9 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/12/22 22:19	N5Y3	ECL 4
Instrument ID: GC48										

**Client Sample ID: GW-030322-JRL-MW6**

**Lab Sample ID: 570-86947-12**

**Date Collected: 03/04/22 08:50**

**Matrix: Water**

**Date Received: 03/05/22 10:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	220007	03/16/22 19:13	OH1	ECL 4
Instrument ID: GCMSW										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 05:34	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC			235.5 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/12/22 22:41	N5Y3	ECL 4
Instrument ID: GC48										

Eurofins Calscience

# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Client Sample ID: GW-030322-NA-D1R

## Lab Sample ID: 570-86947-13

Date Collected: 03/04/22 08:51

Matrix: Water

Date Received: 03/05/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	220007	03/16/22 19:40	OH1	ECL 4
Instrument ID: GCMSW										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 11:58	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC			265.3 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/12/22 23:49	N5Y3	ECL 4
Instrument ID: GC48										

## Client Sample ID: GW-030322-NA-MW15

## Lab Sample ID: 570-86947-14

Date Collected: 03/04/22 09:38

Matrix: Water

Date Received: 03/05/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	220007	03/16/22 20:07	OH1	ECL 4
Instrument ID: GCMSW										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 12:22	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC			261.7 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/13/22 00:11	N5Y3	ECL 4
Instrument ID: GC48										

## Client Sample ID: GW-030322-NA-DUP1

## Lab Sample ID: 570-86947-15

Date Collected: 03/04/22 00:00

Matrix: Water

Date Received: 03/05/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	220007	03/16/22 20:34	OH1	ECL 4
Instrument ID: GCMSW										
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 12:46	A9VE	ECL 2
Instrument ID: GC53										
Silica Gel Cleanup	Prep	3510C SGC			260 mL	2.5 mL	218926	03/11/22 13:58	UFLU	ECL 1
Silica Gel Cleanup	Analysis	NWTPH-Dx		1			218993	03/13/22 00:34	N5Y3	ECL 4
Instrument ID: GC48										

## Client Sample ID: TRIP BLANK

## Lab Sample ID: 570-86947-16

Date Collected: 03/04/22 00:00

Matrix: Water

Date Received: 03/05/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	218404	03/10/22 13:10	A9VE	ECL 2
Instrument ID: GC53										

### Laboratory References:

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

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

ECL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Accreditation/Certification Summary

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

## Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C916-18	10-12-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



# Method Summary

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ECL 4
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ECL 2
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	ECL 4
3510C SGC	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 4

#### 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 Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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

ECL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Sample Summary

Client: GHD Services Inc.  
Project/Site: Renton Terminal / 1257287

Job ID: 570-86947-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-86947-1	GW-030322-JRL-MW1	Water	03/03/22 09:30	03/05/22 10:00
570-86947-2	GW-030322-NA-MW16	Water	03/03/22 09:40	03/05/22 10:00
570-86947-3	GW-030322-NA-MW13	Water	03/03/22 10:50	03/05/22 10:00
570-86947-4	GW-030322-NA-MW12	Water	03/03/22 11:42	03/05/22 10:00
570-86947-5	GW-030322-JRL-MW2	Water	03/03/22 11:45	03/05/22 10:00
570-86947-6	GW-030322-JRL-MW3	Water	03/03/22 12:30	03/05/22 10:00
570-86947-7	GW-030322-NA-MW11	Water	03/03/22 12:34	03/05/22 10:00
570-86947-8	GW-030322-JRL-MW4	Water	03/03/22 13:25	03/05/22 10:00
570-86947-9	GW-030322-NA-MW10	Water	03/03/22 13:27	03/05/22 10:00
570-86947-10	GW-030322-NA-LAI14	Water	03/03/22 14:39	03/05/22 10:00
570-86947-11	GW-030322-NA-LAI13	Water	03/03/22 15:40	03/05/22 10:00
570-86947-12	GW-030322-JRL-MW6	Water	03/04/22 08:50	03/05/22 10:00
570-86947-13	GW-030322-NA-D1R	Water	03/04/22 08:51	03/05/22 10:00
570-86947-14	GW-030322-NA-MW15	Water	03/04/22 09:38	03/05/22 10:00
570-86947-15	GW-030322-NA-DUP1	Water	03/04/22 00:00	03/05/22 10:00
570-86947-16	TRIP BLANK	Water	03/04/22 00:00	03/05/22 10:00

