ZipperGeo
Geoprofessional Consultants

August 1, 2018

Mill Creek Crossing LLC
22833 Bothell Everett Highway, Suite 207
Bothell, Washington 98021

Attn: Mr. Nicholas Echelbarger

Re: February 2018 Groundwater Monitoring Report – Former Prime Cleaners
18001 Bothell Everett Highway
Bothell, Snohomish County, Washington
ZGA Project No. 1001.25
VCP #NW2571

Dear Mr. Echelbarger:

Zipper Geo Associates, LLC (ZGA) is pleased to submit this Groundwater Monitoring Report for the above referenced site. This investigation was performed in general accordance with ZGA's Proposal No. P14297R, dated July 2, 2015 and includes results for sampling events completed in February 2018.

We appreciate the opportunity to perform these services for Mill Creek Crossing LLC. Please contact the undersigned at (425) 582-9928 if you have questions regarding the information provided in the report.

Sincerely,
Zipper Geo Associates, LLC

Evelyn Conrado, GIT
Staff Geologist

State of Washington
Engineering Geologist
1221
Licensed Geologist
Jon Marion Einarsen

Jon Einarsen, LG
Principal

Attachments: Appendix A – Figures
Figure 1 – Groundwater Contour Map (February 2018)
Appendix B – Laboratory Report

Introduction

A dual-phase extraction (DPE) system has been installed at the Site to treat soil and groundwater that has been impacted by tetrachloroethylene (PCE) due to historical use of two adjoining tenant spaces for dry cleaning activities. The DPE system was first started on February 1, 2017. After troubleshooting several electrical and mechanical issues that were causing the system to automatically shut down, the system has been running more or less continuously since June of 2017, with periodic shutdowns for maintenance and groundwater sampling.

This groundwater monitoring report presents a summary of a groundwater sampling event completed in February of 2018, which is the third quarterly sampling event since system startup. The scope of the monitoring study is to sample 10 groundwater wells located proximal to the former dry cleaning facilities located on the southwest part of the Mill Creek Crossing Retail Center. Results from the monitoring study are used to assess trends in concentrations of volatile organic compounds (VOC), particularly tetrachloroethylene (PCE), and its degradational products trichloroethylene (TCE), 1,1-dichlorethene, cis-1,2-dichloroethylene (cis-1,2-DCE), and trans-1,2-dichloroethylene (trans-1,2-DCE), and vinyl chloride. 1,1-dichlorethene and the end-member degradational product vinyl chloride have never been detected at the Site.

Table 1. Project Information

Site Name	Former Prime Cleaners
Site Location/Address	18001 Bothell-Everett Highway
VCP #	NW2571
Sampling Schedule	Quarterly
Sampling Dates (this report)	February 13-14, 2018
Wells Sounded	MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10
Wells Sampled	MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10
Next Sampling Event	May 2018

Groundwater Flow

Ten dedicated groundwater monitoring wells are present on or adjoining the Site (MW-1 through MW-10). We measured depth to groundwater in each well on February 13, 2018. Depth to groundwater was measured in relation to the north side of the PVC casing of each well. Generally, we observed a southerly trend to groundwater flow, consistent with previous sampling events. Relative groundwater elevations measured during previous sampling events and the event discussed in this report are presented in Table 2. A groundwater contour map for the February 2018 sampling event is attached in Appendix A as Figure 1.

Table 2. Groundwater Elevations

Well ID	Relative Casing Elevation (ft.)	Date of Measurement	Depth to Groundwater (ft.)	Relative Groundwater Elevation (ft.)
MW-1	296.31	08-25-2010	25.22	271.09
		05-09-2011	21.18	275.13
		05-23-2012	22.73	273.58
		03-05-2014	23.95	272.36
		01-09-2017	22.85	273.46
		08-17-2017	24.87	271.44
		11-14-2017	24.66	271.65
		02-13-2018	21.65	274.66
MW-2	296.47	88-25-2010	25.58	270.89
		05-09-2011	21.61	274.86
		05-23-2012	22.97	273.50
		03-05-2014	24.28	272.19
		01-09-2017	23.14	273.33
		08-17-2017	25.57	270.90
		11-14-2017	25.15	271.32
		02-13-2018	22.00	274.47
MW-3	296.96	08-25-2010	26.17	270.79
		05-09-2011	22.21	274.75
		05-23-2012	23.49	273.47
		03-05-2014	24.88	272.08
		01-09-2017	23.66	273.30
		08-17-2017	26.10	270.86
		11-14-2017	25.69	271.27
		02-13-2018	22.45	274.51
MW-4	296.56	08-25-2010	25.76	270.80
		05-09-2011	21.77	274.79
		05-23-2012	23.10	273.46
		03-05-2014	24.47	272.09
		01-09-2017	23.21	273.35
		08-17-2017	25.67	270.89
		11-14-2017	25.32	271.24
		02-13-2018	22.10	274.46
MW-5	289.85	08-25-2010	18.71	271.14
		05-09-2011	14.96	274.89
		05-23-2012	16.18	273.67
		03-05-2014	17.49	272.36
		01-09-2017	17.36	272.49
		08-17-2017	18.71	271.14
		11-14-2017	18.51	271.34
		02-13-2018	15.52	274.33

Well ID	Relative Casing Elevation (ft.)	Date of Measurement	Depth to Groundwater (ft.)	Relative Groundwater Elevation (ft.)
MW-6	289.94	08-25-2010	18.91	271.03
		05-09-2011	15.06	274.88
		05-23-2012	16.30	273.64
		03-05-2014	17.54	272.40
		01-09-2017	16.44	273.50
		08-17-2017	18.81	271.13
		11-14-2017	18.71	271.23
		02-13-2018	15.53	274.41
MW-7	289.72	08-25-2010	19.14	270.58
		05-09-2011	15.22	274.50
		05-23-2012	16.41	273.31
		03-05-2014	17.85	271.87
		01-09-2017	16.61	273.11
		08-17-2017	19.11	270.61
		11-14-2017	18.68	271.04
		02-13-2018	15.51	274.21
MW-8	290.56	08-25-2010	Not Installed	
		05-09-2011	16.02	274.54
		05-23-2012	17.21	273.35
		03-05-2014	18.69	271.87
		01-09-2017	17.47	273.09
		08-17-2017	19.91	270.65
		11-14-2017	19.46	271.10
		02-13-2018	16.30	274.26
MW-9	298.90	08-25-2010	Not Installed	
		05-09-2011		
		05-23-2012		
		03-05-2014	26.30	272.60
		01-09-2017	25.10	273.80
		08-17-2017	27.55	271.35
		11-14-2017	27.52	271.38
		02-13-2018	24.35	274.55
MW-10	297.49	08-25-2010	Not Installed	
		05-09-2011		
		05-23-2012		
		03-05-2014	25.19	272.30
		01-12-2017	24.17	273.32
		08-18-2017	26.21	271.28
		11-14-2017	25.91	271.58
		02-13-2018	22.85	274.64

Groundwater Sampling and Analysis

The DPE system was shut down on February 9, 2018 and groundwater was sampled by ZGA on February 13 to February 14, 2018. Each groundwater monitoring well was purged using a portable bladder pump equipped with a disposable bladder and dedicated tubing. The pump was lowered gently into the water column to a depth that corresponded with the highest concentration of PCE observed in that well in soil

during the remedial investigation (ZGA Project No. 1001.22). If no PCE was measured in soil in a well, the pump was set at the mid-point of the screen. Flow rates were maintained at approximately 0.1 to 0.3 liters per minute. During the purging process, groundwater quality parameters Including temperature, electrical conductivity (EC), pH, turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) were measured at regular Intervals using a Horiba U-22 water-quality meter equipped with a flow cell. Purging at a given well was considered complete when: DO and turbidity were within +/- 10% variance; pH was within +/- 0.1 variance; EC was with +/- 3% variance; and ORP was within +/- 10 mV. All non-disposable pump components were decontaminated after sampling by rinsing with potable water, scrubbing in a solution of Alconox™ and potable water, and a final rinse with distilled water. Purge water and decontamination water were stored in a sealed, labeled 50-gallon drum at the Site and are awaiting classification and off-site disposal.

Groundwater samples were collected after parameter stabilization into laboratory supplied glass 40 mL VOA vials preserved with hydrochloric acid. Sample containers were labeled with the well ID, the project name, the project number, the date, and the time of collection. Sample containers were immediately stored in a chilled cooler and were later transferred to a dedicated refrigerator in our office. Sample containers were transported to Field Environmental Instruments (FEI) in Woodinville in a chilled cooler under chain of custody procedures. FEI functioned as an intermediary to the analytical laboratory: Environmental Science Corporation (ESC), a Washington State accredited laboratory. All samples were analyzed by ESC at their central laboratory, located in Tennessee.

The analytical results are summarized in Table 3, and are compared to cleanup levels defined in the Model Toxics Control Act (WAC 173-340).

Groundwater Sampling Analytical Results (February 2018)

The following results were drawn from the analysis of 10 groundwater samples. The executed chain-of-custody forms and laboratory analytical certificates are provided in Appendix B.

- PCE was detected at concentrations that exceeded the applicable cleanup level (5 µg/L) in three wells: MW-3 (6.78 ug/L), MW-4 (28.5 µg/L), and MW-8 (16.1 µg/L and duplicate 14.7 ug/L).
- PCE was detected at concentrations above the laboratory reporting limit (RDL) but below the applicable cleanup level in five wells: MW-1 (0.300 µg/L), MW-5 (0.220 ug/L), MW-6 (3.21 µg/L), and MW-7 (1.93 µg/L).
- PCE was not detected above the RDL in three wells: MW-2, MW-9, and MW-10.

Chloroform was reported at concentrations of 9.49 µg/L (MW-1) and 1.57 µg/L (MW-7) which exceed the MTCA Method B cleanup level (1.41 µg/L). Chloroform was reported above the RDL but below the cleanup level in MW-3, MW-8, MW-9, and MW-10. Bromodichloromethane was reported at a concentration of 0.527 µg/L in MW-1, which is below the MTCA Method B cleanup level (0.706 µg/L. No other VOC were reported above laboratory RDLs.

Chloroform and bromodichloromethane are disinfection by-products commonly produced during the chlorination of drinking water and wastewater (Ivahnenko and Zogorski, 2006; Centers for Disease Control[1]). Potable water to the Site and vicinity is provided by the Alderwood Water and Waste Water District (AWWD). According to the 2016 AWWD Water Quality Report, the average concentration of chloroform and bromodichloromethane measured in the public water supply was 37.2 µg/L and 1.9 µg/L.

[1] https://www.atsdr.cdc.gov/phs/phs.asp?id=706&tid=127

Based on these results, the presence of chloroform and bromodichloromethane in groundwater at the Site is likely derived from leaky public water supply piping and irrigation.

Table 3. Groundwater Analytical Results

Monitoring Well	Date	Volatile Organic Compounds (µg/L)			
		PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE
MW-1	06-17-09	**12**	ND<1	4.8	ND<1
	08-10-10	ND<1	**3.2**	**1.4**	ND<1
	05-10-11	**1.3**	ND<1	ND<1	ND<1
	05-23-12	ND<2	ND<2	ND<2	ND<2
	03-05-14	ND<2	ND<2	ND<2	ND<2
	01-11-17	**0.508**	ND<1	ND<1	ND<1
	08-18-17	**0.431**	ND<1	ND<1	ND<1
	11-15-17	**0.231**	ND<0.5	ND<0.5	ND<0.5
	02-13-18	**0.300**	ND<0.5	ND<0.5	ND<0.5
MW-2	06-16-09	ND<1	ND<1	ND<1	ND<1
	08-12-10	ND<1	ND<1	ND<1	ND<1
	05-10-11	ND<1	ND<1	ND<1	ND<1
	05-24-12	ND<2	ND<2	ND<2	ND<2
	03-05-14	ND<2	ND<2	ND<2	ND<2
	01-11-17	ND<1	ND<1	ND<1	ND<1
	08-17-17	ND<1	ND<1	ND<1	ND<1
	11-14-17	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	02-13-18	ND<0.5	ND<0.5	ND<0.5	ND<0.5
MW-3	06-17-09	**6.6**	ND<1	ND<1	ND<1
	08-12-10	**6.4**	ND<1	ND<1	ND<1
	05-10-11	**9.3**	ND<1	ND<1	ND<1
	05-24-12	**15**	ND<2	ND<2	ND<2
	03-07-14	**5.6**	ND<2	ND<2	ND<2
	01-12-17	**9.28**	ND<1	ND<1	ND<1
	08-21-17	**2.81**	ND<1	ND<1	ND<1
	11-16-17	**4.96**	ND<0.5	ND<0.5	ND<0.5
	02-14-18	**6.78**	ND<0.5	ND<0.5	ND<0.5