1

2

3

4

5

6

7

8

9

10

11

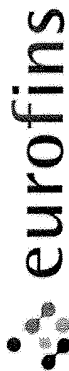
12

13

14

15





Calscience

CHAIN OF CUSTODY RECORD

DATE: 03-04-22

PAGE: 2 OF 2

2841 Dow Avenue, Suite 100, Tustin, CA 92780-7211 • (714) 895-5494

LABORATORY CLIENT: **GHD SERVICES INC**

ADDRESS: **9725 3RD AVE NE STE 204** STATE: **WA** ZIP: **98115**

CITY: **SEATTLE**

TEL: **253-507-6217** EMAIL: **MATTHEW.DAVIS@GHD.COM**

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

COELT EDF GLOBAL ID: ECI PROJECT NO: LOG CODE:

SPECIAL INSTRUCTIONS:

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	LOG CODE:		
		DATE	TIME			Unpreserved	Preserved	Field Filtered
11	GW-030322-NA-LAI13	3/3/22	1540	WG	8		X	
12	GW-030422-JRL-MW10	3/4/22	0850	WG	24		X	
13	GW-030422-NA-D1R	3/4/22	0851	WG	8		X	
14	GW-030422-NA-MW15	3/4/22	0938	WG	8		X	
15	GW-030422-NA-DUP1	3/4/22	---	WG	8		X	
16	TRIP BLANK	---	---	WT	3		X	

CLIENT PROJECT NAME / NUMBER: **REXTON TERMINAL 12572873** PO NO:

PROJECT CONTACT: **MATT DAVIS 253-507-6217** SAMPLERS (PRINT): **NICK HADAMOUSKI**  
**JOE LEWANDOWSKI**

REQUESTED ANALYSES

Please check box or fill in blank as needed

TPH (g) <input type="checkbox"/> GRO	TPH (d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260) BTEX ONLY	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081)	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"/> 2186	MS/MSW
X	X			X									X

Received by (Signature): *[Signature]* Date: 3/5/22 Time: 000

Received by (Signature): *[Signature]* Date: Date: Time:

Received by (Signature): *[Signature]* Date: Date: Time:

**FedEx** Package  
Express **US Airbill**

FedEx  
Tracking  
Number

8166 8704 6777

Form  
ID No.

0200

fedex.com 1.800.GoFedEx.1.800.463.332

**1 From**  
Date  
Sender's Name  
Company  
Address  
City State ZIP

**2 Your Internal Billing Reference**

**3 To**  
Recipient's Name  
Company  
Address  
City State ZIP

**4 Express Package Service** \*To most locations.

**Next Business Day**  
 FedEx First Overnight  
 FedEx Priority Overnight  
 FedEx Standard Overnight

**5 Packaging** \*Declared value limit \$500.

FedEx Envelope\*  FedEx Pak\*  FedEx Box\*

**6 Special Handling and Delivery Signature Opt**

Saturday Delivery  
 No Signature Required  
 Direct Signature  
**Does this shipment contain dangerous goods?**  
 No  Yes

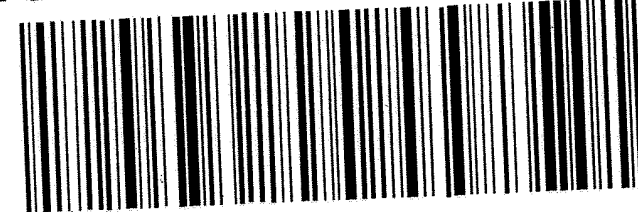
**7 Payment Bill to:**

Enter FedEx Acct. No. below.  
 Sender  Recipient  Third Party  
Total Packages Total Weight



8166 8704 6777

**FedEx**  
TRK# 8166 8704 6777  
0200  
**W0 DTHA**  
SATURDAY 12:00P  
PRIORITY OVERNIGHT  
92780  
CA-US  
SNA



5027863 04Mar2022 PAEA 56064/7591/1823

**FedEx** Express **Package US Airbill**

FedEx Tracking Number **8166 8704 6788**

**1 From**  
 Date: 13-04-20  
 Sender's Name: [Redacted]  
 Company: [Redacted]  
 Address: 9765 3RD AVE NE  
 City: SEATTLE State: WA ZIP: 98115