Monitoring Well	Date	Volatile Organic Compounds (µg/L)			
		PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE
MW-4	10-31-07	**45**	ND<1	ND<1	ND<1
	06-16-09	**170**	ND<1	ND<1	ND<1
	08-12-10	**140**	ND<1	ND<1	ND<1
	05-10-11	**110**	ND<1	ND<1	ND<1
	05-24-12	**140**	ND<2	ND<2	ND<2
	03-07-14	**44**	ND<2	ND<2	ND<2
	01-13-17	**96.1**	ND<1	ND<1	ND<1
	01-13-17 DUP	**95.8**	ND<1	ND<1	ND<1
	08-21-17	**76.5**	ND<1	ND<1	ND<1
	11-16-17	**50.8**	ND<0.5	ND<0.5	ND<0.5
	11-16-17 DUP	**56.9**	ND<0.5	ND<0.5	ND<0.5
	02-14-18	**28.5**	ND<0.5	ND<0.5	ND<0.5
MW-5	08-10-10	**0.61**	ND<1	ND<1	ND<1
	05-09-11	**0.60**	ND<1	ND<1	ND<1
	03-06-14	ND<2	ND<2	ND<2	ND<2
	01-12-17	ND<1	ND<1	ND<1	ND<1
	08-18-17	**0.281**	ND<1	ND<1	ND<1
	11-15-17	**0.259**	ND<0.5	ND<0.5	ND<0.5
	02-13-18	**0.220**	ND<0.5	ND<0.5	ND<0.5
MW-6	08-10-10	ND<1	ND<1	ND<1	ND<1
	05-09-11	**2.2**	ND<1	ND<1	ND<1
	03-06-14	**4.7**	ND<2	ND<2	ND<2
	01-12-17	**1.07**	ND<1	ND<1	ND<1
	08-21-17	**0.674**	ND<1	ND<1	ND<1
	11-15-17	**2.37**	ND<0.5	ND<0.5	ND<0.5
	02-14-18	**3.21**	ND<0.5	ND<0.5	ND<0.5
MW-7	08-10-10	**0.55**	ND<1	ND<1	ND<1
	05-09-11	ND<1	ND<1	ND<1	ND<1
	03-06-14	**8.0**	ND<2	ND<2	ND<2
	01-12-17	**0.948**	ND<1	ND<1	ND<1
	08-21-17	**1.49**	ND<1	ND<1	ND<1
	11-15-17	**3.8**	ND<0.5	ND<0.5	ND<0.5
	02-14-18	**1.93**	ND<0.5	ND<0.5	ND<0.5
MW-8	05-10-11	**22**	ND<1	ND<1	ND<1
	05-24-12	**36**	ND<2	ND<2	ND<2
	03-07-14	**13**	ND<2	ND<2	ND<2
	01-13-17	**26.4**	ND<1	ND<1	ND<1
	08-21-17	**25.1**	ND<1	ND<1	**0.250**
	11-16-17	**19.2**	ND<0.5	ND<0.5	ND<0.5
	02-14-18	**16.1**	ND<0.5	ND<0.5	ND<0.5
	02-14-18 DUP	**14.7**	ND<0.5	ND<0.5	ND<0.5
MW-9	03-05-14	ND<2	ND<2	ND<2	ND<2
	01-11-17	ND<1	ND<1	ND<1	ND<1
	08-18-17	ND<1	ND<1	ND<1	ND<1
	11-14-17	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	03-06-14	ND<2	ND<2	ND<2	ND<2
	02-13-18	ND<0.5	ND<0.5	ND<0.5	ND<0.5

Monitoring Well	Date	Volatile Organic Compounds (µg/L)			
		PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE
MW-10	01-12-17	ND<1	ND<1	ND<1	ND<1
	08-18-17	ND<1	ND<1	ND<1	ND<1
	11-14-17	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	06-16-09	ND<1	ND<1	ND<1	ND<1
	02-13-18	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Equipment Blank	08-12-10	ND<1	ND<1	ND<1	ND<1
	01-13-17	ND<1	ND<1	ND<1	ND<1
	11-16-17	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	02-14-18	ND<0.5	ND<0.5	ND<0.5	ND<0.5
DPE Effluent	03-08-17	0.748	ND<1	ND<1	ND<1
	11-12-17	0.286	ND<0.5	ND<0.5	ND<0.5
MTCA Cleanup Level		***5***	***5***	***16***	***160***

ug/L: micrograms per liter (parts-per-billion); ND<: Not detected above indicated laboratory reporting detection limit; Shaded values exceed MTCA Method A cleanup levels. [A]: Method A cleanup level. [B]: Method B cleanup level. Please refer to Appendix C for the complete set of analytes and analytical results for VOC.

Conclusions

ZGA completed a groundwater monitoring sampling event in February 2018. Historically, PCE has exceeded cleanup levels in MW-3, MW-4 and MW-8. The concentration of PCE fell to a concentration below the cleanup level in MW-3 for the two previous sampling events, but slightly exceeded the cleanup level in the February 2018 sampling event. The concentrations of PCE in MW-4 and MW-8 remain above cleanup levels but appear to be declining.

ZGA will continue to monitor the effectiveness of the DPE system by completing additional groundwater monitoring events on a quarterly basis going forward.

References

Ivahnenko, T. and Zogorski, J.S., 2006, Sources and occurrence of Chloroform and Other Trihalomethanes in Drinking-Water Supply Wells in the United States, 1986-2001, U.S. Geological Survey, Scientific Investigations Report 2006-5015.

APPENDIX A

Figures

RETT HIGHWAY)

EZELL'S

EXI
BUI

MW–10

MW–1

MW–5

MW–2

MW–6

MW–7

MW–8

MW–4

MW–3

MW–9

DPE–4

DPE–3

DPE–1

DPE–2

196.02'

440.25'

144.22'

62.13'

56'

50'

N 87°10'36" W

274.5

274.6

274.4

274.3

OSAKA GRILL

MONEY TREE

PRIME CLEANERS

FORMER DRY CLEANER

EXISTING BUILDING

VAN

N

40 0 20 40

SCALE IN FEET

LEGEND :

MW–1 (273.40)	*GROUND WATER MONITORING WELL – APPROXIMATE LOCATION AND GROUNDWATER ELEVATION*
DPE-3	*DUAL-PHASE EXTRACTION WELL – APPROXIMATE LOCATION*
273.40	*INFERRED GROUNDWATER CONTOURS*
	INFERRED GROUNDWATER FLOW DIRECTION
	INFERRED EXTENT OF PCE CONTAMINATION IN GROUNDWATER EXCEEDING MTCA METHOD A CLEANUP LEVEL

PCE: TETRACHLOROETHYLENE
UG/L: MICROGRAMS PER LITER
J: LABORATORY QUALIFIER: "The identification of the analyte is acceptable; the reported value is an estimate."
V3: LABORATORY QUALIFIER: "The internal standard exhibited poor recovery due to sample matrix interference. The analytical results will be biased high. BDL [Below Detection Limits] results will be unaffected.

PRIME CLEANERS
18001 Bothell Everett Highway
Bothell, Washington

GROUNDWATER CONTOUR MAP

DATE: FEBRUARY 2018 Job No. 1001.25

Zipper Geo Associates, LLC
19023 36th Ave. W.,Suite D
Lynnwood, WA

FIGURE 1
SHT. 1 of 1

Appendix B

Laboratory Report

ANALYTICAL REPORT

February 21, 2018

Zipper Geo Associates - Lynnwood, WA

Sample Delivery Group:	L971022
Samples Received:	02/16/2018
Project Number:	1001.25
Description:	Prime Cleaners

Report To: Jon Einarsen
19019 36th Ave. W.
Ste. E
Lynnwood, WA 98036

Entire Report Reviewed By: Brian Ford

Brian Ford
Technical Service Representative

TABLE OF CONTENTS

MW-1 L971022-01 GW

Collected by: Evelyn Conrado | Collected date/time: 02/13/18 13:30 | Received date/time: 02/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1074633	1	02/17/18 02:16	02/17/18 02:16	LRL

MW-2 L971022-02 GW

Collected by: Evelyn Conrado | Collected date/time: 02/13/18 12:10 | Received date/time: 02/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1074633	1	02/17/18 02:38	02/17/18 02:38	LRL

MW-3 L971022-03 GW

Collected by: Evelyn Conrado | Collected date/time: 02/14/18 12:15 | Received date/time: 02/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1074633	1	02/17/18 02:59	02/17/18 02:59	LRL

MW-4 L971022-04 GW

Collected by: Evelyn Conrado | Collected date/time: 02/14/18 15:15 | Received date/time: 02/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1074633	1	02/17/18 03:21	02/17/18 03:21	LRL

MW-5 L971022-05 GW

Collected by: Evelyn Conrado | Collected date/time: 02/13/18 14:50 | Received date/time: 02/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1074633	1	02/17/18 03:43	02/17/18 03:43	LRL

MW-6 L971022-06 GW

Collected by: Evelyn Conrado | Collected date/time: 02/14/18 08:55 | Received date/time: 02/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1074633	1	02/17/18 04:04	02/17/18 04:04	LRL

MW-7 L971022-07 GW

Collected by: Evelyn Conrado | Collected date/time: 02/14/18 10:40 | Received date/time: 02/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1074633	1	02/17/18 04:26	02/17/18 04:26	LRL

MW-8 L971022-08 GW

Collected by: Evelyn Conrado | Collected date/time: 02/14/18 13:35 | Received date/time: 02/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1074633	1	02/17/18 04:47	02/17/18 04:47	LRL

MW-9 L971022-09 GW

Collected by: Evelyn Conrado | Collected date/time: 02/13/18 08:57 | Received date/time: 02/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1074633	1	02/17/18 05:09	02/17/18 05:09	LRL

MW-10 L971022-10 GW

Collected by: Evelyn Conrado | Collected date/time: 02/13/18 10:40 | Received date/time: 02/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1074633	1	02/17/18 05:31	02/17/18 05:31	LRL

DUPLICATE L971022-11 GW

Collected by: Evelyn Conrado | Collected date/time: 02/14/18 00:00 | Received date/time: 02/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1074633	1	02/17/18 06:19	02/17/18 06:19	LRL

EQUIPMENT BLANK L971022-12 GW

Collected by: Evelyn Conrado | Collected date/time: 02/14/18 14:14 | Received date/time: 02/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1074633	1	02/17/18 06:40	02/17/18 06:40	LRL

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	02/17/2018 02:16	WG1074633
Acrylonitrile	U		0.873	5.00	1	02/17/2018 02:16	WG1074633
Benzene	U		0.0896	0.500	1	02/17/2018 02:16	WG1074633
Bromobenzene	U		0.133	0.500	1	02/17/2018 02:16	WG1074633
Bromodichloromethane	0.527		0.0800	0.500	1	02/17/2018 02:16	WG1074633
Bromochloromethane	U		0.145	0.500	1	02/17/2018 02:16	WG1074633
Bromoform	U		0.186	0.500	1	02/17/2018 02:16	WG1074633
Bromomethane	U		0.157	2.50	1	02/17/2018 02:16	WG1074633
n-Butylbenzene	U		0.143	0.500	1	02/17/2018 02:16	WG1074633
sec-Butylbenzene	U		0.134	0.500	1	02/17/2018 02:16	WG1074633
tert-Butylbenzene	U		0.183	0.500	1	02/17/2018 02:16	WG1074633
Carbon disulfide	U	J0	0.101	0.500	1	02/17/2018 02:16	WG1074633
Carbon tetrachloride	U		0.159	0.500	1	02/17/2018 02:16	WG1074633
Chlorobenzene	U		0.140	0.500	1	02/17/2018 02:16	WG1074633
Chlorodibromomethane	U		0.128	0.500	1	02/17/2018 02:16	WG1074633
Chloroethane	U		0.141	2.50	1	02/17/2018 02:16	WG1074633
Chloroform	9.49		0.0860	0.500	1	02/17/2018 02:16	WG1074633
Chloromethane	U		0.153	1.25	1	02/17/2018 02:16	WG1074633
2-Chlorotoluene	U		0.111	0.500	1	02/17/2018 02:16	WG1074633
4-Chlorotoluene	U		0.0972	0.500	1	02/17/2018 02:16	WG1074633
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/17/2018 02:16	WG1074633
1,2-Dibromoethane	U		0.193	0.500	1	02/17/2018 02:16	WG1074633
Dibromomethane	U		0.117	0.500	1	02/17/2018 02:16	WG1074633
1,2-Dichlorobenzene	U		0.101	0.500	1	02/17/2018 02:16	WG1074633
1,3-Dichlorobenzene	U		0.130	0.500	1	02/17/2018 02:16	WG1074633
1,4-Dichlorobenzene	U		0.121	0.500	1	02/17/2018 02:16	WG1074633
Dichlorodifluoromethane	U		0.127	2.50	1	02/17/2018 02:16	WG1074633
1,1-Dichloroethane	U		0.114	0.500	1	02/17/2018 02:16	WG1074633
1,2-Dichloroethane	U		0.108	0.500	1	02/17/2018 02:16	WG1074633
1,1-Dichloroethene	U		0.188	0.500	1	02/17/2018 02:16	WG1074633
cis-1,2-Dichloroethene	U		0.0933	0.500	1	02/17/2018 02:16	WG1074633
trans-1,2-Dichloroethene	U		0.152	0.500	1	02/17/2018 02:16	WG1074633
1,2-Dichloropropane	U		0.190	0.500	1	02/17/2018 02:16	WG1074633
1,1-Dichloropropene	U		0.128	0.500	1	02/17/2018 02:16	WG1074633
1,3-Dichloropropane	U		0.147	1.00	1	02/17/2018 02:16	WG1074633
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/17/2018 02:16	WG1074633
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/17/2018 02:16	WG1074633
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	02/17/2018 02:16	WG1074633
2,2-Dichloropropane	U		0.0929	0.500	1	02/17/2018 02:16	WG1074633
Di-isopropyl ether	U		0.0924	0.500	1	02/17/2018 02:16	WG1074633
Ethylbenzene	U		0.158	0.500	1	02/17/2018 02:16	WG1074633
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/17/2018 02:16	WG1074633
2-Hexanone	U		0.757	5.00	1	02/17/2018 02:16	WG1074633
n-Hexane	U		0.305	5.00	1	02/17/2018 02:16	WG1074633
Iodomethane	U		0.377	10.0	1	02/17/2018 02:16	WG1074633
Isopropylbenzene	U		0.126	0.500	1	02/17/2018 02:16	WG1074633
p-Isopropyltoluene	U		0.138	0.500	1	02/17/2018 02:16	WG1074633
2-Butanone (MEK)	U		1.28	5.00	1	02/17/2018 02:16	WG1074633
Methylene Chloride	U		1.07	2.50	1	02/17/2018 02:16	WG1074633
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/17/2018 02:16	WG1074633
Methyl tert-butyl ether	U		0.102	0.500	1	02/17/2018 02:16	WG1074633
Naphthalene	U		0.174	2.50	1	02/17/2018 02:16	WG1074633
n-Propylbenzene	U		0.162	0.500	1	02/17/2018 02:16	WG1074633
Styrene	U		0.117	0.500	1	02/17/2018 02:16	WG1074633
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/17/2018 02:16	WG1074633
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/17/2018 02:16	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/17/2018 02:16	WG1074633
Tetrachloroethene	0.300	J	0.199	0.500	1	02/17/2018 02:16	WG1074633
Toluene	U		0.412	0.500	1	02/17/2018 02:16	WG1074633
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/17/2018 02:16	WG1074633
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/17/2018 02:16	WG1074633
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/17/2018 02:16	WG1074633
1,1,2-Trichloroethane	U		0.186	0.500	1	02/17/2018 02:16	WG1074633
Trichloroethene	U		0.153	0.500	1	02/17/2018 02:16	WG1074633
Trichlorofluoromethane	U		0.130	2.50	1	02/17/2018 02:16	WG1074633
1,2,3-Trichloropropane	U		0.247	2.50	1	02/17/2018 02:16	WG1074633
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/17/2018 02:16	WG1074633
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/17/2018 02:16	WG1074633
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/17/2018 02:16	WG1074633
Vinyl acetate	U		0.645	5.00	1	02/17/2018 02:16	WG1074633
Vinyl chloride	U		0.118	0.500	1	02/17/2018 02:16	WG1074633
Xylenes, Total	U		0.316	1.50	1	02/17/2018 02:16	WG1074633
(S) Toluene-d8	*107*			*80.0-120*		*02/17/2018 02:16*	WG1074633
(S) Dibromofluoromethane	*86.2*			*76.0-123*		*02/17/2018 02:16*	WG1074633
(S) 4-Bromofluorobenzene	*102*			*80.0-120*		*02/17/2018 02:16*	WG1074633

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	02/17/2018 02:38	WG1074633
Acrylonitrile	U		0.873	5.00	1	02/17/2018 02:38	WG1074633
Benzene	U		0.0896	0.500	1	02/17/2018 02:38	WG1074633
Bromobenzene	U		0.133	0.500	1	02/17/2018 02:38	WG1074633
Bromodichloromethane	U		0.0800	0.500	1	02/17/2018 02:38	WG1074633
Bromochloromethane	U		0.145	0.500	1	02/17/2018 02:38	WG1074633
Bromoform	U		0.186	0.500	1	02/17/2018 02:38	WG1074633
Bromomethane	U		0.157	2.50	1	02/17/2018 02:38	WG1074633
n-Butylbenzene	U		0.143	0.500	1	02/17/2018 02:38	WG1074633
sec-Butylbenzene	U		0.134	0.500	1	02/17/2018 02:38	WG1074633
tert-Butylbenzene	U		0.183	0.500	1	02/17/2018 02:38	WG1074633
Carbon disulfide	U	J0	0.101	0.500	1	02/17/2018 02:38	WG1074633
Carbon tetrachloride	U		0.159	0.500	1	02/17/2018 02:38	WG1074633
Chlorobenzene	U		0.140	0.500	1	02/17/2018 02:38	WG1074633
Chlorodibromomethane	U		0.128	0.500	1	02/17/2018 02:38	WG1074633
Chloroethane	U		0.141	2.50	1	02/17/2018 02:38	WG1074633
Chloroform	U		0.0860	0.500	1	02/17/2018 02:38	WG1074633
Chloromethane	U		0.153	1.25	1	02/17/2018 02:38	WG1074633
2-Chlorotoluene	U		0.111	0.500	1	02/17/2018 02:38	WG1074633
4-Chlorotoluene	U		0.0972	0.500	1	02/17/2018 02:38	WG1074633
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/17/2018 02:38	WG1074633
1,2-Dibromoethane	U		0.193	0.500	1	02/17/2018 02:38	WG1074633
Dibromomethane	U		0.117	0.500	1	02/17/2018 02:38	WG1074633
1,2-Dichlorobenzene	U		0.101	0.500	1	02/17/2018 02:38	WG1074633
1,3-Dichlorobenzene	U		0.130	0.500	1	02/17/2018 02:38	WG1074633
1,4-Dichlorobenzene	U		0.121	0.500	1	02/17/2018 02:38	WG1074633
Dichlorodifluoromethane	U		0.127	2.50	1	02/17/2018 02:38	WG1074633
1,1-Dichloroethane	U		0.114	0.500	1	02/17/2018 02:38	WG1074633
1,2-Dichloroethane	U		0.108	0.500	1	02/17/2018 02:38	WG1074633
1,1-Dichloroethene	U		0.188	0.500	1	02/17/2018 02:38	WG1074633
cis-1,2-Dichloroethene	U		0.0933	0.500	1	02/17/2018 02:38	WG1074633
trans-1,2-Dichloroethene	U		0.152	0.500	1	02/17/2018 02:38	WG1074633
1,2-Dichloropropane	U		0.190	0.500	1	02/17/2018 02:38	WG1074633
1,1-Dichloropropene	U		0.128	0.500	1	02/17/2018 02:38	WG1074633
1,3-Dichloropropane	U		0.147	1.00	1	02/17/2018 02:38	WG1074633
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/17/2018 02:38	WG1074633
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/17/2018 02:38	WG1074633
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	02/17/2018 02:38	WG1074633
2,2-Dichloropropane	U		0.0929	0.500	1	02/17/2018 02:38	WG1074633
Di-isopropyl ether	U		0.0924	0.500	1	02/17/2018 02:38	WG1074633
Ethylbenzene	U		0.158	0.500	1	02/17/2018 02:38	WG1074633
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/17/2018 02:38	WG1074633
2-Hexanone	U		0.757	5.00	1	02/17/2018 02:38	WG1074633
n-Hexane	U		0.305	5.00	1	02/17/2018 02:38	WG1074633
Iodomethane	U		0.377	10.0	1	02/17/2018 02:38	WG1074633
Isopropylbenzene	U		0.126	0.500	1	02/17/2018 02:38	WG1074633
p-Isopropyltoluene	U		0.138	0.500	1	02/17/2018 02:38	WG1074633
2-Butanone (MEK)	U		1.28	5.00	1	02/17/2018 02:38	WG1074633
Methylene Chloride	U		1.07	2.50	1	02/17/2018 02:38	WG1074633
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/17/2018 02:38	WG1074633
Methyl tert-butyl ether	U		0.102	0.500	1	02/17/2018 02:38	WG1074633
Naphthalene	U		0.174	2.50	1	02/17/2018 02:38	WG1074633
n-Propylbenzene	U		0.162	0.500	1	02/17/2018 02:38	WG1074633
Styrene	U		0.117	0.500	1	02/17/2018 02:38	WG1074633
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/17/2018 02:38	WG1074633
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/17/2018 02:38	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/17/2018 02:38	WG1074633
Tetrachloroethene	U		0.199	0.500	1	02/17/2018 02:38	WG1074633
Toluene	U		0.412	0.500	1	02/17/2018 02:38	WG1074633
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/17/2018 02:38	WG1074633
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/17/2018 02:38	WG1074633
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/17/2018 02:38	WG1074633
1,1,2-Trichloroethane	U		0.186	0.500	1	02/17/2018 02:38	WG1074633
Trichloroethene	U		0.153	0.500	1	02/17/2018 02:38	WG1074633
Trichlorofluoromethane	U		0.130	2.50	1	02/17/2018 02:38	WG1074633
1,2,3-Trichloropropane	U		0.247	2.50	1	02/17/2018 02:38	WG1074633
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/17/2018 02:38	WG1074633
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/17/2018 02:38	WG1074633
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/17/2018 02:38	WG1074633
Vinyl acetate	U		0.645	5.00	1	02/17/2018 02:38	WG1074633
Vinyl chloride	U		0.118	0.500	1	02/17/2018 02:38	WG1074633
Xylenes, Total	U		0.316	1.50	1	02/17/2018 02:38	WG1074633
(S) Toluene-d8	*107*			*80.0-120*		*02/17/2018 02:38*	WG1074633
(S) Dibromofluoromethane	*83.5*			*76.0-123*		*02/17/2018 02:38*	WG1074633
(S) 4-Bromofluorobenzene	*103*			*80.0-120*		*02/17/2018 02:38*	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	02/17/2018 02:59	WG1074633
Acrylonitrile	U		0.873	5.00	1	02/17/2018 02:59	WG1074633
Benzene	U		0.0896	0.500	1	02/17/2018 02:59	WG1074633
Bromobenzene	U		0.133	0.500	1	02/17/2018 02:59	WG1074633
Bromodichloromethane	U		0.0800	0.500	1	02/17/2018 02:59	WG1074633
Bromochloromethane	U		0.145	0.500	1	02/17/2018 02:59	WG1074633
Bromoform	U		0.186	0.500	1	02/17/2018 02:59	WG1074633
Bromomethane	U		0.157	2.50	1	02/17/2018 02:59	WG1074633
n-Butylbenzene	U		0.143	0.500	1	02/17/2018 02:59	WG1074633
sec-Butylbenzene	U		0.134	0.500	1	02/17/2018 02:59	WG1074633
tert-Butylbenzene	U		0.183	0.500	1	02/17/2018 02:59	WG1074633
Carbon disulfide	U	J0	0.101	0.500	1	02/17/2018 02:59	WG1074633
Carbon tetrachloride	U		0.159	0.500	1	02/17/2018 02:59	WG1074633
Chlorobenzene	U		0.140	0.500	1	02/17/2018 02:59	WG1074633
Chlorodibromomethane	U		0.128	0.500	1	02/17/2018 02:59	WG1074633
Chloroethane	U		0.141	2.50	1	02/17/2018 02:59	WG1074633
Chloroform	0.214	J	0.0860	0.500	1	02/17/2018 02:59	WG1074633
Chloromethane	U		0.153	1.25	1	02/17/2018 02:59	WG1074633
2-Chlorotoluene	U		0.111	0.500	1	02/17/2018 02:59	WG1074633
4-Chlorotoluene	U		0.0972	0.500	1	02/17/2018 02:59	WG1074633
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/17/2018 02:59	WG1074633
1,2-Dibromoethane	U		0.193	0.500	1	02/17/2018 02:59	WG1074633
Dibromomethane	U		0.117	0.500	1	02/17/2018 02:59	WG1074633
1,2-Dichlorobenzene	U		0.101	0.500	1	02/17/2018 02:59	WG1074633
1,3-Dichlorobenzene	U		0.130	0.500	1	02/17/2018 02:59	WG1074633
1,4-Dichlorobenzene	U		0.121	0.500	1	02/17/2018 02:59	WG1074633
Dichlorodifluoromethane	U		0.127	2.50	1	02/17/2018 02:59	WG1074633
1,1-Dichloroethane	U		0.114	0.500	1	02/17/2018 02:59	WG1074633
1,2-Dichloroethane	U		0.108	0.500	1	02/17/2018 02:59	WG1074633
1,1-Dichloroethene	U		0.188	0.500	1	02/17/2018 02:59	WG1074633
cis-1,2-Dichloroethene	U		0.0933	0.500	1	02/17/2018 02:59	WG1074633
trans-1,2-Dichloroethene	U		0.152	0.500	1	02/17/2018 02:59	WG1074633
1,2-Dichloropropane	U		0.190	0.500	1	02/17/2018 02:59	WG1074633
1,1-Dichloropropene	U		0.128	0.500	1	02/17/2018 02:59	WG1074633
1,3-Dichloropropane	U		0.147	1.00	1	02/17/2018 02:59	WG1074633
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/17/2018 02:59	WG1074633
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/17/2018 02:59	WG1074633
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	02/17/2018 02:59	WG1074633
2,2-Dichloropropane	U		0.0929	0.500	1	02/17/2018 02:59	WG1074633
Di-isopropyl ether	U		0.0924	0.500	1	02/17/2018 02:59	WG1074633
Ethylbenzene	U		0.158	0.500	1	02/17/2018 02:59	WG1074633
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/17/2018 02:59	WG1074633
2-Hexanone	U		0.757	5.00	1	02/17/2018 02:59	WG1074633
n-Hexane	U		0.305	5.00	1	02/17/2018 02:59	WG1074633
Iodomethane	U		0.377	10.0	1	02/17/2018 02:59	WG1074633
Isopropylbenzene	U		0.126	0.500	1	02/17/2018 02:59	WG1074633
p-Isopropyltoluene	U		0.138	0.500	1	02/17/2018 02:59	WG1074633
2-Butanone (MEK)	U		1.28	5.00	1	02/17/2018 02:59	WG1074633
Methylene Chloride	U		1.07	2.50	1	02/17/2018 02:59	WG1074633
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/17/2018 02:59	WG1074633
Methyl tert-butyl ether	U		0.102	0.500	1	02/17/2018 02:59	WG1074633
Naphthalene	U		0.174	2.50	1	02/17/2018 02:59	WG1074633
n-Propylbenzene	U		0.162	0.500	1	02/17/2018 02:59	WG1074633
Styrene	U		0.117	0.500	1	02/17/2018 02:59	WG1074633
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/17/2018 02:59	WG1074633
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/17/2018 02:59	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/17/2018 02:59	WG1074633
Tetrachloroethene	6.78		0.199	0.500	1	02/17/2018 02:59	WG1074633
Toluene	U		0.412	0.500	1	02/17/2018 02:59	WG1074633
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/17/2018 02:59	WG1074633
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/17/2018 02:59	WG1074633
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/17/2018 02:59	WG1074633
1,1,2-Trichloroethane	U		0.186	0.500	1	02/17/2018 02:59	WG1074633
Trichloroethene	U		0.153	0.500	1	02/17/2018 02:59	WG1074633
Trichlorofluoromethane	U		0.130	2.50	1	02/17/2018 02:59	WG1074633
1,2,3-Trichloropropane	U		0.247	2.50	1	02/17/2018 02:59	WG1074633
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/17/2018 02:59	WG1074633
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/17/2018 02:59	WG1074633
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/17/2018 02:59	WG1074633
Vinyl acetate	U		0.645	5.00	1	02/17/2018 02:59	WG1074633
Vinyl chloride	U		0.118	0.500	1	02/17/2018 02:59	WG1074633
Xylenes, Total	U		0.316	1.50	1	02/17/2018 02:59	WG1074633
(S) Toluene-d8	*109*			*80.0-120*		*02/17/2018 02:59*	WG1074633
(S) Dibromofluoromethane	*81.4*			*76.0-123*		*02/17/2018 02:59*	WG1074633
(S) 4-Bromofluorobenzene	*104*			*80.0-120*		*02/17/2018 02:59*	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	02/17/2018 03:21	WG1074633
Acrylonitrile	U		0.873	5.00	1	02/17/2018 03:21	WG1074633
Benzene	U		0.0896	0.500	1	02/17/2018 03:21	WG1074633
Bromobenzene	U		0.133	0.500	1	02/17/2018 03:21	WG1074633
Bromodichloromethane	U		0.0800	0.500	1	02/17/2018 03:21	WG1074633
Bromochloromethane	U		0.145	0.500	1	02/17/2018 03:21	WG1074633
Bromoform	U		0.186	0.500	1	02/17/2018 03:21	WG1074633
Bromomethane	U		0.157	2.50	1	02/17/2018 03:21	WG1074633
n-Butylbenzene	U		0.143	0.500	1	02/17/2018 03:21	WG1074633
sec-Butylbenzene	U		0.134	0.500	1	02/17/2018 03:21	WG1074633
tert-Butylbenzene	U		0.183	0.500	1	02/17/2018 03:21	WG1074633
Carbon disulfide	U	J0	0.101	0.500	1	02/17/2018 03:21	WG1074633
Carbon tetrachloride	U		0.159	0.500	1	02/17/2018 03:21	WG1074633
Chlorobenzene	U		0.140	0.500	1	02/17/2018 03:21	WG1074633
Chlorodibromomethane	U		0.128	0.500	1	02/17/2018 03:21	WG1074633
Chloroethane	U		0.141	2.50	1	02/17/2018 03:21	WG1074633
Chloroform	U		0.0860	0.500	1	02/17/2018 03:21	WG1074633
Chloromethane	U		0.153	1.25	1	02/17/2018 03:21	WG1074633
2-Chlorotoluene	U		0.111	0.500	1	02/17/2018 03:21	WG1074633
4-Chlorotoluene	U		0.0972	0.500	1	02/17/2018 03:21	WG1074633
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/17/2018 03:21	WG1074633
1,2-Dibromoethane	U		0.193	0.500	1	02/17/2018 03:21	WG1074633
Dibromomethane	U		0.117	0.500	1	02/17/2018 03:21	WG1074633
1,2-Dichlorobenzene	U		0.101	0.500	1	02/17/2018 03:21	WG1074633
1,3-Dichlorobenzene	U		0.130	0.500	1	02/17/2018 03:21	WG1074633
1,4-Dichlorobenzene	U		0.121	0.500	1	02/17/2018 03:21	WG1074633
Dichlorodifluoromethane	U		0.127	2.50	1	02/17/2018 03:21	WG1074633
1,1-Dichloroethane	U		0.114	0.500	1	02/17/2018 03:21	WG1074633
1,2-Dichloroethane	U		0.108	0.500	1	02/17/2018 03:21	WG1074633
1,1-Dichloroethene	U		0.188	0.500	1	02/17/2018 03:21	WG1074633
cis-1,2-Dichloroethene	U		0.0933	0.500	1	02/17/2018 03:21	WG1074633
trans-1,2-Dichloroethene	U		0.152	0.500	1	02/17/2018 03:21	WG1074633
1,2-Dichloropropane	U		0.190	0.500	1	02/17/2018 03:21	WG1074633
1,1-Dichloropropene	U		0.128	0.500	1	02/17/2018 03:21	WG1074633
1,3-Dichloropropane	U		0.147	1.00	1	02/17/2018 03:21	WG1074633
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/17/2018 03:21	WG1074633
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/17/2018 03:21	WG1074633
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	02/17/2018 03:21	WG1074633
2,2-Dichloropropane	U		0.0929	0.500	1	02/17/2018 03:21	WG1074633
Di-isopropyl ether	U		0.0924	0.500	1	02/17/2018 03:21	WG1074633
Ethylbenzene	U		0.158	0.500	1	02/17/2018 03:21	WG1074633
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/17/2018 03:21	WG1074633
2-Hexanone	U		0.757	5.00	1	02/17/2018 03:21	WG1074633
n-Hexane	U		0.305	5.00	1	02/17/2018 03:21	WG1074633