**2 Your Internal Billing Reference**

**3 To**  
 Recipient's Name: [Redacted]  
 Company: [Redacted]  
 Address: 3841 NEW HWY  
 City: JUSTIN State: CA ZIP: 92780

**4 Express Pick-up**  
 Form ID No. [Redacted]  
 Next Business Day: 570-86947 Waybill  
 FedEx First Overnight  
 FedEx Priority Overnight  
 FedEx Standard Overnight

**5 Packaging** \*Declared value limit \$200  
 FedEx Envelope\*  FedEx Pak\*

**6 Special Handling and Delivery Signature Options** Fees may apply. See the FedEx Service Guide.  
 Saturday Delivery  
 No Signature Required  
 Direct Signature  
 Indirect Signature  
 Does this shipment contain dangerous goods?  
 No  Yes  
 Dry Ice  Cargo Aircraft Only

**7 Payment Bill to:** Enter FedEx Acct No. below.  
 Sender Acct No. in Section 1 will be billed.  
 Recipient  Third Party  
 Total Packages: [Redacted] Total Weight: [Redacted] lbs.



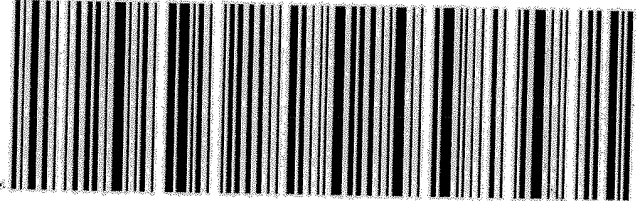
8166 8704 6788

**FedEx**  
TRK# 0200 8166 8704 6788

**SATURDAY 12:00P**  
**PRIORITY OVERNIGHT**

**W0 DTHA**

**92780**  
CA-US  
**SNA**



5027863 04Mar2022 PAEA 56064/7591/1B23

# Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 570-86947-1

**Login Number: 86947**

**List Number: 1**

**Creator: Ramos, Maribel**

**List Source: Eurofins Calscience**

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	

# **Appendix E**

## **Data Validation Memo**



# Technical Memorandum

March 22, 2022

<b>To</b>	Matt Davis	<b>Tel</b>	1 206 914 3141
<b>Copy to</b>	Treven Hunter, Joe Lewandowski	<b>Email</b>	Jeffrey.Cloud@ghd.com
<b>From</b>	Jeffrey Cloud/eew/1-NF	<b>Ref. No.</b>	12572873
<b>Subject</b>	<b>Analytical Results and Reduced Validation of Report J86947  Semiannual Groundwater Sampling  Phillips 66 Company – Renton Terminal AOC 5228  Renton, Washington  March 2022</b>		

## 1. Introduction

This document details a reduced validation of analytical results for groundwater samples collected in support of the Semiannual Groundwater Sampling at the Renton Terminal AOC 5228 site in Renton, Washington during March 2022. Samples were submitted to Eurofins Calscience, located in Tustin, California. A sample collection and analysis summary is presented in Table 1. A summary of the analytical methodology is presented in Table 2. The validated analytical results are summarized in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, recovery data from surrogate spikes, laboratory control samples, matrix spikes and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 2 and applicable guidance from the document entitled "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540 R 2016 002, September 2016.

## 2. Sample Holding Time and Preservation

The sample holding time criteria and sample preservation requirements for the analyses are summarized in the methods. The sample chain of custody documents and analytical report were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

All sample containers were properly preserved, delivered on ice and stored by the laboratory at the required temperature (0-6°C).

### **3. Laboratory Blank Analyses**

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

### **4. Surrogate Spike Recoveries**

In accordance with the methods employed, all samples, blanks, and QC samples analyzed for organics are spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for volatile organic compound (VOC), gasoline range organics (GRO) and diesel range organics (DRO)/motor oil range organics (ORO) analysis were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Surrogate recoveries were assessed against the control limits. All surrogate recoveries met the associated criteria.

### **5. Laboratory Control Sample Analyses**

Laboratory control samples (LCS)/laboratory control sample duplicates (LCSD) are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects. The relative percent difference (RPD) of the LCS/LCSD recoveries is used to evaluate analytical precision.