Iodomethane	U		0.377	10.0	1	02/17/2018 03:21	WG1074633
Isopropylbenzene	U		0.126	0.500	1	02/17/2018 03:21	WG1074633
p-Isopropyltoluene	U		0.138	0.500	1	02/17/2018 03:21	WG1074633
2-Butanone (MEK)	U		1.28	5.00	1	02/17/2018 03:21	WG1074633
Methylene Chloride	U		1.07	2.50	1	02/17/2018 03:21	WG1074633
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/17/2018 03:21	WG1074633
Methyl tert-butyl ether	U		0.102	0.500	1	02/17/2018 03:21	WG1074633
Naphthalene	U		0.174	2.50	1	02/17/2018 03:21	WG1074633
n-Propylbenzene	U		0.162	0.500	1	02/17/2018 03:21	WG1074633
Styrene	U		0.117	0.500	1	02/17/2018 03:21	WG1074633
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/17/2018 03:21	WG1074633
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/17/2018 03:21	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/17/2018 03:21	WG1074633
Tetrachloroethene	28.5		0.199	0.500	1	02/17/2018 03:21	WG1074633
Toluene	U		0.412	0.500	1	02/17/2018 03:21	WG1074633
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/17/2018 03:21	WG1074633
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/17/2018 03:21	WG1074633
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/17/2018 03:21	WG1074633
1,1,2-Trichloroethane	U		0.186	0.500	1	02/17/2018 03:21	WG1074633
Trichloroethene	U		0.153	0.500	1	02/17/2018 03:21	WG1074633
Trichlorofluoromethane	U		0.130	2.50	1	02/17/2018 03:21	WG1074633
1,2,3-Trichloropropane	U		0.247	2.50	1	02/17/2018 03:21	WG1074633
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/17/2018 03:21	WG1074633
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/17/2018 03:21	WG1074633
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/17/2018 03:21	WG1074633
Vinyl acetate	U		0.645	5.00	1	02/17/2018 03:21	WG1074633
Vinyl chloride	U		0.118	0.500	1	02/17/2018 03:21	WG1074633
Xylenes, Total	U		0.316	1.50	1	02/17/2018 03:21	WG1074633
(S) Toluene-d8	*108*			*80.0-120*		*02/17/2018 03:21*	WG1074633
(S) Dibromofluoromethane	*87.0*			*76.0-123*		*02/17/2018 03:21*	WG1074633
(S) 4-Bromofluorobenzene	*104*			*80.0-120*		*02/17/2018 03:21*	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	02/17/2018 03:43	WG1074633
Acrylonitrile	U		0.873	5.00	1	02/17/2018 03:43	WG1074633
Benzene	U		0.0896	0.500	1	02/17/2018 03:43	WG1074633
Bromobenzene	U		0.133	0.500	1	02/17/2018 03:43	WG1074633
Bromodichloromethane	U		0.0800	0.500	1	02/17/2018 03:43	WG1074633
Bromochloromethane	U		0.145	0.500	1	02/17/2018 03:43	WG1074633
Bromoform	U		0.186	0.500	1	02/17/2018 03:43	WG1074633
Bromomethane	U		0.157	2.50	1	02/17/2018 03:43	WG1074633
n-Butylbenzene	U		0.143	0.500	1	02/17/2018 03:43	WG1074633
sec-Butylbenzene	U		0.134	0.500	1	02/17/2018 03:43	WG1074633
tert-Butylbenzene	U		0.183	0.500	1	02/17/2018 03:43	WG1074633
Carbon disulfide	U	J0	0.101	0.500	1	02/17/2018 03:43	WG1074633
Carbon tetrachloride	U		0.159	0.500	1	02/17/2018 03:43	WG1074633
Chlorobenzene	U		0.140	0.500	1	02/17/2018 03:43	WG1074633
Chlorodibromomethane	U		0.128	0.500	1	02/17/2018 03:43	WG1074633
Chloroethane	U		0.141	2.50	1	02/17/2018 03:43	WG1074633
Chloroform	U		0.0860	0.500	1	02/17/2018 03:43	WG1074633
Chloromethane	U		0.153	1.25	1	02/17/2018 03:43	WG1074633
2-Chlorotoluene	U		0.111	0.500	1	02/17/2018 03:43	WG1074633
4-Chlorotoluene	U		0.0972	0.500	1	02/17/2018 03:43	WG1074633
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/17/2018 03:43	WG1074633
1,2-Dibromoethane	U		0.193	0.500	1	02/17/2018 03:43	WG1074633
Dibromomethane	U		0.117	0.500	1	02/17/2018 03:43	WG1074633
1,2-Dichlorobenzene	U		0.101	0.500	1	02/17/2018 03:43	WG1074633
1,3-Dichlorobenzene	U		0.130	0.500	1	02/17/2018 03:43	WG1074633
1,4-Dichlorobenzene	U		0.121	0.500	1	02/17/2018 03:43	WG1074633
Dichlorodifluoromethane	U		0.127	2.50	1	02/17/2018 03:43	WG1074633
1,1-Dichloroethane	U		0.114	0.500	1	02/17/2018 03:43	WG1074633
1,2-Dichloroethane	U		0.108	0.500	1	02/17/2018 03:43	WG1074633
1,1-Dichloroethene	U		0.188	0.500	1	02/17/2018 03:43	WG1074633
cis-1,2-Dichloroethene	U		0.0933	0.500	1	02/17/2018 03:43	WG1074633
trans-1,2-Dichloroethene	U		0.152	0.500	1	02/17/2018 03:43	WG1074633
1,2-Dichloropropane	U		0.190	0.500	1	02/17/2018 03:43	WG1074633
1,1-Dichloropropene	U		0.128	0.500	1	02/17/2018 03:43	WG1074633
1,3-Dichloropropane	U		0.147	1.00	1	02/17/2018 03:43	WG1074633
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/17/2018 03:43	WG1074633
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/17/2018 03:43	WG1074633
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	02/17/2018 03:43	WG1074633
2,2-Dichloropropane	U		0.0929	0.500	1	02/17/2018 03:43	WG1074633
Di-isopropyl ether	U		0.0924	0.500	1	02/17/2018 03:43	WG1074633
Ethylbenzene	U		0.158	0.500	1	02/17/2018 03:43	WG1074633
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/17/2018 03:43	WG1074633
2-Hexanone	U		0.757	5.00	1	02/17/2018 03:43	WG1074633
n-Hexane	U		0.305	5.00	1	02/17/2018 03:43	WG1074633
Iodomethane	U		0.377	10.0	1	02/17/2018 03:43	WG1074633
Isopropylbenzene	U		0.126	0.500	1	02/17/2018 03:43	WG1074633
p-Isopropyltoluene	U		0.138	0.500	1	02/17/2018 03:43	WG1074633
2-Butanone (MEK)	U		1.28	5.00	1	02/17/2018 03:43	WG1074633
Methylene Chloride	U		1.07	2.50	1	02/17/2018 03:43	WG1074633
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/17/2018 03:43	WG1074633
Methyl tert-butyl ether	U		0.102	0.500	1	02/17/2018 03:43	WG1074633
Naphthalene	U		0.174	2.50	1	02/17/2018 03:43	WG1074633
n-Propylbenzene	U		0.162	0.500	1	02/17/2018 03:43	WG1074633
Styrene	U		0.117	0.500	1	02/17/2018 03:43	WG1074633
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/17/2018 03:43	WG1074633
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/17/2018 03:43	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/17/2018 03:43	WG1074633
Tetrachloroethene	0.220	J	0.199	0.500	1	02/17/2018 03:43	WG1074633
Toluene	U		0.412	0.500	1	02/17/2018 03:43	WG1074633
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/17/2018 03:43	WG1074633
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/17/2018 03:43	WG1074633
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/17/2018 03:43	WG1074633
1,1,2-Trichloroethane	U		0.186	0.500	1	02/17/2018 03:43	WG1074633
Trichloroethene	U		0.153	0.500	1	02/17/2018 03:43	WG1074633
Trichlorofluoromethane	U		0.130	2.50	1	02/17/2018 03:43	WG1074633
1,2,3-Trichloropropane	U		0.247	2.50	1	02/17/2018 03:43	WG1074633
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/17/2018 03:43	WG1074633
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/17/2018 03:43	WG1074633
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/17/2018 03:43	WG1074633
Vinyl acetate	U		0.645	5.00	1	02/17/2018 03:43	WG1074633
Vinyl chloride	U		0.118	0.500	1	02/17/2018 03:43	WG1074633
Xylenes, Total	U		0.316	1.50	1	02/17/2018 03:43	WG1074633
(S) Toluene-d8	*107*			*80.0-120*		*02/17/2018 03:43*	WG1074633
(S) Dibromofluoromethane	*85.8*			*76.0-123*		*02/17/2018 03:43*	WG1074633
(S) 4-Bromofluorobenzene	*102*			*80.0-120*		*02/17/2018 03:43*	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	02/17/2018 04:04	WG1074633
Acrylonitrile	U		0.873	5.00	1	02/17/2018 04:04	WG1074633
Benzene	U		0.0896	0.500	1	02/17/2018 04:04	WG1074633
Bromobenzene	U		0.133	0.500	1	02/17/2018 04:04	WG1074633
Bromodichloromethane	U		0.0800	0.500	1	02/17/2018 04:04	WG1074633
Bromochloromethane	U		0.145	0.500	1	02/17/2018 04:04	WG1074633
Bromoform	U		0.186	0.500	1	02/17/2018 04:04	WG1074633
Bromomethane	U		0.157	2.50	1	02/17/2018 04:04	WG1074633
n-Butylbenzene	U		0.143	0.500	1	02/17/2018 04:04	WG1074633
sec-Butylbenzene	U		0.134	0.500	1	02/17/2018 04:04	WG1074633
tert-Butylbenzene	U		0.183	0.500	1	02/17/2018 04:04	WG1074633
Carbon disulfide	U	J0	0.101	0.500	1	02/17/2018 04:04	WG1074633
Carbon tetrachloride	U		0.159	0.500	1	02/17/2018 04:04	WG1074633
Chlorobenzene	U		0.140	0.500	1	02/17/2018 04:04	WG1074633
Chlorodibromomethane	U		0.128	0.500	1	02/17/2018 04:04	WG1074633
Chloroethane	U		0.141	2.50	1	02/17/2018 04:04	WG1074633
Chloroform	U		0.0860	0.500	1	02/17/2018 04:04	WG1074633
Chloromethane	U		0.153	1.25	1	02/17/2018 04:04	WG1074633
2-Chlorotoluene	U		0.111	0.500	1	02/17/2018 04:04	WG1074633
4-Chlorotoluene	U		0.0972	0.500	1	02/17/2018 04:04	WG1074633
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/17/2018 04:04	WG1074633
1,2-Dibromoethane	U		0.193	0.500	1	02/17/2018 04:04	WG1074633
Dibromomethane	U		0.117	0.500	1	02/17/2018 04:04	WG1074633
1,2-Dichlorobenzene	U		0.101	0.500	1	02/17/2018 04:04	WG1074633
1,3-Dichlorobenzene	U		0.130	0.500	1	02/17/2018 04:04	WG1074633
1,4-Dichlorobenzene	U		0.121	0.500	1	02/17/2018 04:04	WG1074633
Dichlorodifluoromethane	U		0.127	2.50	1	02/17/2018 04:04	WG1074633
1,1-Dichloroethane	U		0.114	0.500	1	02/17/2018 04:04	WG1074633
1,2-Dichloroethane	U		0.108	0.500	1	02/17/2018 04:04	WG1074633
1,1-Dichloroethene	U		0.188	0.500	1	02/17/2018 04:04	WG1074633
cis-1,2-Dichloroethene	U		0.0933	0.500	1	02/17/2018 04:04	WG1074633
trans-1,2-Dichloroethene	U		0.152	0.500	1	02/17/2018 04:04	WG1074633
1,2-Dichloropropane	U		0.190	0.500	1	02/17/2018 04:04	WG1074633
1,1-Dichloropropene	U		0.128	0.500	1	02/17/2018 04:04	WG1074633
1,3-Dichloropropane	U		0.147	1.00	1	02/17/2018 04:04	WG1074633
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/17/2018 04:04	WG1074633
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/17/2018 04:04	WG1074633
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	02/17/2018 04:04	WG1074633
2,2-Dichloropropane	U		0.0929	0.500	1	02/17/2018 04:04	WG1074633
Di-isopropyl ether	U		0.0924	0.500	1	02/17/2018 04:04	WG1074633
Ethylbenzene	U		0.158	0.500	1	02/17/2018 04:04	WG1074633
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/17/2018 04:04	WG1074633
2-Hexanone	U		0.757	5.00	1	02/17/2018 04:04	WG1074633
n-Hexane	U		0.305	5.00	1	02/17/2018 04:04	WG1074633
Iodomethane	U		0.377	10.0	1	02/17/2018 04:04	WG1074633
Isopropylbenzene	U		0.126	0.500	1	02/17/2018 04:04	WG1074633
p-Isopropyltoluene	U		0.138	0.500	1	02/17/2018 04:04	WG1074633
2-Butanone (MEK)	U		1.28	5.00	1	02/17/2018 04:04	WG1074633
Methylene Chloride	U		1.07	2.50	1	02/17/2018 04:04	WG1074633
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/17/2018 04:04	WG1074633
Methyl tert-butyl ether	U		0.102	0.500	1	02/17/2018 04:04	WG1074633
Naphthalene	U		0.174	2.50	1	02/17/2018 04:04	WG1074633
n-Propylbenzene	U		0.162	0.500	1	02/17/2018 04:04	WG1074633
Styrene	U		0.117	0.500	1	02/17/2018 04:04	WG1074633
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/17/2018 04:04	WG1074633
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/17/2018 04:04	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/17/2018 04:04	WG1074633
Tetrachloroethene	3.21		0.199	0.500	1	02/17/2018 04:04	WG1074633
Toluene	U		0.412	0.500	1	02/17/2018 04:04	WG1074633
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/17/2018 04:04	WG1074633
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/17/2018 04:04	WG1074633
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/17/2018 04:04	WG1074633
1,1,2-Trichloroethane	U		0.186	0.500	1	02/17/2018 04:04	WG1074633
Trichloroethene	U		0.153	0.500	1	02/17/2018 04:04	WG1074633
Trichlorofluoromethane	U		0.130	2.50	1	02/17/2018 04:04	WG1074633
1,2,3-Trichloropropane	U		0.247	2.50	1	02/17/2018 04:04	WG1074633
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/17/2018 04:04	WG1074633
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/17/2018 04:04	WG1074633
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/17/2018 04:04	WG1074633
Vinyl acetate	U		0.645	5.00	1	02/17/2018 04:04	WG1074633
Vinyl chloride	U		0.118	0.500	1	02/17/2018 04:04	WG1074633
Xylenes, Total	U		0.316	1.50	1	02/17/2018 04:04	WG1074633
(S) Toluene-d8	*105*			*80.0-120*		*02/17/2018 04:04*	WG1074633
(S) Dibromofluoromethane	*86.8*			*76.0-123*		*02/17/2018 04:04*	WG1074633
(S) 4-Bromofluorobenzene	*101*			*80.0-120*		*02/17/2018 04:04*	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	02/17/2018 04:26	WG1074633
Acrylonitrile	U		0.873	5.00	1	02/17/2018 04:26	WG1074633
Benzene	U		0.0896	0.500	1	02/17/2018 04:26	WG1074633
Bromobenzene	U		0.133	0.500	1	02/17/2018 04:26	WG1074633
Bromodichloromethane	U		0.0800	0.500	1	02/17/2018 04:26	WG1074633
Bromochloromethane	U		0.145	0.500	1	02/17/2018 04:26	WG1074633
Bromoform	U		0.186	0.500	1	02/17/2018 04:26	WG1074633
Bromomethane	U		0.157	2.50	1	02/17/2018 04:26	WG1074633
n-Butylbenzene	U		0.143	0.500	1	02/17/2018 04:26	WG1074633
sec-Butylbenzene	U		0.134	0.500	1	02/17/2018 04:26	WG1074633
tert-Butylbenzene	U		0.183	0.500	1	02/17/2018 04:26	WG1074633
Carbon disulfide	U	J0	0.101	0.500	1	02/17/2018 04:26	WG1074633