For this study, LCS/LCSD were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

The LCS/LCSD contained all analytes of interest. All LCS/LCSD recoveries and RPDs were within associated control limits, demonstrating acceptable analytical accuracy and precision.

### **6. Matrix Spike Analyses**

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as matrix spike (MS)/matrix spike duplicate (MSD) samples. The RPD between the MS and MSD is used to assess analytical precision. MS/MSD analyses were performed as specified in Table 1.

The MS/MSD samples were spiked with the analytes of interest. All percent recoveries and RPD values were within the associated control limits, demonstrating acceptable analytical accuracy and precision.

## 7. Field QA/QC Samples

The field QA/QC consisted of one trip blank sample and one field duplicate sample set.

### 7.1 Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, one trip blank was submitted to the laboratory for analysis. The result was non-detect for the analyte of interest.

### 7.2 Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, one field duplicate sample was collected and submitted "blind" to the laboratory, as specified in Table 1. The RPD associated with the duplicate sample must be less than 50 percent. If the reported concentration in both the investigative sample and its duplicate are less than five times the reporting limit (RL), the evaluation criterion is one times the RL value.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision.

## 8. Analyte Reporting

The laboratory did not report any detected concentrations below the laboratory's RL. Non-detect results were presented as non-detect at the RL in Table 3.

## 9. Conclusion

Based on the assessment detailed in the foregoing, the summarized data are acceptable without qualification.

Regards



**Jeffrey Cloud**

Data Management Team – Data Validator

Table 1

**Sample Collection and Analysis Summary**  
**Semiannual Groundwater Sampling**  
**Phillips 66 Company - Renton Terminal AOC 5228**  
**Renton, Washington**  
**March 2022**

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters			Comments
					DRO/ORO	GRO	VOCs	
GW-030322-NA-D1R	D-1R	Water	03/04/2022	08:51	X	X	X	
GW-030322-NA-DUP1	D-1R	Water	03/04/2022	--	X	X	X	FD (GW-030322-NA-D1R)
GW-030322-NA-LAI13	LAI-13	Water	03/03/2022	15:40	X	X	X	
GW-030322-NA-LAI14	LAI-14	Water	03/03/2022	14:39	X	X	X	
GW-030322-JRL-MW1	MW-1	Water	03/03/2022	09:30	X	X	X	
GW-030322-JRL-MW2	MW-2	Water	03/03/2022	11:45	X	X	X	
GW-030322-JRL-MW3	MW-3	Water	03/03/2022	12:30	X	X	X	
GW-030322-JRL-MW4	MW-4	Water	03/03/2022	13:25	X	X	X	
GW-030322-JRL-MW6	MW-6	Water	03/04/2022	08:50	X	X	X	MS/MSD
GW-030322-NA-MW10	MW-10	Water	03/03/2022	13:27	X	X	X	
GW-030322-NA-MW11	MW-11	Water	03/03/2022	12:34	X	X	X	
GW-030322-NA-MW12	MW-12	Water	03/03/2022	11:42	X	X	X	
GW-030322-NA-MW13	MW-13	Water	03/03/2022	10:50	X	X	X	

Table 1

**Sample Collection and Analysis Summary**  
**Semiannual Groundwater Sampling**  
**Phillips 66 Company - Renton Terminal AOC 5228**  
**Renton, Washington**  
**March 2022**

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters			Comments
					DRO/ORO	GRO	VOCs	
GW-030322-NA-MW15	MW-15	Water	03/04/2022	09:38	X	X	X	
GW-030322-NA-MW16	MW-16	Water	03/03/2022	09:40	X	X	X	
TRIP BLANK	--	Water	03/04/2022	--		X		Trip Blank

## Notes:

- FD - Field Duplicate sample of sample in parenthesis
- MS/MSD - Matrix Spike/Matrix Spike Duplicate
- VOCs - Volatile Organic Compounds
- GRO - Gasoline Range Organics
- DRO/ORO - Diesel Range Organics/Motor Oil Range Organics
- "--" - Not Applicable

Table 2

**Analytical Methods**  
**Semiannual Groundwater Sampling**  
**Phillips 66 Company - Renton Terminal AOC 5228**  
**Renton, Washington**  
**March 2022**