Carbon tetrachloride	U		0.159	0.500	1	02/17/2018 04:26	WG1074633
Chlorobenzene	U		0.140	0.500	1	02/17/2018 04:26	WG1074633
Chlorodibromomethane	U		0.128	0.500	1	02/17/2018 04:26	WG1074633
Chloroethane	U		0.141	2.50	1	02/17/2018 04:26	WG1074633
Chloroform	1.57		0.0860	0.500	1	02/17/2018 04:26	WG1074633
Chloromethane	U		0.153	1.25	1	02/17/2018 04:26	WG1074633
2-Chlorotoluene	U		0.111	0.500	1	02/17/2018 04:26	WG1074633
4-Chlorotoluene	U		0.0972	0.500	1	02/17/2018 04:26	WG1074633
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/17/2018 04:26	WG1074633
1,2-Dibromoethane	U		0.193	0.500	1	02/17/2018 04:26	WG1074633
Dibromomethane	U		0.117	0.500	1	02/17/2018 04:26	WG1074633
1,2-Dichlorobenzene	U		0.101	0.500	1	02/17/2018 04:26	WG1074633
1,3-Dichlorobenzene	U		0.130	0.500	1	02/17/2018 04:26	WG1074633
1,4-Dichlorobenzene	U		0.121	0.500	1	02/17/2018 04:26	WG1074633
Dichlorodifluoromethane	U		0.127	2.50	1	02/17/2018 04:26	WG1074633
1,1-Dichloroethane	U		0.114	0.500	1	02/17/2018 04:26	WG1074633
1,2-Dichloroethane	U		0.108	0.500	1	02/17/2018 04:26	WG1074633
1,1-Dichloroethene	U		0.188	0.500	1	02/17/2018 04:26	WG1074633
cis-1,2-Dichloroethene	U		0.0933	0.500	1	02/17/2018 04:26	WG1074633
trans-1,2-Dichloroethene	U		0.152	0.500	1	02/17/2018 04:26	WG1074633
1,2-Dichloropropane	U		0.190	0.500	1	02/17/2018 04:26	WG1074633
1,1-Dichloropropene	U		0.128	0.500	1	02/17/2018 04:26	WG1074633
1,3-Dichloropropane	U		0.147	1.00	1	02/17/2018 04:26	WG1074633
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/17/2018 04:26	WG1074633
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/17/2018 04:26	WG1074633
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	02/17/2018 04:26	WG1074633
2,2-Dichloropropane	U		0.0929	0.500	1	02/17/2018 04:26	WG1074633
Di-isopropyl ether	U		0.0924	0.500	1	02/17/2018 04:26	WG1074633
Ethylbenzene	U		0.158	0.500	1	02/17/2018 04:26	WG1074633
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/17/2018 04:26	WG1074633
2-Hexanone	U		0.757	5.00	1	02/17/2018 04:26	WG1074633
n-Hexane	U		0.305	5.00	1	02/17/2018 04:26	WG1074633
Iodomethane	U		0.377	10.0	1	02/17/2018 04:26	WG1074633
Isopropylbenzene	U		0.126	0.500	1	02/17/2018 04:26	WG1074633
p-Isopropyltoluene	U		0.138	0.500	1	02/17/2018 04:26	WG1074633
2-Butanone (MEK)	U		1.28	5.00	1	02/17/2018 04:26	WG1074633
Methylene Chloride	U		1.07	2.50	1	02/17/2018 04:26	WG1074633
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/17/2018 04:26	WG1074633
Methyl tert-butyl ether	U		0.102	0.500	1	02/17/2018 04:26	WG1074633
Naphthalene	U		0.174	2.50	1	02/17/2018 04:26	WG1074633
n-Propylbenzene	U		0.162	0.500	1	02/17/2018 04:26	WG1074633
Styrene	U		0.117	0.500	1	02/17/2018 04:26	WG1074633
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/17/2018 04:26	WG1074633
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/17/2018 04:26	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/17/2018 04:26	WG1074633
Tetrachloroethene	1.93		0.199	0.500	1	02/17/2018 04:26	WG1074633
Toluene	U		0.412	0.500	1	02/17/2018 04:26	WG1074633
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/17/2018 04:26	WG1074633
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/17/2018 04:26	WG1074633
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/17/2018 04:26	WG1074633
1,1,2-Trichloroethane	U		0.186	0.500	1	02/17/2018 04:26	WG1074633
Trichloroethene	U		0.153	0.500	1	02/17/2018 04:26	WG1074633
Trichlorofluoromethane	U		0.130	2.50	1	02/17/2018 04:26	WG1074633
1,2,3-Trichloropropane	U		0.247	2.50	1	02/17/2018 04:26	WG1074633
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/17/2018 04:26	WG1074633
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/17/2018 04:26	WG1074633
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/17/2018 04:26	WG1074633
Vinyl acetate	U		0.645	5.00	1	02/17/2018 04:26	WG1074633
Vinyl chloride	U		0.118	0.500	1	02/17/2018 04:26	WG1074633
Xylenes, Total	U		0.316	1.50	1	02/17/2018 04:26	WG1074633
(S) Toluene-d8	*106*			*80.0-120*		*02/17/2018 04:26*	WG1074633
(S) Dibromofluoromethane	*86.4*			*76.0-123*		*02/17/2018 04:26*	WG1074633
(S) 4-Bromofluorobenzene	*103*			*80.0-120*		*02/17/2018 04:26*	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	02/17/2018 04:47	WG1074633
Acrylonitrile	U		0.873	5.00	1	02/17/2018 04:47	WG1074633
Benzene	U		0.0896	0.500	1	02/17/2018 04:47	WG1074633
Bromobenzene	U		0.133	0.500	1	02/17/2018 04:47	WG1074633
Bromodichloromethane	U		0.0800	0.500	1	02/17/2018 04:47	WG1074633
Bromochloromethane	U		0.145	0.500	1	02/17/2018 04:47	WG1074633
Bromoform	U		0.186	0.500	1	02/17/2018 04:47	WG1074633
Bromomethane	U		0.157	2.50	1	02/17/2018 04:47	WG1074633
n-Butylbenzene	U		0.143	0.500	1	02/17/2018 04:47	WG1074633
sec-Butylbenzene	U		0.134	0.500	1	02/17/2018 04:47	WG1074633
tert-Butylbenzene	U		0.183	0.500	1	02/17/2018 04:47	WG1074633
Carbon disulfide	U	J0	0.101	0.500	1	02/17/2018 04:47	WG1074633
Carbon tetrachloride	U		0.159	0.500	1	02/17/2018 04:47	WG1074633
Chlorobenzene	U		0.140	0.500	1	02/17/2018 04:47	WG1074633
Chlorodibromomethane	U		0.128	0.500	1	02/17/2018 04:47	WG1074633
Chloroethane	U		0.141	2.50	1	02/17/2018 04:47	WG1074633
Chloroform	1.06		0.0860	0.500	1	02/17/2018 04:47	WG1074633
Chloromethane	U		0.153	1.25	1	02/17/2018 04:47	WG1074633
2-Chlorotoluene	U		0.111	0.500	1	02/17/2018 04:47	WG1074633
4-Chlorotoluene	U		0.0972	0.500	1	02/17/2018 04:47	WG1074633
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/17/2018 04:47	WG1074633
1,2-Dibromoethane	U		0.193	0.500	1	02/17/2018 04:47	WG1074633
Dibromomethane	U		0.117	0.500	1	02/17/2018 04:47	WG1074633
1,2-Dichlorobenzene	U		0.101	0.500	1	02/17/2018 04:47	WG1074633
1,3-Dichlorobenzene	U		0.130	0.500	1	02/17/2018 04:47	WG1074633
1,4-Dichlorobenzene	U		0.121	0.500	1	02/17/2018 04:47	WG1074633
Dichlorodifluoromethane	U		0.127	2.50	1	02/17/2018 04:47	WG1074633
1,1-Dichloroethane	U		0.114	0.500	1	02/17/2018 04:47	WG1074633
1,2-Dichloroethane	U		0.108	0.500	1	02/17/2018 04:47	WG1074633
1,1-Dichloroethene	U		0.188	0.500	1	02/17/2018 04:47	WG1074633
cis-1,2-Dichloroethene	U		0.0933	0.500	1	02/17/2018 04:47	WG1074633
trans-1,2-Dichloroethene	U		0.152	0.500	1	02/17/2018 04:47	WG1074633
1,2-Dichloropropane	U		0.190	0.500	1	02/17/2018 04:47	WG1074633
1,1-Dichloropropene	U		0.128	0.500	1	02/17/2018 04:47	WG1074633
1,3-Dichloropropane	U		0.147	1.00	1	02/17/2018 04:47	WG1074633
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/17/2018 04:47	WG1074633
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/17/2018 04:47	WG1074633
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	02/17/2018 04:47	WG1074633
2,2-Dichloropropane	U		0.0929	0.500	1	02/17/2018 04:47	WG1074633
Di-isopropyl ether	U		0.0924	0.500	1	02/17/2018 04:47	WG1074633
Ethylbenzene	U		0.158	0.500	1	02/17/2018 04:47	WG1074633
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/17/2018 04:47	WG1074633
2-Hexanone	U		0.757	5.00	1	02/17/2018 04:47	WG1074633
n-Hexane	U		0.305	5.00	1	02/17/2018 04:47	WG1074633
Iodomethane	U		0.377	10.0	1	02/17/2018 04:47	WG1074633
Isopropylbenzene	U		0.126	0.500	1	02/17/2018 04:47	WG1074633
p-Isopropyltoluene	U		0.138	0.500	1	02/17/2018 04:47	WG1074633
2-Butanone (MEK)	U		1.28	5.00	1	02/17/2018 04:47	WG1074633
Methylene Chloride	U		1.07	2.50	1	02/17/2018 04:47	WG1074633
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/17/2018 04:47	WG1074633
Methyl tert-butyl ether	U		0.102	0.500	1	02/17/2018 04:47	WG1074633
Naphthalene	U		0.174	2.50	1	02/17/2018 04:47	WG1074633
n-Propylbenzene	U		0.162	0.500	1	02/17/2018 04:47	WG1074633
Styrene	U		0.117	0.500	1	02/17/2018 04:47	WG1074633
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/17/2018 04:47	WG1074633
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/17/2018 04:47	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/17/2018 04:47	WG1074633
Tetrachloroethene	16.1		0.199	0.500	1	02/17/2018 04:47	WG1074633
Toluene	U		0.412	0.500	1	02/17/2018 04:47	WG1074633
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/17/2018 04:47	WG1074633
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/17/2018 04:47	WG1074633
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/17/2018 04:47	WG1074633
1,1,2-Trichloroethane	U		0.186	0.500	1	02/17/2018 04:47	WG1074633
Trichloroethene	U		0.153	0.500	1	02/17/2018 04:47	WG1074633
Trichlorofluoromethane	U		0.130	2.50	1	02/17/2018 04:47	WG1074633
1,2,3-Trichloropropane	U		0.247	2.50	1	02/17/2018 04:47	WG1074633
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/17/2018 04:47	WG1074633
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/17/2018 04:47	WG1074633
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/17/2018 04:47	WG1074633
Vinyl acetate	U		0.645	5.00	1	02/17/2018 04:47	WG1074633
Vinyl chloride	U		0.118	0.500	1	02/17/2018 04:47	WG1074633
Xylenes, Total	U		0.316	1.50	1	02/17/2018 04:47	WG1074633
(S) Toluene-d8	*108*			*80.0-120*		*02/17/2018 04:47*	WG1074633
(S) Dibromofluoromethane	*83.9*			*76.0-123*		*02/17/2018 04:47*	WG1074633
(S) 4-Bromofluorobenzene	*102*			*80.0-120*		*02/17/2018 04:47*	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	02/17/2018 05:09	WG1074633
Acrylonitrile	U		0.873	5.00	1	02/17/2018 05:09	WG1074633
Benzene	U		0.0896	0.500	1	02/17/2018 05:09	WG1074633
Bromobenzene	U		0.133	0.500	1	02/17/2018 05:09	WG1074633
Bromodichloromethane	U		0.0800	0.500	1	02/17/2018 05:09	WG1074633
Bromochloromethane	U		0.145	0.500	1	02/17/2018 05:09	WG1074633
Bromoform	U		0.186	0.500	1	02/17/2018 05:09	WG1074633
Bromomethane	U		0.157	2.50	1	02/17/2018 05:09	WG1074633
n-Butylbenzene	U		0.143	0.500	1	02/17/2018 05:09	WG1074633
sec-Butylbenzene	U		0.134	0.500	1	02/17/2018 05:09	WG1074633
tert-Butylbenzene	U		0.183	0.500	1	02/17/2018 05:09	WG1074633
Carbon disulfide	U	J0	0.101	0.500	1	02/17/2018 05:09	WG1074633
Carbon tetrachloride	U		0.159	0.500	1	02/17/2018 05:09	WG1074633
Chlorobenzene	U		0.140	0.500	1	02/17/2018 05:09	WG1074633
Chlorodibromomethane	U		0.128	0.500	1	02/17/2018 05:09	WG1074633
Chloroethane	U		0.141	2.50	1	02/17/2018 05:09	WG1074633
Chloroform	0.677		0.0860	0.500	1	02/17/2018 05:09	WG1074633
Chloromethane	U		0.153	1.25	1	02/17/2018 05:09	WG1074633
2-Chlorotoluene	U		0.111	0.500	1	02/17/2018 05:09	WG1074633
4-Chlorotoluene	U		0.0972	0.500	1	02/17/2018 05:09	WG1074633
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/17/2018 05:09	WG1074633
1,2-Dibromoethane	U		0.193	0.500	1	02/17/2018 05:09	WG1074633
Dibromomethane	U		0.117	0.500	1	02/17/2018 05:09	WG1074633
1,2-Dichlorobenzene	U		0.101	0.500	1	02/17/2018 05:09	WG1074633
1,3-Dichlorobenzene	U		0.130	0.500	1	02/17/2018 05:09	WG1074633
1,4-Dichlorobenzene	U		0.121	0.500	1	02/17/2018 05:09	WG1074633
Dichlorodifluoromethane	U		0.127	2.50	1	02/17/2018 05:09	WG1074633
1,1-Dichloroethane	U		0.114	0.500	1	02/17/2018 05:09	WG1074633
1,2-Dichloroethane	U		0.108	0.500	1	02/17/2018 05:09	WG1074633
1,1-Dichloroethene	U		0.188	0.500	1	02/17/2018 05:09	WG1074633
cis-1,2-Dichloroethene	U		0.0933	0.500	1	02/17/2018 05:09	WG1074633
trans-1,2-Dichloroethene	U		0.152	0.500	1	02/17/2018 05:09	WG1074633
1,2-Dichloropropane	U		0.190	0.500	1	02/17/2018 05:09	WG1074633
1,1-Dichloropropene	U		0.128	0.500	1	02/17/2018 05:09	WG1074633
1,3-Dichloropropane	U		0.147	1.00	1	02/17/2018 05:09	WG1074633
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/17/2018 05:09	WG1074633
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/17/2018 05:09	WG1074633
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	02/17/2018 05:09	WG1074633
2,2-Dichloropropane	U		0.0929	0.500	1	02/17/2018 05:09	WG1074633
Di-isopropyl ether	U		0.0924	0.500	1	02/17/2018 05:09	WG1074633
Ethylbenzene	U		0.158	0.500	1	02/17/2018 05:09	WG1074633
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/17/2018 05:09	WG1074633
2-Hexanone	U		0.757	5.00	1	02/17/2018 05:09	WG1074633
n-Hexane	U		0.305	5.00	1	02/17/2018 05:09	WG1074633
Iodomethane	U		0.377	10.0	1	02/17/2018 05:09	WG1074633
Isopropylbenzene	U		0.126	0.500	1	02/17/2018 05:09	WG1074633
p-Isopropyltoluene	U		0.138	0.500	1	02/17/2018 05:09	WG1074633
2-Butanone (MEK)	U		1.28	5.00	1	02/17/2018 05:09	WG1074633
Methylene Chloride	U		1.07	2.50	1	02/17/2018 05:09	WG1074633
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/17/2018 05:09	WG1074633
Methyl tert-butyl ether	U		0.102	0.500	1	02/17/2018 05:09	WG1074633
Naphthalene	U		0.174	2.50	1	02/17/2018 05:09	WG1074633
n-Propylbenzene	U		0.162	0.500	1	02/17/2018 05:09	WG1074633
Styrene	U		0.117	0.500	1	02/17/2018 05:09	WG1074633
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/17/2018 05:09	WG1074633
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/17/2018 05:09	WG1074633

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/17/2018 05:09	WG1074633
Tetrachloroethene	U		0.199	0.500	1	02/17/2018 05:09	WG1074633
Toluene	U		0.412	0.500	1	02/17/2018 05:09	WG1074633
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/17/2018 05:09	WG1074633
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/17/2018 05:09	WG1074633
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/17/2018 05:09	WG1074633
1,1,2-Trichloroethane	U		0.186	0.500	1	02/17/2018 05:09	WG1074633
Trichloroethene	U		0.153	0.500	1	02/17/2018 05:09	WG1074633
Trichlorofluoromethane	U		0.130	2.50	1	02/17/2018 05:09	WG1074633
1,2,3-Trichloropropane	U		0.247	2.50	1	02/17/2018 05:09	WG1074633
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/17/2018 05:09	WG1074633
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/17/2018 05:09	WG1074633
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/17/2018 05:09	WG1074633
Vinyl acetate	U		0.645	5.00	1	02/17/2018 05:09	WG1074633
Vinyl chloride	U		0.118	0.500	1	02/17/2018 05:09	WG1074633
Xylenes, Total	U		0.316	1.50	1	02/17/2018 05:09	WG1074633
(S) Toluene-d8	*108*			*80.0-120*		*02/17/2018 05:09*	WG1074633
(S) Dibromofluoromethane	*85.8*			*76.0-123*		*02/17/2018 05:09*	WG1074633
(S) 4-Bromofluorobenzene	*102*			*80.0-120*		*02/17/2018 05:09*	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	02/17/2018 05:31	WG1074633
Acrylonitrile	U		0.873	5.00	1	02/17/2018 05:31	WG1074633
Benzene	U		0.0896	0.500	1	02/17/2018 05:31	WG1074633
Bromobenzene	U		0.133	0.500	1	02/17/2018 05:31	WG1074633
Bromodichloromethane	U		0.0800	0.500	1	02/17/2018 05:31	WG1074633
Bromochloromethane	U		0.145	0.500	1	02/17/2018 05:31	WG1074633
Bromoform	U		0.186	0.500	1	02/17/2018 05:31	WG1074633
Bromomethane	U		0.157	2.50	1	02/17/2018 05:31	WG1074633
n-Butylbenzene	U		0.143	0.500	1	02/17/2018 05:31	WG1074633
sec-Butylbenzene	U		0.134	0.500	1	02/17/2018 05:31	WG1074633
tert-Butylbenzene	U		0.183	0.500	1	02/17/2018 05:31	WG1074633
Carbon disulfide	U	J0	0.101	0.500	1	02/17/2018 05:31	WG1074633
Carbon tetrachloride	U		0.159	0.500	1	02/17/2018 05:31	WG1074633
Chlorobenzene	U		0.140	0.500	1	02/17/2018 05:31	WG1074633
Chlorodibromomethane	U		0.128	0.500	1	02/17/2018 05:31	WG1074633
Chloroethane	U		0.141	2.50	1	02/17/2018 05:31	WG1074633
Chloroform	1.39		0.0860	0.500	1	02/17/2018 05:31	WG1074633
Chloromethane	U		0.153	1.25	1	02/17/2018 05:31	WG1074633
2-Chlorotoluene	U		0.111	0.500	1	02/17/2018 05:31	WG1074633
4-Chlorotoluene	U		0.0972	0.500	1	02/17/2018 05:31	WG1074633
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/17/2018 05:31	WG1074633
1,2-Dibromoethane	U		0.193	0.500	1	02/17/2018 05:31	WG1074633
Dibromomethane	U		0.117	0.500	1	02/17/2018 05:31	WG1074633
1,2-Dichlorobenzene	U		0.101	0.500	1	02/17/2018 05:31	WG1074633
1,3-Dichlorobenzene	U		0.130	0.500	1	02/17/2018 05:31	WG1074633
1,4-Dichlorobenzene	U		0.121	0.500	1	02/17/2018 05:31	WG1074633
Dichlorodifluoromethane	U		0.127	2.50	1	02/17/2018 05:31	WG1074633
1,1-Dichloroethane	U		0.114	0.500	1	02/17/2018 05:31	WG1074633
1,2-Dichloroethane	U		0.108	0.500	1	02/17/2018 05:31	WG1074633
1,1-Dichloroethene	U		0.188	0.500	1	02/17/2018 05:31	WG1074633
cis-1,2-Dichloroethene	U		0.0933	0.500	1	02/17/2018 05:31	WG1074633
trans-1,2-Dichloroethene	U		0.152	0.500	1	02/17/2018 05:31	WG1074633
1,2-Dichloropropane	U		0.190	0.500	1	02/17/2018 05:31	WG1074633
1,1-Dichloropropene	U		0.128	0.500	1	02/17/2018 05:31	WG1074633
1,3-Dichloropropane	U		0.147	1.00	1	02/17/2018 05:31	WG1074633
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/17/2018 05:31	WG1074633
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/17/2018 05:31	WG1074633
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	02/17/2018 05:31	WG1074633
2,2-Dichloropropane	U		0.0929	0.500	1	02/17/2018 05:31	WG1074633
Di-isopropyl ether	U		0.0924	0.500	1	02/17/2018 05:31	WG1074633
Ethylbenzene	U		0.158	0.500	1	02/17/2018 05:31	WG1074633
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/17/2018 05:31	WG1074633
2-Hexanone	U		0.757	5.00	1	02/17/2018 05:31	WG1074633
n-Hexane	U		0.305	5.00	1	02/17/2018 05:31	WG1074633
Iodomethane	U		0.377	10.0	1	02/17/2018 05:31	WG1074633
Isopropylbenzene	U		0.126	0.500	1	02/17/2018 05:31	WG1074633
p-Isopropyltoluene	U		0.138	0.500	1	02/17/2018 05:31	WG1074633
2-Butanone (MEK)	U		1.28	5.00	1	02/17/2018 05:31	WG1074633
Methylene Chloride	U		1.07	2.50	1	02/17/2018 05:31	WG1074633
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/17/2018 05:31	WG1074633
Methyl tert-butyl ether	U		0.102	0.500	1	02/17/2018 05:31	WG1074633
Naphthalene	U		0.174	2.50	1	02/17/2018 05:31	WG1074633
n-Propylbenzene	U		0.162	0.500	1	02/17/2018 05:31	WG1074633
Styrene	U		0.117	0.500	1	02/17/2018 05:31	WG1074633
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/17/2018 05:31	WG1074633
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/17/2018 05:31	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/17/2018 05:31	WG1074633
Tetrachloroethene	U		0.199	0.500	1	02/17/2018 05:31	WG1074633
Toluene	U		0.412	0.500	1	02/17/2018 05:31	WG1074633
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/17/2018 05:31	WG1074633
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/17/2018 05:31	WG1074633
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/17/2018 05:31	WG1074633
1,1,2-Trichloroethane	U		0.186	0.500	1	02/17/2018 05:31	WG1074633
Trichloroethene	U		0.153	0.500	1	02/17/2018 05:31	WG1074633
Trichlorofluoromethane	U		0.130	2.50	1	02/17/2018 05:31	WG1074633
1,2,3-Trichloropropane	U		0.247	2.50	1	02/17/2018 05:31	WG1074633
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/17/2018 05:31	WG1074633
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/17/2018 05:31	WG1074633
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/17/2018 05:31	WG1074633
Vinyl acetate	U		0.645	5.00	1	02/17/2018 05:31	WG1074633
Vinyl chloride	U		0.118	0.500	1	02/17/2018 05:31	WG1074633
Xylenes, Total	U		0.316	1.50	1	02/17/2018 05:31	WG1074633
(S) Toluene-d8	*107*			*80.0-120*		*02/17/2018 05:31*	WG1074633
(S) Dibromofluoromethane	*86.2*			*76.0-123*		*02/17/2018 05:31*	WG1074633
(S) 4-Bromofluorobenzene	*99.0*			*80.0-120*		*02/17/2018 05:31*	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	02/17/2018 06:19	WG1074633
Acrylonitrile	U		0.873	5.00	1	02/17/2018 06:19	WG1074633
Benzene	U		0.0896	0.500	1	02/17/2018 06:19	WG1074633
Bromobenzene	U		0.133	0.500	1	02/17/2018 06:19	WG1074633
Bromodichloromethane	U		0.0800	0.500	1	02/17/2018 06:19	WG1074633
Bromochloromethane	U		0.145	0.500	1	02/17/2018 06:19	WG1074633
Bromoform	U		0.186	0.500	1	02/17/2018 06:19	WG1074633
Bromomethane	U		0.157	2.50	1	02/17/2018 06:19	WG1074633
n-Butylbenzene	U		0.143	0.500	1	02/17/2018 06:19	WG1074633
sec-Butylbenzene	U		0.134	0.500	1	02/17/2018 06:19	WG1074633
tert-Butylbenzene	U		0.183	0.500	1	02/17/2018 06:19	WG1074633
Carbon disulfide	U	J0	0.101	0.500	1	02/17/2018 06:19	WG1074633
Carbon tetrachloride	U		0.159	0.500	1	02/17/2018 06:19	WG1074633
Chlorobenzene	U		0.140	0.500	1	02/17/2018 06:19	WG1074633
Chlorodibromomethane	U		0.128	0.500	1	02/17/2018 06:19	WG1074633
Chloroethane	U		0.141	2.50	1	02/17/2018 06:19	WG1074633
Chloroform	1.06		0.0860	0.500	1	02/17/2018 06:19	WG1074633
Chloromethane	U		0.153	1.25	1	02/17/2018 06:19	WG1074633
2-Chlorotoluene	U		0.111	0.500	1	02/17/2018 06:19	WG1074633
4-Chlorotoluene	U		0.0972	0.500	1	02/17/2018 06:19	WG1074633
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/17/2018 06:19	WG1074633
1,2-Dibromoethane	U		0.193	0.500	1	02/17/2018 06:19	WG1074633
Dibromomethane	U		0.117	0.500	1	02/17/2018 06:19	WG1074633
1,2-Dichlorobenzene	U		0.101	0.500	1	02/17/2018 06:19	WG1074633
1,3-Dichlorobenzene	U		0.130	0.500	1	02/17/2018 06:19	WG1074633
1,4-Dichlorobenzene	U		0.121	0.500	1	02/17/2018 06:19	WG1074633
Dichlorodifluoromethane	U		0.127	2.50	1	02/17/2018 06:19	WG1074633
1,1-Dichloroethane	U		0.114	0.500	1	02/17/2018 06:19	WG1074633
1,2-Dichloroethane	U		0.108	0.500	1	02/17/2018 06:19	WG1074633
1,1-Dichloroethene	U		0.188	0.500	1	02/17/2018 06:19	WG1074633
cis-1,2-Dichloroethene	U		0.0933	0.500	1	02/17/2018 06:19	WG1074633
trans-1,2-Dichloroethene	U		0.152	0.500	1	02/17/2018 06:19	WG1074633
1,2-Dichloropropane	U		0.190	0.500	1	02/17/2018 06:19	WG1074633
1,1-Dichloropropene	U		0.128	0.500	1	02/17/2018 06:19	WG1074633
1,3-Dichloropropane	U		0.147	1.00	1	02/17/2018 06:19	WG1074633
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/17/2018 06:19	WG1074633
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/17/2018 06:19	WG1074633
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	02/17/2018 06:19	WG1074633
2,2-Dichloropropane	U		0.0929	0.500	1	02/17/2018 06:19	WG1074633
Di-isopropyl ether	U		0.0924	0.500	1	02/17/2018 06:19	WG1074633
Ethylbenzene	U		0.158	0.500	1	02/17/2018 06:19	WG1074633
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/17/2018 06:19	WG1074633
2-Hexanone	U		0.757	5.00	1	02/17/2018 06:19	WG1074633
n-Hexane	U		0.305	5.00	1	02/17/2018 06:19	WG1074633
Iodomethane	U		0.377	10.0	1	02/17/2018 06:19	WG1074633
Isopropylbenzene	U		0.126	0.500	1	02/17/2018 06:19	WG1074633
p-Isopropyltoluene	U		0.138	0.500	1	02/17/2018 06:19	WG1074633
2-Butanone (MEK)	U		1.28	5.00	1	02/17/2018 06:19	WG1074633
Methylene Chloride	U		1.07	2.50	1	02/17/2018 06:19	WG1074633
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/17/2018 06:19	WG1074633
Methyl tert-butyl ether	U		0.102	0.500	1	02/17/2018 06:19	WG1074633
Naphthalene	U		0.174	2.50	1	02/17/2018 06:19	WG1074633
n-Propylbenzene	U		0.162	0.500	1	02/17/2018 06:19	WG1074633
Styrene	U		0.117	0.500	1	02/17/2018 06:19	WG1074633
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/17/2018 06:19	WG1074633
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/17/2018 06:19	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/17/2018 06:19	WG1074633
Tetrachloroethene	14.7		0.199	0.500	1	02/17/2018 06:19	WG1074633
Toluene	U		0.412	0.500	1	02/17/2018 06:19	WG1074633
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/17/2018 06:19	WG1074633
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/17/2018 06:19	WG1074633
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/17/2018 06:19	WG1074633
1,1,2-Trichloroethane	U		0.186	0.500	1	02/17/2018 06:19	WG1074633
Trichloroethene	U		0.153	0.500	1	02/17/2018 06:19	WG1074633
Trichlorofluoromethane	U		0.130	2.50	1	02/17/2018 06:19	WG1074633
1,2,3-Trichloropropane	U		0.247	2.50	1	02/17/2018 06:19	WG1074633
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/17/2018 06:19	WG1074633
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/17/2018 06:19	WG1074633
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/17/2018 06:19	WG1074633
Vinyl acetate	U		0.645	5.00	1	02/17/2018 06:19	WG1074633
Vinyl chloride	U		0.118	0.500	1	02/17/2018 06:19	WG1074633
Xylenes, Total	U		0.316	1.50	1	02/17/2018 06:19	WG1074633
(S) Toluene-d8	*107*			*80.0-120*		*02/17/2018 06:19*	WG1074633
(S) Dibromofluoromethane	*84.0*			*76.0-123*		*02/17/2018 06:19*	WG1074633
(S) 4-Bromofluorobenzene	*101*			*80.0-120*		*02/17/2018 06:19*	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.34	J	1.05	25.0	1	02/17/2018 06:40	WG1074633
Acrylonitrile	U		0.873	5.00	1	02/17/2018 06:40	WG1074633
Benzene	U		0.0896	0.500	1	02/17/2018 06:40	WG1074633
Bromobenzene	U		0.133	0.500	1	02/17/2018 06:40	WG1074633
Bromodichloromethane	U		0.0800	0.500	1	02/17/2018 06:40	WG1074633
Bromochloromethane	U		0.145	0.500	1	02/17/2018 06:40	WG1074633
Bromoform	U		0.186	0.500	1	02/17/2018 06:40	WG1074633
Bromomethane	U		0.157	2.50	1	02/17/2018 06:40	WG1074633
n-Butylbenzene	U		0.143	0.500	1	02/17/2018 06:40	WG1074633
sec-Butylbenzene	U		0.134	0.500	1	02/17/2018 06:40	WG1074633
tert-Butylbenzene	U		0.183	0.500	1	02/17/2018 06:40	WG1074633
Carbon disulfide	U	J0	0.101	0.500	1	02/17/2018 06:40	WG1074633
Carbon tetrachloride	U		0.159	0.500	1	02/17/2018 06:40	WG1074633
Chlorobenzene	U		0.140	0.500	1	02/17/2018 06:40	WG1074633
Chlorodibromomethane	U		0.128	0.500	1	02/17/2018 06:40	WG1074633
Chloroethane	U		0.141	2.50	1	02/17/2018 06:40	WG1074633
Chloroform	U		0.0860	0.500	1	02/17/2018 06:40	WG1074633
Chloromethane	U		0.153	1.25	1	02/17/2018 06:40	WG1074633
2-Chlorotoluene	U		0.111	0.500	1	02/17/2018 06:40	WG1074633
4-Chlorotoluene	U		0.0972	0.500	1	02/17/2018 06:40	WG1074633
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/17/2018 06:40	WG1074633
1,2-Dibromoethane	U		0.193	0.500	1	02/17/2018 06:40	WG1074633
Dibromomethane	U		0.117	0.500	1	02/17/2018 06:40	WG1074633
1,2-Dichlorobenzene	U		0.101	0.500	1	02/17/2018 06:40	WG1074633
1,3-Dichlorobenzene	U		0.130	0.500	1	02/17/2018 06:40	WG1074633
1,4-Dichlorobenzene	U		0.121	0.500	1	02/17/2018 06:40	WG1074633
Dichlorodifluoromethane	U		0.127	2.50	1	02/17/2018 06:40	WG1074633
1,1-Dichloroethane	U		0.114	0.500	1	02/17/2018 06:40	WG1074633
1,2-Dichloroethane	U		0.108	0.500	1	02/17/2018 06:40	WG1074633
1,1-Dichloroethene	U		0.188	0.500	1	02/17/2018 06:40	WG1074633
cis-1,2-Dichloroethene	U		0.0933	0.500	1	02/17/2018 06:40	WG1074633
trans-1,2-Dichloroethene	U		0.152	0.500	1	02/17/2018 06:40	WG1074633
1,2-Dichloropropane	U		0.190	0.500	1	02/17/2018 06:40	WG1074633
1,1-Dichloropropene	U		0.128	0.500	1	02/17/2018 06:40	WG1074633
1,3-Dichloropropane	U		0.147	1.00	1	02/17/2018 06:40	WG1074633
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/17/2018 06:40	WG1074633
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/17/2018 06:40	WG1074633
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	02/17/2018 06:40	WG1074633
2,2-Dichloropropane	U		0.0929	0.500	1	02/17/2018 06:40	WG1074633
Di-isopropyl ether	U		0.0924	0.500	1	02/17/2018 06:40	WG1074633
Ethylbenzene	U		0.158	0.500	1	02/17/2018 06:40	WG1074633
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/17/2018 06:40	WG1074633
2-Hexanone	U		0.757	5.00	1	02/17/2018 06:40	WG1074633
n-Hexane	U		0.305	5.00	1	02/17/2018 06:40	WG1074633
Iodomethane	U		0.377	10.0	1	02/17/2018 06:40	WG1074633
Isopropylbenzene	U		0.126	0.500	1	02/17/2018 06:40	WG1074633
p-Isopropyltoluene	U		0.138	0.500	1	02/17/2018 06:40	WG1074633
2-Butanone (MEK)	U		1.28	5.00	1	02/17/2018 06:40	WG1074633
Methylene Chloride	U		1.07	2.50	1	02/17/2018 06:40	WG1074633
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/17/2018 06:40	WG1074633
Methyl tert-butyl ether	U		0.102	0.500	1	02/17/2018 06:40	WG1074633
Naphthalene	U		0.174	2.50	1	02/17/2018 06:40	WG1074633
n-Propylbenzene	U		0.162	0.500	1	02/17/2018 06:40	WG1074633
Styrene	U		0.117	0.500	1	02/17/2018 06:40	WG1074633
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/17/2018 06:40	WG1074633
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/17/2018 06:40	WG1074633