<b>Parameter</b>	<b>Method</b>	<b>Matrix</b>
Volatile Organic Compounds (VOCs)	SW-846 8260C <sup>(1)</sup>	Water
Gasoline Range Organics (GRO)	NWTPH-Gx <sup>(2)</sup>	Water
Diesel Range Organics (DRO)/Motor Oil Range Organics (ORO)	NWTPH-Dx <sup>(2)</sup>	Water

## Notes:

- (1) - SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions
- (2) - NWTPH - Referenced from "Washington State Department of Ecology Analytical Methods for Petroleum Hydrocarbons", Publication No. ECY 97-602, June 1997

**Analytical Results Summary**  
**Semiannual Groundwater Sampling**  
**Phillips 66 Company - Renton Terminal AOC 5228**  
**Renton, Washington**  
**March 2022**

Location ID:	D-1R	DUP	LAI-13	LAI-14	MW-1
Sample Name:	GW-030322-NA-D1R	GW-030322-NA-DUP1	GW-030322-NA-LAI13	GW-030322-NA-LAI14	GW-030322-JRL-MW1
Sample Date:	03/04/2022	03/04/2022 Duplicate	03/03/2022	03/03/2022	03/03/2022

Parameters	Unit					
<b>Volatile Organic Compounds</b>						
Benzene	µg/L	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
m&p-Xylenes	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U
o-Xylene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U
<b>Total Petroleum Hydrocarbons</b>						
Motor oil	mg/L	0.094 U	0.096 U	0.10 U	0.097 U	0.099 U
Total Petroleum Hydrocarbons - Extractable (DRO)	mg/L	0.31	0.29	0.10 U	0.097 U	0.099 U
Gasoline	µg/L	340	340	100 U	100 U	100 U

**Analytical Results Summary**  
**Semiannual Groundwater Sampling**  
**Phillips 66 Company - Renton Terminal AOC 5228**  
**Renton, Washington**  
**March 2022**

<b>Location ID:</b>	<b>MW-2</b>	<b>MW-3</b>	<b>MW-4</b>	<b>MW-6</b>	<b>MW-10</b>
<b>Sample Name:</b>	<b>GW-030322-JRL-MW2</b>	<b>GW-030322-JRL-MW3</b>	<b>GW-030322-JRL-MW4</b>	<b>GW-030322-JRL-MW6</b>	<b>GW-030322-NA-MW10</b>
<b>Sample Date:</b>	<b>03/03/2022</b>	<b>03/03/2022</b>	<b>03/03/2022</b>	<b>03/04/2022</b>	<b>03/03/2022</b>

<b>Parameters</b>	<b>Unit</b>					
<b>Volatile Organic Compounds</b>						
Benzene	µg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylenes	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Xylene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
<b>Total Petroleum Hydrocarbons</b>						
Motor oil	mg/L	0.11 U	0.098 U	0.10 U	0.11 U	0.097 U
Total Petroleum Hydrocarbons - Extractable (DRO)	mg/L	0.11 U	0.098 U	0.10 U	0.11 U	0.097 U
Gasoline	µg/L	100 U	100 U	100 U	100 U	100 U



**Analytical Results Summary**  
**Semiannual Groundwater Sampling**  
**Phillips 66 Company - Renton Terminal AOC 5228**  
**Renton, Washington**  
**March 2022**

Location ID:	MW-11	MW-12	MW-13	MW-15	MW-16
Sample Name:	GW-030322-NA-MW11	GW-030322-NA-MW12	GW-030322-NA-MW13	GW-030322-NA-MW15	GW-030322-NA-MW16
Sample Date:	03/03/2022	03/03/2022	03/03/2022	03/04/2022	03/03/2022

Parameters	Unit	MW-11	MW-12	MW-13	MW-15	MW-16
<b>Volatile Organic Compounds</b>						
Benzene	µg/L	0.50 U	0.50 U	0.50 U	12	0.50 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylenes	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Xylene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
<b>Total Petroleum Hydrocarbons</b>						
Motor oil	mg/L	0.098 U	0.097 U	0.097 U	0.096 U	0.098 U
Total Petroleum Hydrocarbons - Extractable (DRO)	mg/L	0.098 U	0.097 U	0.097 U	0.096 U	0.098 U
Gasoline	µg/L	130	100 U	100 U	130	100 U

## Notes:

U - Not detected at the associated reporting limit

DRO - Diesel Range Organics