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/17/2018 06:40	WG1074633
Tetrachloroethene	U		0.199	0.500	1	02/17/2018 06:40	WG1074633
Toluene	0.652		0.412	0.500	1	02/17/2018 06:40	WG1074633
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/17/2018 06:40	WG1074633
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/17/2018 06:40	WG1074633
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/17/2018 06:40	WG1074633
1,1,2-Trichloroethane	U		0.186	0.500	1	02/17/2018 06:40	WG1074633
Trichloroethene	U		0.153	0.500	1	02/17/2018 06:40	WG1074633
Trichlorofluoromethane	U		0.130	2.50	1	02/17/2018 06:40	WG1074633
1,2,3-Trichloropropane	U		0.247	2.50	1	02/17/2018 06:40	WG1074633
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/17/2018 06:40	WG1074633
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/17/2018 06:40	WG1074633
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/17/2018 06:40	WG1074633
Vinyl acetate	U		0.645	5.00	1	02/17/2018 06:40	WG1074633
Vinyl chloride	U		0.118	0.500	1	02/17/2018 06:40	WG1074633
Xylenes, Total	U		0.316	1.50	1	02/17/2018 06:40	WG1074633
(S) Toluene-d8	*107*			*80.0-120*		*02/17/2018 06:40*	WG1074633
(S) Dibromofluoromethane	*85.4*			*76.0-123*		*02/17/2018 06:40*	WG1074633
(S) 4-Bromofluorobenzene	*103*			*80.0-120*		*02/17/2018 06:40*	WG1074633

Method Blank (MB)

(MB) R3287486-3 02/16/18 23:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Bromobenzene	U		0.133	0.500
Benzene	U		0.0896	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Method Blank (MB)

(MB) R3287486-3 02/16/18 23:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	0.291	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Ethylbenzene	U		0.158	0.500
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
1,2,3-Trichlorobenzene	0.171	J	0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Methyl tert-butyl ether	U		0.102	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	0.135	J	0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Toluene	U		0.412	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*106*			*80.0-120*
(S) Dibromofluoromethane	*86.5*			*76.0-123*
(S) 4-Bromofluorobenzene	*103*			*80.0-120*

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

(LCS) R3287486-1 02/16/18 22:36 • (LCSD) R3287486-2 02/16/18 22:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	114	117	91.1	93.7	10.0-160			2.79	23
Acrylonitrile	125	123	124	98.2	99.3	60.0-142			1.10	20
Bromobenzene	25.0	24.1	24.8	96.4	99.3	79.0-120			2.92	20
Bromodichloromethane	25.0	24.2	24.4	96.7	97.6	76.0-120			0.974	20
Bromochloromethane	25.0	21.4	21.5	85.7	86.1	76.0-122			0.370	20
Bromoform	25.0	24.3	24.6	97.1	98.3	67.0-132			1.20	20
Bromomethane	25.0	24.3	22.6	97.1	90.4	18.0-160			7.10	20
n-Butylbenzene	25.0	25.4	25.9	101	104	72.0-126			2.01	20
sec-Butylbenzene	25.0	26.7	26.7	107	107	74.0-121			0.159	20
tert-Butylbenzene	25.0	26.5	26.4	106	106	75.0-122			0.272	20
Carbon disulfide	25.0	19.4	19.6	77.6	78.5	55.0-127			1.16	20
Carbon tetrachloride	25.0	21.1	21.0	84.5	84.2	63.0-122			0.354	20
Chlorobenzene	25.0	24.9	25.3	99.5	101	79.0-121			1.70	20
Chlorodibromomethane	25.0	26.3	26.2	105	105	75.0-125			0.545	20
Chloroethane	25.0	24.4	21.5	97.4	85.8	47.0-152			12.7	20
Chloroform	25.0	21.4	21.2	85.5	84.7	72.0-121			0.903	20
Chloromethane	25.0	20.9	21.1	83.7	84.2	48.0-139			0.665	20
2-Chlorotoluene	25.0	24.8	25.2	99.3	101	74.0-122			1.48	20
4-Chlorotoluene	25.0	25.0	25.6	99.9	102	79.0-120			2.57	20
1,2-Dibromo-3-Chloropropane	25.0	26.0	26.0	104	104	64.0-127			0.0130	20
1,2-Dibromoethane	25.0	26.0	26.9	104	108	77.0-123			3.60	20
Dibromomethane	25.0	24.3	24.6	97.2	98.4	78.0-120			1.24	20
1,2-Dichlorobenzene	25.0	25.0	25.7	100	103	80.0-120			2.48	20
1,3-Dichlorobenzene	25.0	24.7	24.9	98.8	99.4	72.0-123			0.627	20
1,4-Dichlorobenzene	25.0	24.1	24.2	96.5	96.6	77.0-120			0.140	20
Dichlorodifluoromethane	25.0	20.8	21.5	83.1	86.1	49.0-155			3.55	20
1,1-Dichloroethane	25.0	21.4	21.3	85.5	85.3	70.0-126			0.212	20
1,2-Dichloroethane	25.0	20.8	21.0	83.2	83.8	67.0-126			0.729	20
1,1-Dichloroethene	25.0	20.8	21.8	83.3	87.0	64.0-129			4.35	20
cis-1,2-Dichloroethene	25.0	21.9	21.7	87.7	86.9	73.0-120			0.946	20
trans-1,2-Dichloroethene	25.0	20.8	20.6	83.0	82.3	71.0-121			0.919	20
1,2-Dichloropropane	25.0	23.8	24.5	95.1	98.1	75.0-125			3.11	20
1,1-Dichloropropene	25.0	21.7	21.6	86.6	86.5	71.0-129			0.175	20
1,3-Dichloropropane	25.0	25.4	26.0	102	104	80.0-121			2.35	20
cis-1,3-Dichloropropene	25.0	27.1	27.0	108	108	79.0-123			0.0748	20
trans-1,3-Dichloropropene	25.0	25.8	26.2	103	105	74.0-127			1.48	20
trans-1,4-Dichloro-2-butene	25.0	14.6	14.3	58.4	57.2	55.0-134			1.96	20
2,2-Dichloropropane	25.0	20.8	20.1	83.2	80.5	60.0-125			3.30	20
Di-isopropyl ether	25.0	20.8	20.9	83.3	83.6	59.0-133			0.360	20
Hexachloro-1,3-butadiene	25.0	24.9	26.2	99.7	105	64.0-131			4.91	20

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

(LCS) R3287486-1 02/16/18 22:36 • (LCSD) R3287486-2 02/16/18 22:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Hexanone	125	135	136	108	109	58.0-147			1.03	20
n-Hexane	25.0	21.4	21.1	85.5	84.6	56.0-124			1.09	20
Iodomethane	125	102	103	81.3	82.3	57.0-140			1.30	20
Isopropylbenzene	25.0	25.2	25.5	101	102	75.0-120			1.25	20
p-Isopropyltoluene	25.0	26.1	26.5	104	106	74.0-126			1.50	20
2-Butanone (MEK)	125	107	107	85.4	85.7	37.0-158			0.360	20
Methylene Chloride	25.0	20.7	21.3	82.9	85.2	66.0-121			2.76	20
4-Methyl-2-pentanone (MIBK)	125	127	130	101	104	59.0-143			2.26	20
Benzene	25.0	20.3	20.4	81.3	81.5	69.0-123			0.219	20
Naphthalene	25.0	24.5	25.3	98.2	101	62.0-128			3.03	20
n-Propylbenzene	25.0	24.9	25.3	99.5	101	79.0-120			1.62	20
Styrene	25.0	24.5	25.3	98.2	101	78.0-124			2.92	20
1,1,1,2-Tetrachloroethane	25.0	25.7	25.6	103	102	75.0-122			0.528	20
1,1,2,2-Tetrachloroethane	25.0	25.1	25.7	100	103	71.0-122			2.67	20
1,1,2-Trichlorotrifluoroethane	25.0	21.2	21.8	85.0	87.1	61.0-136			2.45	20
Tetrachloroethene	25.0	24.4	24.6	97.5	98.4	70.0-127			0.917	20
1,2,3-Trichlorobenzene	25.0	23.8	24.0	95.1	95.9	61.0-133			0.797	20
1,2,4-Trichlorobenzene	25.0	24.4	24.8	97.6	99.0	69.0-129			1.51	20
1,1,1-Trichloroethane	25.0	21.6	21.5	86.2	86.1	68.0-122			0.146	20
1,1,2-Trichloroethane	25.0	24.4	25.2	97.7	101	78.0-120			3.01	20
Trichloroethene	25.0	22.2	22.6	88.7	90.4	78.0-120			1.88	20
Trichlorofluoromethane	25.0	21.4	21.3	85.5	85.2	56.0-137			0.362	20
1,2,3-Trichloropropane	25.0	24.7	25.4	98.6	102	72.0-124			3.14	20
1,2,4-Trimethylbenzene	25.0	25.5	25.8	102	103	75.0-120			1.31	20
1,2,3-Trimethylbenzene	25.0	25.2	25.3	101	101	75.0-120			0.418	20
1,3,5-Trimethylbenzene	25.0	25.7	26.1	103	104	75.0-120			1.62	20
Vinyl acetate	125	122	126	97.5	101	46.0-160			3.50	20
Vinyl chloride	25.0	20.6	20.2	82.2	80.8	64.0-133			1.75	20
Ethylbenzene	25.0	25.3	25.9	101	104	77.0-120			2.36	20
Methyl tert-butyl ether	25.0	21.1	21.2	84.5	84.7	64.0-123			0.259	20
Toluene	25.0	24.3	24.6	97.2	98.4	77.0-120			1.22	20
Xylenes, Total	75.0	76.8	78.0	102	104	77.0-120			1.55	20
(S) Toluene-d8				*104*	*104*	*80.0-120*				
(S) Dibromofluoromethane				*87.0*	*86.1*	*76.0-123*				
(S) 4-Bromofluorobenzene				*100*	*101*	*80.0-120*				

Guide to Reading and Understanding Your Laboratory Report

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

Abbreviations and Definitions

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

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

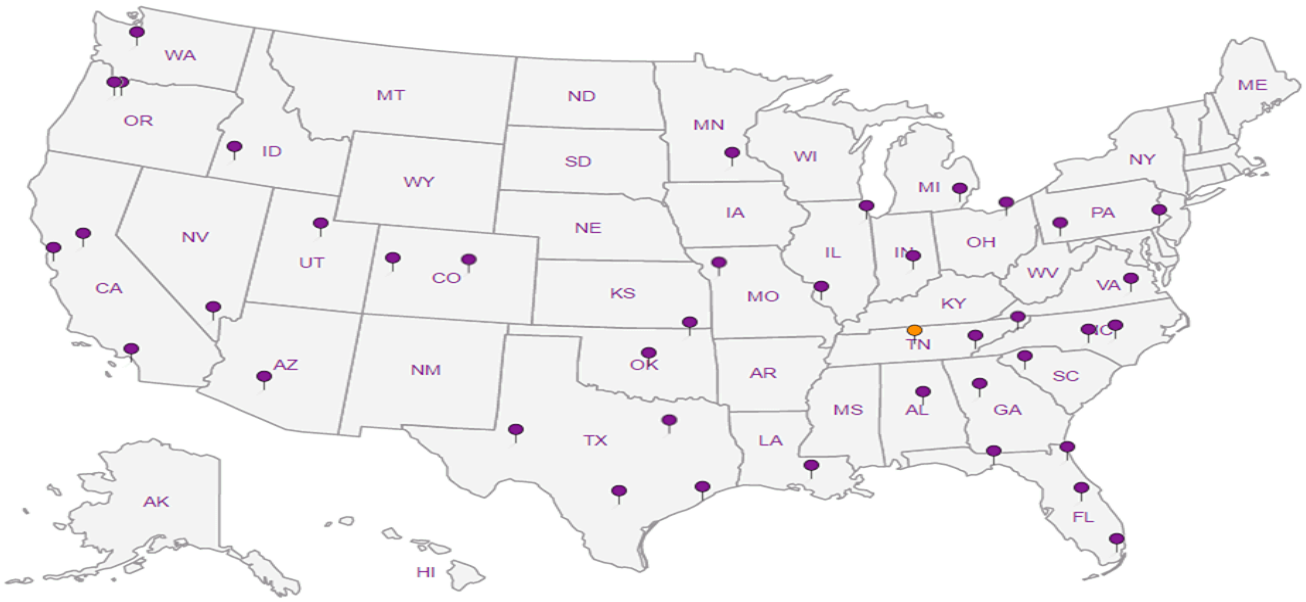
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

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

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



Zipper Geo Associates - Lynnwood, WA

19019 36th Ave. W.

Report to: Jon Einarsen

Billing Information:
Jon Einarsen
19019 36th Ave. W.
Ste. E
Lynnwood, WA 98036

Email To: jeinarsen@zippergeo.com

Project Description: Prime Cleaners

City/State Collected: Mill Creek, WA

Phone: 425-582-9928
Fax:

Client Project # 1001.25

Lab Project # ZIPGEOLWA-100125

Collected by (print): Evelyn Conrado

Site/Facility ID #

P.O. # 1001.25

Collected by (signature): Evelyn Conrado
Immediately Packed on Ice N ___ Y ✓

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

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260LLC 40mlAmb-HCl									Remarks	Sample # (lab only)
MW-1		GW		2/13/18	13:30	3	X										-01
MW-2		GW		2/13/18	12:10	3	X										02
MW-3		GW		2/14/18	12:15	3	X										03
MW-4		GW		2/14/18	15:15	3	X										04
MW-5		GW		2/13/18	14:50	3	X										05
MW-6		GW		2/14/18	8:55	3	X										06
MW-7		GW		2/14/18	10:40	3	X										07
MW-8		GW		2/14/18	13:35	3	X										08
MW-9		GW		2/13/18	8:57	3	X										09
MW-10		GW		2/13/18	10:40	3	X										10

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking # 7466 1466 1403

Trip Blank Received: Yes / No (HCL / MeoH) TBR

Temp: 2.12 °C Bottles Received: 36

Condition: NCF / OK

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Evelyn Conrado	02/15/18		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Date: 2/16/18 Time: 845

If preservation required by Login: Date/Time

Hold:

Chain of Custody Page 1 of 2

ESC LABORATORIES

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L971022

A054

Acctnum: ZIPGEOLWA
Template: T129863
Prelogin: P638477
TSR: 110 - Brian Ford
PB:
Shipped Via:

Chain of Custody Page 2 of 2

ESC LAB SCIENCES
a subsidiary of Pace Analytical

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Zipper Geo Associates - Lynnwood, WA

19019 36th Ave. W.

Billing Information:
Jon Einarsen
19019 36th Ave. W.
Ste. E
Lynnwood, WA 98036

Pres Chk

Report to: **Jon Einarsen**

Email To: **jeinarsen@zippergeo.com**

Project Description: **Prime Cleaners**

City/State Collected: Mill Creek, WA

Phone: **425-582-9928**
Fax:

Client Project # **1001.25**

Lab Project # **ZIPGEOLWA-100125**

Collected by (print): Evelyn Conrado

Site/Facility ID #

P.O. # 1001.25

Collected by (signature): Evelyn Conrado
Immediately Packed on Ice N ___ Y ✓

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

Quote #

Date Results Needed

L# L971022

Table #

Acctnum: **ZIPGEOLWA**

Template: **T129863**

Prelogin: **P638477**

TSR: **110 - Brian Ford**

PB:

Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260LLC 40mlAmb-HCl	Remarks	Sample # (lab only)
Duplicate		GW		2/14/18		3	X		-11
Equipment Blank		GW		2/14/18	14:14	3	X		12
		GW				3	X		1

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 7466 1466 1403

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: ✓Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Evelyn Conrado	02/15/18		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			862

Trip Blank Received: Yes / No
HCl / MeoH
TBR

Temp: 2.1 °C Bottles Received: 36

Date: 2/16/18 Time: 845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK