
Soil and Ground Water Investigation Report

The Home of Truth
1300 Grand Street
Alameda, CA 94501

Fuel Leak Case No. RO0003248
GeoTracker Global ID T10000010386

May 2018





The Home of Truth Spiritual Center

1300 Grand St. Alameda, CA 94501

510-522-3366 ~ alamedahomeoftruth@gmail.com

<http://www.thehomeoftruth.org>

Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Re: The Home of Truth Alameda
ACEH LOP RO#3248
1300 Grand Street, Alameda, California 94501

To Whom It May Concern,

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on our behalf to ACDEH's FTP server and the SWRCB's GeoTracker website.

Sincerely,

Judi Friedman, Administrator
Authorized Representative
The Home of Truth

Attachment: Report

Soil and Ground Water Investigation Report

1300 Grand Street, Alameda, CA

Fuel Leak Case No. RO0003248
GeoTracker Global ID T10000010386

Prepared for:
The Home of Truth

May 2018

Prepared by:
AWR Environmental
2363 Mariner Square Dr. Suite 245
Alameda, CA 94501



Steven Michelson, PG



TABLE OF CONTENTS

1.	INTRODUCTION.....	1
2.	SITE BACKGROUND.....	1
2.1	Site History	1
2.2	Site Setting.....	2
2.3	Utilities	2
2.4	Conceptual Site Model.....	2
3.	SOIL AND GROUND WATER SITE INVESTIGATION	3
4.	FINDINGS	3
4.1	Screening Criteria Selection.....	4
4.2	Soil Conditions.....	4
4.3	Ground Water Conditions	4
4.4	General Observations	5
4.5	Evaluation of Potential Risks to Human Health.....	5
5.	CONCLUSIONS	6
6.	RECOMMENDATIONS	6
7.	REFERENCES	6

TABLES

- Table 1. Soil Analytical Results
- Table 2. Ground Water Analytical Results
- Table 3. Conceptual Site Model

FIGURES

- Figure 1. Vicinity Map
- Figure 2. Site Map
- Figure 3. Hydrocarbon Concentrations in Ground Water

APPENDICES

- Appendix A. Permits
- Appendix B. Boring Logs
- Appendix C. Laboratory Analytical Reports



1. INTRODUCTION

This Soil and Ground Water Investigation Report (SWI) was prepared by AWR Environmental (AWR) on behalf of The Home of Truth Alameda (THOT). This Report describes soil and ground water sampling performed at 1300 Grand Street, Alameda, California (Site). The scope of the investigation is outlined in the Site Investigation Work Plan (AWR, 2017), which Alameda County Department of Environmental Health (ACDEH) approved by letter in October 2017 letter.

The purpose of the investigation was to assess the existence and extent of petroleum in soil and or ground water due to the likely UST identified in the sidewalk. The objectives of the investigation were to sample and analyze soil and ground water, evaluate analytical results to characterize Site conditions, and delineate the extent of primary and secondary sources of contamination if present.

2. SITE BACKGROUND

2.1 SITE HISTORY

The Site is located on the southwest corner of the intersection of Alameda Avenue and Grand Street in Alameda, California (Figure 1). THOT is a church with residential units and is located in a residential neighborhood. The building is over 100 years old.

THOT management revealed that the basement previously contained a boiler fueled with heating oil. A small sump, or pit, is present in the basement that extends approximately 1 foot below the floor, and likely contained the boiler, which is no longer present in the basement. Two approximately 1-inch diameter fuel lines enter the pit from underground. A vent line is presently attached to the exterior of the building. The building is now heated using natural gas.

In the winter of 2017, ground water rose and infiltrated the church's basement and a petroleum sheen was observed on the water's surface. On April 26th, 2017, a geophysical survey was performed to identify a possible underground storage tank and pipelines. The survey identified a likely 1,000-gallon underground storage tank (UST) underneath the sidewalk along Alameda Ave with piping leading into the basement of the church (Figure 2). The likely UST and its piping were estimated to be 5 ft bgs and the likely UST was estimated to be 5 to 6 feet in diameter and 12 feet long. On May 1, 2017, a water sample collected from the basement revealed concentrations of petroleum hydrocarbons in the diesel range at 41,400 µg/L (Table 1).



2.2 SITE SETTING

The Site is essentially flat at an approximate elevation of 35 feet above mean sea level. The property is approximately 2 feet above the elevation of the street. The nearest significant surface water features are the Alameda Lagoon, 0.35 miles to the south, and the Oakland Estuary, 0.65 miles to the north. Potable water is provided by the East Bay Municipal Utility District.

Depth to ground water was measured in May 2016 in monitor wells located at 2006 Encinal Ave at approximately 7 feet bgs, with a gradient toward the south-southwest. Ground water gradient at the Site is currently unknown.

Based on the recent drilling, the shallow geologic materials to a depth of approximately 16 ft bgs consist largely of fine to medium sand with silt ranging from about 5% to 35%. In some borings, a thin layer of clayey silt was encountered.

Ground water on the property was encountered at about 6 to 6.5 feet bgs. Ground water beneath the sidewalk was encountered at about 4.5 feet bgs. Ground water is likely about 1 to 2 feet below the basement.

2.3 UTILITIES

Based on the April 26th 2017 geophysical survey, Underground Services Alert (USA) markings, and April 25th 2018 utility location, one above ground and two underground utilities cross over and/or are immediately adjacent to the likely UST (Figure 2).

- PG&E natural gas line crosses directly over the likely UST. In early 2018, PG&E confirmed the location of the gas line and estimated that moving the line would cost more than \$50,000.
- Sanitary sewer crosses over the vent pipe immediately east of the likely UST.
- Alameda Power electrical power line crosses above the likely UST, approximately 15 to 20 feet above ground.

Due to complications presented by utilities on Site, Ms. Jakub with the ACDEH Local Oversight Program authorized closure of the tank in place barring a release.

2.4 CONCEPTUAL SITE MODEL

The Conceptual Site Model (CSM) is a representation of site conditions developed using available data, interpretations, and assumptions based on experience to demonstrate the relationship between contaminants of concern, transport media and mechanisms, and potential receptors. The updated major CSM elements, are highlighted in tabular format (Table 3). This CSM will be updated as new information becomes available.



3. SOIL AND GROUND WATER SITE INVESTIGATION

The Site was marked with paint and Underground Service Alert was notified at least 48 hours prior to work commencing to identify public utilities in the work area. A private utility locator was also mobilized prior to drilling to identify any additional utilities on Site. Right-of-Way permit EX18-0010 was obtained from the City of Alameda, and Well Permit W2018-0282 was obtained from the Alameda County Public Works Agency (ACPW) (Appendix A).

On April 25th, 2018, AWR advanced a total of six vertical borings to enable the collection of eleven soil and seven ground water samples (Figure 2). Drilling was performed by Cascade Drilling, a California C57 licensed drilling contractor.

Borings SB1 through SB4 were advanced using a hand auger to between 5 and 6 ft bgs, and further advanced by a truck mounted direct push drill rig to 16 ft bgs. Borings SB5 and SB6 were advanced to 12 ft bgs using a hand auger. Soil in each boring was logged and classified during drilling operations according to the Unified Soil Classification System (USCS) (Appendix B), and screened for Volatile Organic Compounds (VOCs) using a photo-ionization detector (PID).

Soil samples were collected from borings SB1 through SB4 into laboratory supplied jars and EP Method 5035 compliant Terracore sampling containers. Sample depths were selected based on requirements presented in the State Water Resources Control Board's August 2012 Low Threat Closure Policy (LTCP), as well as field observations such as PID readings, odors, as well as color changes from native brown to grey staining.

Grab ground water samples were collected from SB1 through SB4, and SB6 at 10 ft bgs, and from SB5 at 5 and 10 ft bgs, within new polyvinyl chloride (PVC) screen installed in each borehole. Ground water was collected from each boring using clean soft tubing and a peristaltic pump into three 40mL laboratory provided containers.

Following collection, soil and ground water samples were labeled and transferred to a pre-chilled insulated container. All samples were transported under chain-of-custody by a courier service to a California certified laboratory for analysis. After completion of drilling and sample collection, each boring location was abandoned with neat cement tremie grouted to the surface under ACPW supervision.

4. FINDINGS

Laboratory analytical results are summarized in Table 1, and the laboratory's reports are in Appendix C.



4.1 SCREENING CRITERIA SELECTION

LTCP descriptive scenarios 1-4 are not applicable at this Site because the depth to water is less than 5 ft below ground surface adjacent to the likely UST. Therefore, both the LTCP criteria and the RWQCB Environmental Screening Levels (ESLs) are used herein to evaluate the significance of the measured concentrations.

Concentrations in soil are compared to the LTCP concentrations of petroleum constituents in soil that will have no significant risk of adversely affecting human health residential scenario (Table 1), and to ESLs (Table S-2) for evaluating leaching from soil to drinking and nondrinking ground water resources.

Chemical concentrations in ground water are compared to Vapor Intrusion ESLs (Table GW-4, RWQCB, 2016). Concentrations of total petroleum hydrocarbons in groundwater are compared to gross contamination levels (Table GW-4); there are no vapor intrusion ESLs for total petroleum hydrocarbons.

The laboratory measured total petroleum hydrocarbons in three carbon chain ranges:

- C5-C12 corresponds with total petroleum hydrocarbons in the gasoline range
- C12-C22 corresponds with total petroleum hydrocarbons in the heating oil range
- C22-C23 corresponds with total petroleum hydrocarbons in motor oil range
- C32-C40 corresponds with heavy range total petroleum hydrocarbons

4.2 SOIL CONDITIONS

- The soil sample collected from 13 feet bgs in SB-3 contained concentrations of C12-C22, ethylbenzene, and naphthalene above ESLs for protecting potable ground water and TPHg for protecting non-potable ground water.
- The soil sample collected from 13 feet bgs in SB-3 contained measurable concentrations below ESLs of C5-C12, C22-C40 and toluene, and xylenes, among other relatively low concentrations of VOCs.
- Concentrations of acetone below the ESLs were present in soil collected from SB1 at 9.5 and 11 ft bgs, SB2 at 4.5 and 5.5 ft bgs, and SB3 at 4 ft bgs.

4.3 GROUND WATER CONDITIONS

- Ground water collected from SB-1 and SB-4 contained concentrations of C12-C40 petroleum hydrocarbons below ESLs and no measurable concentrations of C5-C12 petroleum hydrocarbons.



- Ground water collected from SB-2, SB-5, and SB-6 contained no measurable concentrations of petroleum hydrocarbons.
- Concentrations of C12-C22 and C22-C32 petroleum hydrocarbons in ground water collected from SB-3 and from the standing ground water collected from the basement in May 2017 above the gross contamination ESLs and at concentrations indicative of potential separate phase petroleum.
- Concentration of C5-C12 and C32-C40 petroleum hydrocarbons were measured below the gross contamination ESLs in the groundwater sample from SB3.
- No concentrations of BTEX were detected in any of the ground water samples.

4.4 GENERAL OBSERVATIONS

- Visible contamination, odors, measurable PID concentrations, and measurable laboratory concentrations of petroleum in soil and ground water are limited to the three borings (SB-1, SB-3, SB-4) advanced adjacent to the likely UST.
- No measurable petroleum was found in soil or ground water samples collected from the three borings advanced near the THOT building and northeast of the likely UST.
- The only measurable concentration of petroleum in soil was in the sample collected from 13 feet bgs in SB3, which is likely near the bottom of the suspected UST.
- Concentrations of petroleum hydrocarbons in ground water collected from SB-1 and SB-3 are indicative of possible separate phase hydrocarbons.

4.5 EVALUATION OF POTENTIAL RISKS TO HUMAN HEALTH

Based on the data, there is no significant risk to residential and recreational human health because the:

- dermal exposure pathway to soil with petroleum is severed due to the presence of hardscape and the depth to petroleum in soil exceeds 5 feet
- ingestion exposure pathway is severed due to potable water supply from EBMUD
- inhalation risk is incomplete between concentrations of volatile constituents in soil and ground water are below inhalation ESL screening criteria, although soil vapor samples have not been collected.



5. CONCLUSIONS

The following conclusions are based on field observations and analytical results to date:

- The likely UST has released heating oil to soil and ground water beneath the sidewalk.
- Concentrations of C12-C22 petroleum in saturated soil and ground water near the likely UST are indicative of potential separate phase petroleum.
- Depth to ground water at the likely UST is less than 5 feet bgs.
- Ground water gradient direction is likely to the south to southwest.
- Benzene, toluene, ethyl benzene, and xylenes are not present at concentrations likely to pose a significant risk
- Risk to human health due to ground water ingestion is unlikely because EBMUD provides potable water to the area.

6. RECOMMENDATIONS

- No significant risk to human health is apparent based on the data.
- Due to the likely presence of separate phase petroleum hydrocarbons, remedial action is recommended.
- Additional delineation of the impacts to soil and ground water in the immediate vicinity of the likely UST is needed to inform the design of the remedy. On Site above and below ground utilities should be assessed as potential obstacles to the remedy.
- Due to the likely southerly ground water gradient direction, delineation of impacts to ground water to the south is recommended.
- Assess possible release of fuel beneath the basement due to product lines.
- Perform a survey to identify ground water supply wells in the area.

Figure 4 depicts suggested additional sampling locations pursuant to the above recommendations.

7. REFERENCES

Applied Water Resources, *Site Investigation Work Plan*, 1300 Grand Street, Alameda CA, August 2017.



TABLES



Table 1: Soil Analytical Results

Location ID	Sample Depth (ft bgs)	Sample Date	C5 - C12 HYDROCARBON	C12-C22 HYDROCARBON	C22-C32 HYDROCARBON	C32-C40 HYDROCARBON	ACETONE	N-BUTYLBENZENE	SEC-BUTYLBENZENE	ETHYLBENZENE	BENZENE	TOLUENE	XYLENES, TOTAL	2-BUTANONE (MEK)	NAPHTHALENE	ISOPROPYLBENZENE	P-ISOPROPYLTOLUENE	N-PROPYLBENZENE	TRICHLOROETHENE	1,2,4-TRIMETHYLBENZENE	1,2,3-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE
			mg/kg																			
SB1	4	4/25/18	<4.81	<4.81	<4.81	<4.81	<0.0331	<0.0165	<0.0165	<0.00331	<0.00732	<0.00661	<0.0086	<0.0331	<0.0165	<0.00331	<0.00661	<0.00661	<0.00132	<0.00661	<0.00661	<0.00661
	9.5	4/25/18	<4.82	<4.82	<4.82	<4.82	0.0453	<0.0151	<0.0151	<0.00302	<0.00121	<0.00603	<0.00784	<0.0302	<0.0151	<0.00302	<0.00603	<0.00603	<0.00121	<0.00603	<0.00603	<0.00603
	11	4/25/18	<4.68	<4.68	<4.68	<4.68	0.0375	<0.0146	<0.0146	<0.00292	<0.00117	<0.00565	<0.0076	<0.0292	<0.0146	<0.00292	<0.00565	<0.00565	<0.00117	<0.00565	<0.00565	<0.00565
SB2	13	4/25/18	<4.98	<4.98	<4.98	<4.98	<0.0311	<0.0156	<0.0156	<0.00311	<0.00125	<0.00623	<0.0081	0.0356	<0.0156	<0.00311	<0.00623	<0.00623	<0.00125	<0.00623	<0.00623	<0.00623
	4.5	4/25/18	<4.74	<4.74	<4.74	<4.74	0.0376	<0.0154	<0.0154	<0.00308	<0.00123	<0.00616	<0.00801	<0.0308	<0.0154	<0.00308	<0.00616	<0.00616	<0.00123	<0.00616	<0.00616	<0.00616
	5.5	4/25/18	<4.78	<4.78	<4.78	<4.78	0.0764	<0.0149	<0.0149	<0.00299	<0.00119	<0.00597	<0.00776	<0.0299	<0.0149	<0.00299	<0.00597	<0.00597	<0.00119	<0.00597	<0.00597	<0.00597
SB3	4	4/25/18	<4.81	<4.81	<4.81	<4.81	0.036	<0.015	<0.015	<0.003	<0.00120	<0.00601	<0.00781	<0.03	<0.015	<0.003	<0.00601	<0.00601	<0.0012	<0.00601	<0.00601	<0.00601
	9	4/25/18	<4.75	<4.75	<4.75	<4.75	<0.0297	<0.0148	<0.0148	<0.00297	<0.00119	<0.00593	<0.00771	<0.0297	<0.0148	<0.00297	<0.00593	<0.00593	<0.00119	<0.00593	<0.00593	<0.00593
	13	4/25/18	1.610	13.400	56	56	<0.0609	3.86	2.99	1.80	<0.0243	0.15	0.44	<0.609	40.30	1.85	3.64	3.50	0.12	3.76	0.85	5.99
SB4	4	4/25/18	<4.42	<4.42	<4.42	<4.42	<0.0326	<0.0163	<0.0163	<0.00326	<0.00130	<0.00652	<0.00847	<0.0326	<0.0163	<0.00326	<0.00652	<0.00652	<0.0013	<0.00652	<0.00652	<0.00652
	9	4/25/18	<5.09	<5.09	<5.09	<5.09	<0.0331	<0.0165	<0.0165	<0.00331	<0.00132	<0.00662	<0.0086	<0.0331	<0.0165	<0.00331	<0.00662	<0.00662	<0.00132	<0.00662	<0.00662	<0.00662
LTCP	Residential 0-5 ft bgs									21	1.9				9.7							
LTCP	Residential 5-10ft bgs									32	2.8				9.7							
ESL	Leaching to drinking GW ¹		1,000	570			0.5			1.4	0.044	2.9	2.3									
ESL	Leaching to non drinking G		3,400	3,600			0.5			1.4	0.049	9.3	11									

Notes

Bold where above leaching to drinking ground water ESL

Highlighted where above leaching to non drinking ground water ESL

LTCP State Water Board Low Threat Closure Policy, Table 1: Concentrations of Petroleum Constituents in Soil That Will Have No Significant Risk of Adversely Affecting Human Health

ESL Ca SF Bay RWQCB Table GW-3 Groundwater Vapor Intrusion Human Health Risk Screening Levels (Volatile Chemicals Only) Feb 2016

¹ Leaching to Ground Water Levels (Table S-2) - Drinking Water

² Leaching to Ground Water Levels (Table S-2) - Nondrinking Water



Table 2: Ground Water Analytical Results

Location ID	Sample Depth (ft bgs)	Sample Date	C5-C12 HYDROCARBONS	C12-C22 HYDROCARBONS	C22-C32 HYDROCARBONS	C32-C40 HYDROCARBONS	OTHER VOCS
			µg/L				
THOT-GW	Basement surface	5/1/2017	363	41,400	4,050	<1000	<5
SB1	10	4/25/18	<100	957	527	<182	<50
SB2	10	4/25/18	<100	<100	<100	<100	<50
SB3	10	4/25/18	2,690	25,800	4,300	170	<50
SB4	10	4/25/18	<100	221	161	<103	<50
SB5	5	4/25/18	<100	<100	<100	<100	<50
SB6	5	4/25/18	<100	<105	<105	<105	<50
	10	4/25/18	<100	<206	<206	<206	<50
ESL	Gross Contamination Levels ¹		50,000	2,500	2,500	50,000	--

Notes

ESLs Ca SF Bay RWQCB Table GW-3 Groundwater Vapor Intrusion Human Health Risk Screening Levels (Volatile Chemicals Only) Feb 2016

¹ Hydrocarbons do not have an ESL for Vapor Intrusion Risk so Groundwater Gross Contamination ESL from table GW-4 has been used

Bold where measured above reporting limit

Highlighted where above ESL

Table 3: Conceptual Site Model

CSM Element	CSM Sub-Element	Description	Data Gap	How to Address
Background and Setting	Site	The Site is located in the City of Alameda on the southwest corner of the intersection of Alameda Ave and Grand Street in Alameda, California (Figure 1). The Site is a church with residential units and is located in a residential neighborhood. The church's basement previously contained a boiler fueled with heating oil. A small sump, or pit, is present in the basement that extends approximately 1 foot below the floor, and likely contained the boiler, which is no longer present in the basement. A vent line is presently attached to the exterior of the building. The building is now heated using natural gas.	None	NA
	Adjacent Properties	Residences are located adjacent to the Site.	None	NA
	Nearby Properties	The surrounding area is made up of residential homes and apartments.	None	NA
Geology and Hydrogeology	Underground Infrastructure	An inactive UST that once held heating oil is likely located beneath the sidewalk on Alameda Ave and its piping leads to the church's basement. A gas line was traced from the church to the street and overlies the UST.	None	NA
	Regional	This Site is located on the western margin of the East Bay Plain Subbasin of the Santa Clara Valley Ground Water Basin. The East Bay Plain subbasin aquifer system consists of unconsolidated sediments of Quaternary age. Deposits include the early Pleistocene Santa Clara Formation, the late Pleistocene Alameda Formation, the early Holocene Temescal Formation, and Artificial Fill (DWR 2004). Soil in the vicinity consists of Pleistocene beach and dune deposits (Merritt sand) consisting of loose, well sorted fine to medium sand (Helley and others 1979).	None	NA
Surface Water Bodies	Site	Soil encountered at the Site consisted mostly of poorly sorted, fine grained sand to sandy silt to maximum explored depth of approximately 16 feet below ground surface (ft bgs) with an approximate 6" clay seen at approximately 7.5 ft bgs in SB5 and SB6. Ground water was measured in May 2016 in monitor wells located at 2006 Encinal Ave at approximately 7 ft bgs and the gradient is towards the south-southwest direction.	Ground water gradient at the Site is currently unknown.	Pending characterization of significant impact to ground water, monitor wells may be installed.
		The nearest significant surface water features are the Alameda Lagoon, 0.35 miles to the south, and the Oakland Estuary, 0.65 miles to the north. The Site is essentially flat at an approximate elevation of 35 feet above mean sea level (ft msl).	None	NA
Nearby Wells		According to GeoTracker's Groundwater Ambient Monitoring and Assessment (GAMA) database, the nearest water supply well is approximately 0.7 miles east of the Site. This well is located at Alameda High School at 2201 Central Ave. The well is located upgradient of the Site and there does not appear to be any water supply wells located downgradient of the Site.	A well survey through DWR has not been completed.	Request a well survey through DWR for nearby water supply wells not on GAMA.
		The Site is located in a residential neighborhood surrounded by several residences and apartment buildings.	Possible receptors are building occupants and nearby residents.	Evaluate soil vapor and ground water quality.
Sensitive Receptors		There is a preschool located approximately 650 feet north of the Site and another preschool located 1,150 feet west of the Site. An elementary school is located 900 feet southwest of the Site.	Actual source(s)	Collection and analysis of soil, ground water, and soil vapor samples.
	On-Site	Likely consisting of the UST beneath the sidewalk, piping to former boiler in basement, and/or former boiler.		
Sources	Off-Site	Concentrations of hydrocarbons and VOCs were detected in soil in SB3 at 13 ft bgs	None	NA
	Soil	Concentrations of hydrocarbons were detected in soil in SB3 at 13 ft bgs	Extent of soil contamination is currently unknown.	Borings in the vicinity of the UST and collect soil samples for analysis.
Distribution of Petroleum Hydrocarbons	Ground Water	Distribution unknown, however a sheen was observed on ground water that infiltrated the basement during the winter. Concentrations of hydrocarbons were detected in groundwater in SB1, SB3, and SB4	Extent of ground water contamination is currently unknown.	Borings in the vicinity of the UST and collect soil samples for analysis.

Table 3: Conceptual Site Model

CSM Element	CSM Sub-Element	Description	Data Gap	How to Address
Distribution of Petroleum Hydrocarbons	Soil Vapor	Unknown	Extent of soil vapor contamination is currently unknown.	Install sub-slab pin in the basement of the church. Depending on grab ground water samples, soil vapor wells may be installed to assess risk to nearby residences.
	Soil	Concentrations of hydrocarbons and VOCs were detected in soil in SB3 at 13 ft bgs	Extent of soil contamination is currently unknown.	Borings in the vicinity of the UST and collect soil samples for analysis.
Distribution of Risk	Ground Water	Concentrations of petroleum hydrocarbons in ground water are significant and indicate that ground water may serve as a source to soil vapor contamination, which in turn poses a vapor intrusion risk to indoor air. Risk by direct exposure to ground water is not a concern due to the fact that ground in the vicinity is not used for drinking water purposes and the City of Alameda is served by a municipal water supply.	Extent of ground water contamination is currently unknown.	Borings in the vicinity of the UST as well as the surrounding area and collect ground water for analysis.
	Soil Vapor	Concentrations of hydrocarbons were detected in groundwater in SB1, SB3, and SB4	Extent of soil vapor contamination is currently unknown.	Install sub-slab pin in the basement of the church. Depending on grab ground water samples, soil vapor wells may be installed to assess risk to nearby residences.

FIGURES



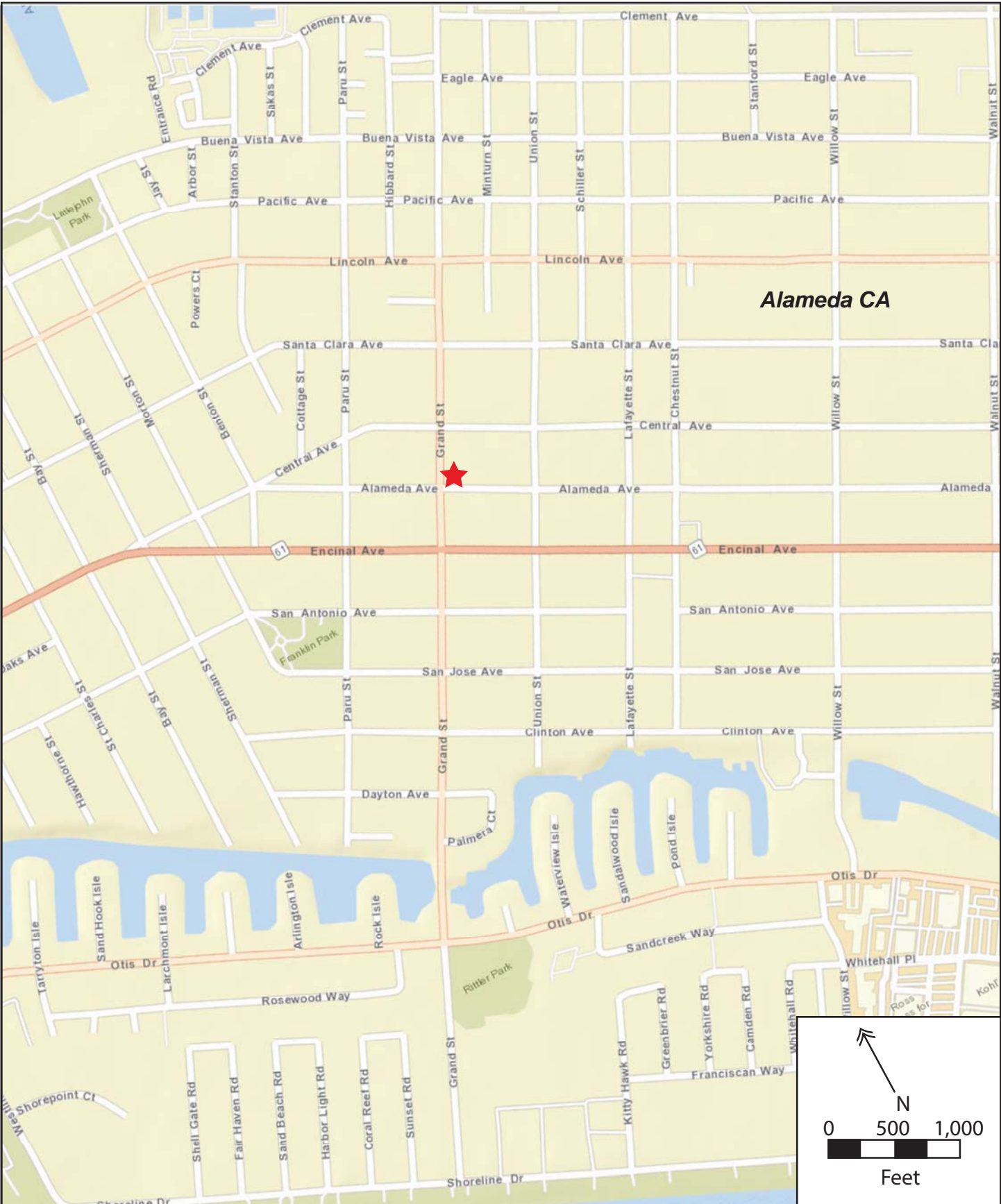


Figure 1

Vicinity Map

1300 Grand St. Alameda, CA



Project Site - 1300 Grand St.



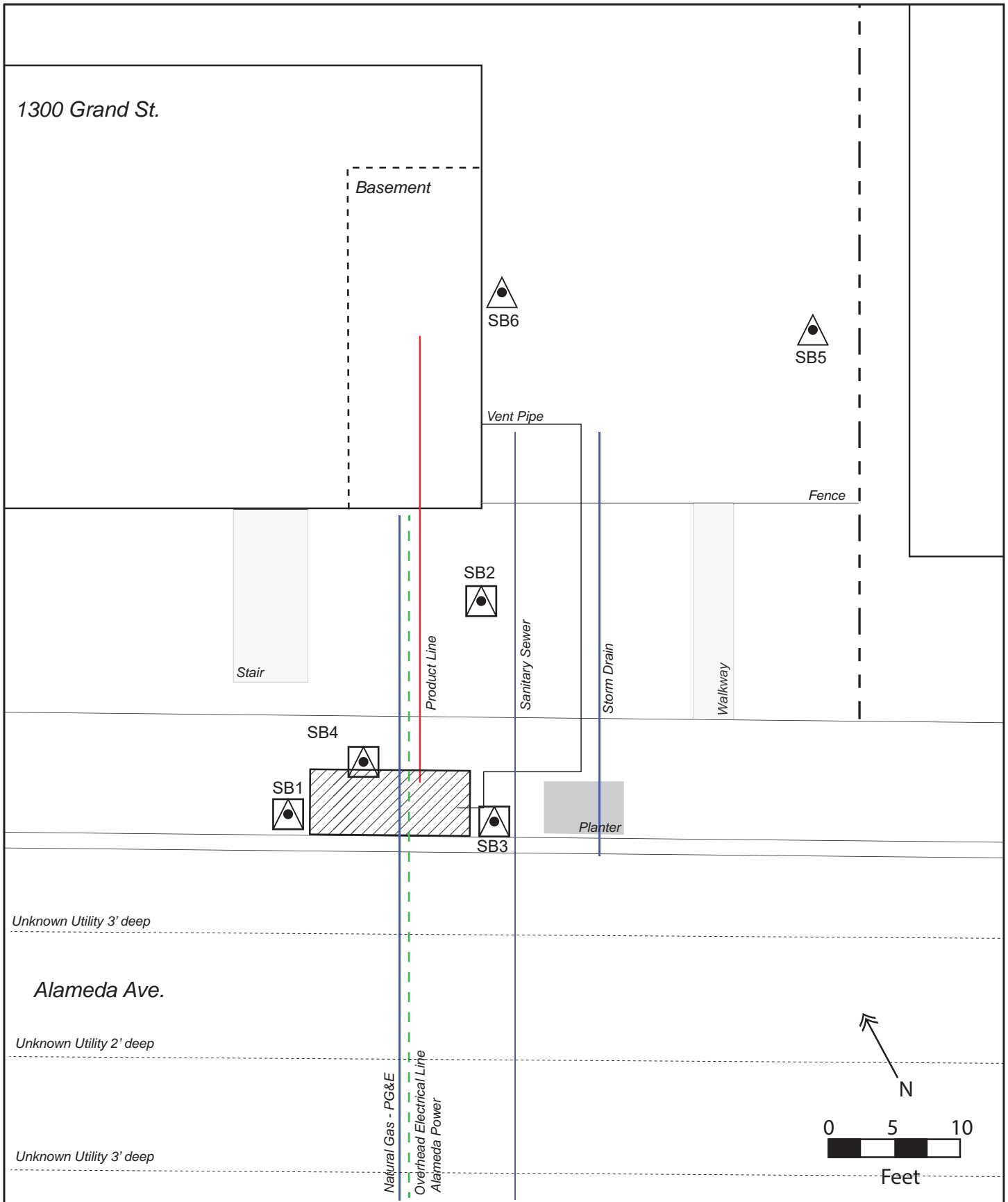


Figure 2
 Sample Locations

1300 Grand St. Alameda, CA

- Soil Sample
- △ Grab Ground Water Sample



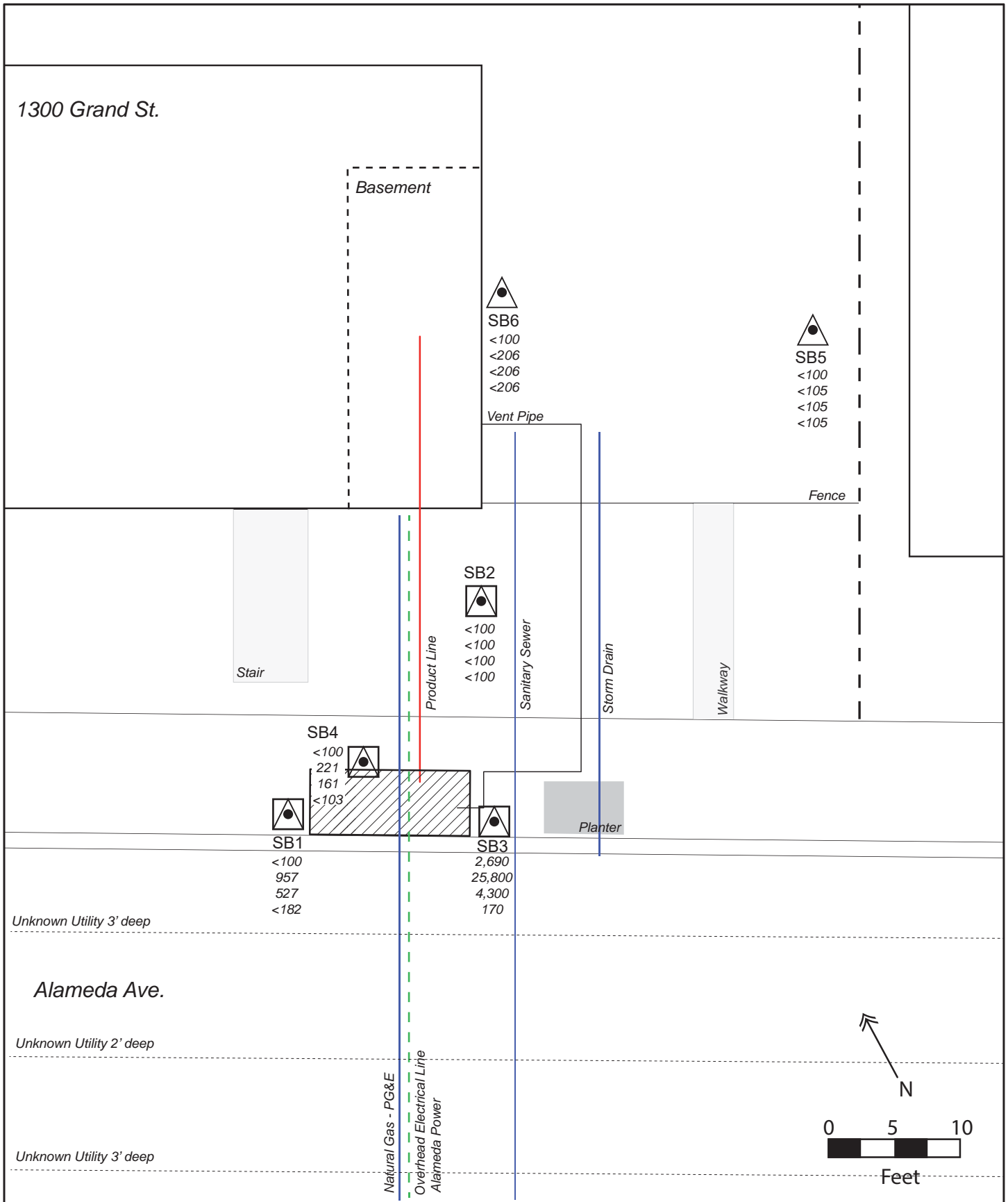


Figure 3
Concentrations of Hydrocarbons in Ground Water
 1300 Grand St. Alameda, CA

- ▲ Grab Ground Water Sample
 - ## - C5-C12 Hydrocarbons concentration (µg/L)
 - ## - C12-C22 Hydrocarbons concentration (µg/L)
 - ## - C22-C32 Hydrocarbons concentration (µg/L)
 - ## - C32-C40 Hydrocarbons concentration (µg/L)
- Soil Sample



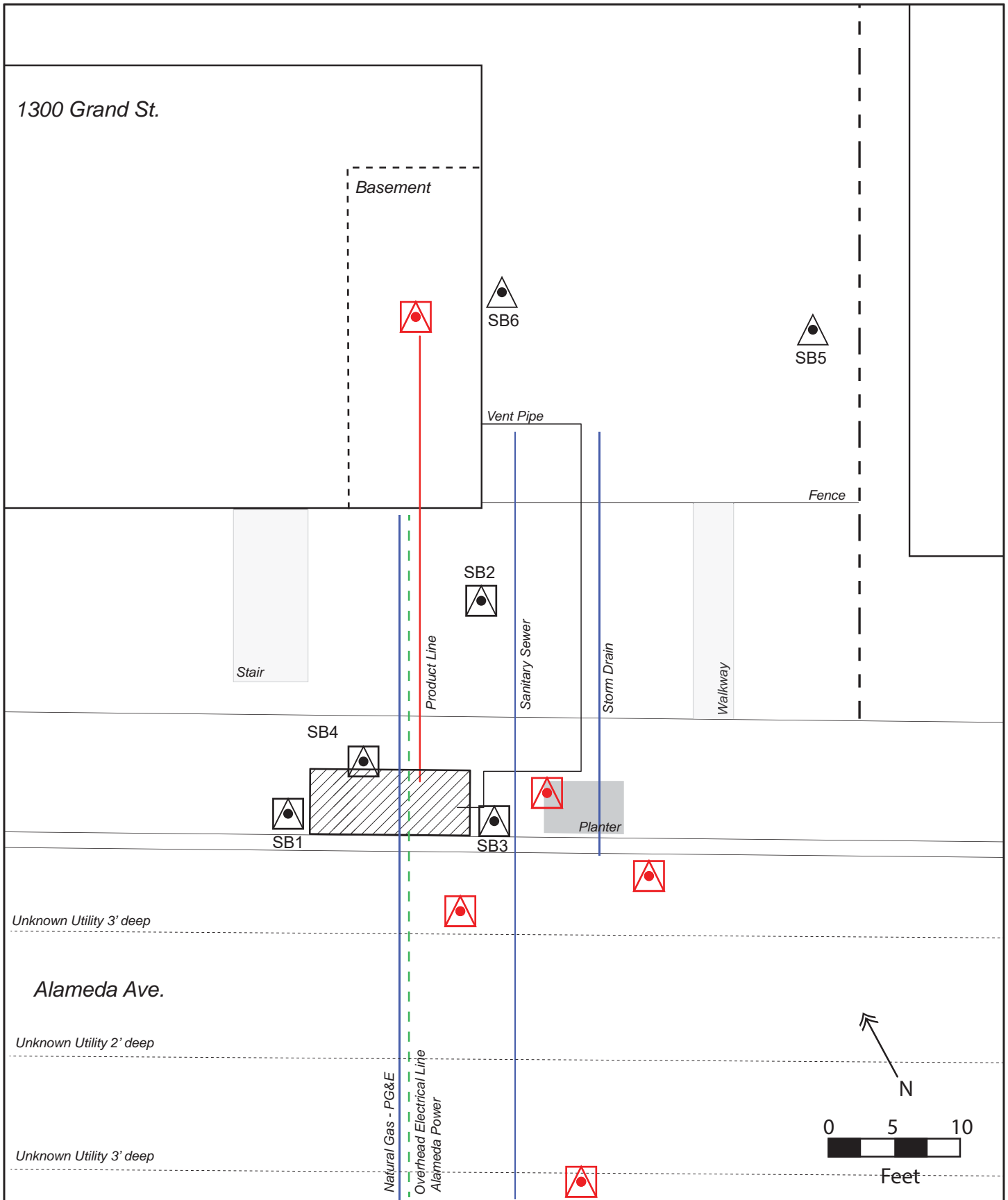


Figure 4
Proposed Sample Locations
 1300 Grand St. Alameda, CA

- Proposed Soil Sample
- ▲ Proposed Grab Ground Water Sample
- Soil Sample
- ▲ Grab Ground Water Sample



APPENDIX A

PERMITS



Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 04/17/2018 By jamesy

Permit Numbers: W2018-0282
Permits Valid from 04/25/2018 to 04/25/2018

Application Id: 1523058969771
Site Location: 1300 Grand St, Alameda, CA 94501, USA
Project Start Date: 04/25/2018

City of Project Site: Alameda
Completion Date: 04/25/2018

Assigned Inspector: Contact Eneyew Amberber at (510) 670-5759 or eneyew@acpwa.org

Applicant: AWR Environmental - Yola Bayram
2363 Mariner Square Drive, Suite 245, Alameda, CA 94501

Phone: 510-671-2088 x51067

Property Owner: The Home of Truth Of Alameda
1300 Grand Street, Alameda, CA 94501

Phone: --

Client: ** same as Property Owner **

Receipt Number: WR2018-0193	Total Due:	\$265.00
Payer Name : Steve Michelson	Total Amount Paid:	\$265.00
	Paid By: VISA	PAID IN FULL

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 6 Boreholes
Driller: Cascade Drilling - Lic #: 938110 - Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2018-0282	04/17/2018	07/24/2018	6	2.00 in.	15.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned.
5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

Alameda County Public Works Agency - Water Resources Well Permit

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

7. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

8. NOTE:

Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

City of Alameda



Interdepartmental Memorandum

Date: February 2, 2018

To: Permit Office

From: Oskar Garcia
Public Works Department

Re: Permit No. EX18-0010, removal of underground storage tank from property.

Job Address: 1300 Grand Street

Applicant: Yola Bayram
2363 Mariner Square Drive Suite 245
Alameda CA 94501

APPROVAL NOTICE

Public Works staff has reviewed and approved the application for Permit No. EX18-0010. The following comments are the City's requirements for approval and shall be enforced, as necessary. The permittee and/or his contractor(s) shall abide by the following provisions:

Specific Comments

Civil

1. The Public Works Inspector shall enforce all general comments addressing restoration within the public right-of-way.
2. The replacement of curb, gutter, and sidewalk within the public right-of-way shall conform to City of Alameda Standard Plan 6297-24.
3. Applicant shall accommodate utility companies if additional access space is required to access their utility boxes that are nearby.

Traffic

1. Work hours shall be 9 am to 4 pm.

The posting of "No-Parking" signs, as applicable, is required 48 hours in advance of the work. "No-Parking" signs are available at the Planning and Building Department, Room 190, City Hall. A fee will be charged for the signs. Only City of Alameda issued "No-Parking" signs are permitted for use within the public right-of-way.

General Comments:

1. 1. Public Notifications: All property owners within the immediate vicinity of the work area must be notified in writing at least 5 days prior to the start of construction. The notification letter or door hanger must include a brief description of the work and the anticipated project completion date. All public notifications must include contractor information, including company name, license number, contact person's name, and phone number, for citizens to report their concerns while work is in progress.
2. Coordination Notification: The permittee shall notify Maria DiMeglio of the Public Works Environmental Services Division at (510) 747-7958, 48-hours prior to beginning of any work within the public right-of-way.
3. Additional Permits: The Contractor shall be responsible for obtaining all additional permits prior to beginning construction for any work not contained within the scope of this permit.
4. Designated Truck Routes: All truck deliveries to the proposed work site must remain on established truck routes.
5. USA: All utilities within the work area shall be located and marked by USA prior to commencing excavation, trenching, micro-tunneling, or boring operations.
6. Work Hours: Unless stated otherwise in the specific comments, work hours are limited to the hours of 8:30 a.m. to 4:30 p.m., Monday through Friday. Be advised that uninterrupted traffic circulation within the public right-of-way is mandatory during the commute hour of 7:30 a.m. to 9:00 a.m. and 3:00 p.m. to 4:30 p.m. Work done on Saturdays, requiring inspection, is prohibited unless approved by the City Engineer and an inspector is available. Requests to work Saturday require two-week minimum prior notice. Inspection fees for Saturday work will be at time and a half (1-1/2) with a four-hour minimum. Said fee will be in accordance with the latest public works fee overtime schedule. No construction activity shall be permitted on Sundays or State and Federal holidays.
7. Construction Staging: Storage of construction materials and equipment within the public right-of-way is not permitted.

7. Construction Staging: Storage of construction materials and equipment within the public right-of-way is not permitted.
8. URCWP (General/As Applicable): Construction materials (i.e. cement bags, paints, flammables, oils, fertilizers, pesticides, or any other materials that have potential for being discharged into the storm drain system by wind or as the result of a material spill) shall be kept in a contained and covered area on-site, as is practical, while construction is in progress. When feasible, tarps shall be used on the ground to collect fallen debris or splatters that could contribute to stormwater pollution. All temporary construction piles may remain on-site no more than 48 hours (continuous) and shall be securely covered overnight with a tarp or other device to contain debris. All construction debris shall be gathered and properly disposed of off-site on a regular basis.
9. Noise Generating Construction Activity: Maintain construction noise, dust control and cleanup to City acceptable levels. Construction equipment shall be properly muffled. Unnecessary idling of excavation and/or grading equipment is prohibited. Stationary noise-generating construction equipment such as compressors shall be located as far as practical from occupied residential housing units. Contractor shall be responsible for responding to any local complaints about construction noise.
10. Daily Work Site Cleanup: Trash and debris shall be cleaned up daily. Work area and haul routes shall be swept daily (with water sweepers) to remove construction-related materials. All construction debris shall be gathered on a regular basis and placed in a dumpster which is emptied or removed weekly. Any temporary on-site construction piles shall be securely covered with a tarp or other device to contain debris. Construction and demolition debris, and recycling, disposal shall be in accordance to the Alameda Municipal Code, Chapter XXI.
11. Storm Water BMP: Construction equipment, tools, etc. shall not be cleaned or rinsed into a street, gutter or storm drain. Concrete trucks and concrete finishing operations shall not discharge wash water into the street gutters or drains. There shall be no debris in the gutters. A contained and covered area on-site shall be used for storage of cement bags, paints, flammables, oils, fertilizers, pesticides, or any other materials that have potential for being discharged to the storm drain system by wind or in the event of a material spill. When feasible, tarps shall be used on the ground to collect fallen debris or splatters that could contribute to storm water pollution. Construction best management practices (BMP) for control of storm water runoff (e.g. straw waddles at catch basin inlets) shall be used where applicable. Contact the Public Works Environmental Services Division, at (510) 749-7930 for information on best management practices.
12. Pavement, Traffic Striping & Detectors: If the street pavement in the vicinity of the job site is damaged as a result of construction activity, then either pavement repair/reconstruction or an asphalt concrete overlay shall be required, as determined by

the City Engineer or assigned representative. Additionally, traffic striping & marking, signal detectors, curb, gutter and other concrete improvements, damaged as a result of construction shall be replaced to the satisfaction of the City Engineer or assigned representative. Installation and maintenance of temporary striping and pavement markers is required while work is ongoing.

13. Traffic Control: If construction work encroaches within the right-of-way, the applicant must submit a traffic control plan that conforms to the following requirements:
- The traffic control plan shall follow the standards and guidelines provided by the most recent version of the CA MUTCD and Caltrans Standard Plans.
 - If a lane is to remain open, the lane width shall be at least:
 - 12 feet on truck routes, bus routes, and paratransit routes
 - 10 feet otherwise.
 - Base the taper lengths, delineator spacing, and sign spacing on a traffic speed equal to the posted speed limit plus 5 MPH.
 - Notify Joseph Robinson at AC Transit (510-891-4908) if the work zone is in a bus stop, near a bus stop, or on a bus route. The work shall not interfere with AC Transit bus service in the area. Joseph Robinson shall be notified at least 2 weeks in advance of the work.
 - Notify Rochelle Wheeler at (510-747-7442) if the work zone is in or near a City of Alameda Paratransit Shuttle stop.
 - Pedestrians shall be properly detoured at **appropriate crossing locations** whenever a sidewalk/crosswalk is closed. See the California MUTCD for guidance. Please keep in mind those pedestrians that may be disabled. Only one crossing at an intersection shall be closed at any time.
 - Applicant shall conform to all ADA standards.
 - If flaggers are used in the detour plan, they shall be shown in the drawings.
 - The applicant must obtain approval from the property owner of any driveways being blocked.
 - If the work is encroaching onto private properties, the applicant shall get approval from the appropriate property owners before proceeding with the work.
 - If the work is on State Route 61, the applicant shall get the proper approved permits from Caltrans
 - Applicant shall not park their vehicle, and not on/over curb or on the sidewalk or paths.
14. Open Trench Excavation: At no time shall there be more than 200 lineal feet of the trench opened along any single conduit alignment, including the section opened ahead of the pipe laying and the section behind the pipe laying which has not been completely backfilled and has a temporary cap. This also dictates the maximum length of right-of-way that may be posted with no parking signs at any one time.
15. Excavation Restoration: Excavation restoration in the roadway shall conform to City of Alameda Standard Plan 2930-22 and the following condition: At the direction of the City

Engineer or assigned agent, pavement restoration may extend to a maximum 18" beyond the standard plan limits where existing adjacent pavement is raveled or alligatored. Pavement restoration shall include sawcut, removal of asphalt concrete, and replacement in kind in conjunction with the trench restoration/paving course. The limits of the area within the roadway to be repaved must be pre-approved by the City Inspector. All work shall be done to the satisfaction of the City Engineer or his assigned agent.

16. Hardscape Restoration: A concrete permit is required for the demolition and restoration of concrete curb, gutter and sidewalk within the public right-of-way. Concrete restoration of concrete curb, gutter, sidewalk and/or driveway within City right-of-way shall conform to City of Alameda Standard Plan 6297-24. Also, existing decorative concrete (e.g. tinted concrete, etc.) shall be replaced in kind and to the nearest expansion joint.
17. Site Restoration: Upon completion of the work all existing improvements within the project area (e.g. landscaping, irrigation, utilities, paths, area drainage, etc.) shall be completely restored to prior condition, or better, within five (5) working days of installation. Any damage within the public-right-of-way shall be replaced at the permittee's expense to the satisfaction of the City Engineer or his designated agent.
18. Construction Inspection: The permittee shall notify the Public Works Inspector (510) 747-7930, 48-hours prior to beginning of any work within the City right-of-way. Work performed or covered without adequate notice will be subject to rejection.

Should you require further clarification regarding these comments, contact Oskar Garcia at (510) 747-7964.

OG:lk

G:\pubworks\Permits\2018\Excavation\EX18-0010.1300 Grand.Removal of underground storage tank\EX18-0010.(A).1300 Grand.Removal of underground storage tank.s1.doc

1300 Grand St.



APPLIED WATER RESOURCES
CORPORATION



2363 Mariner Square Drive, Suite 245
Alameda, CA 94501
Tel: 925 426-1112 ~ Fax 510 227-5495

MEMORANDUM

DATE: JANUARY 3, 2018
TO: PERMIT CENTER
FROM: YOLA BAYRAM
RE: Permit No. EN17-0518, Hold Notice

Message:

Please find attached two figures in response to the Hold Notice issued on November 29, 2017.

The Site Map shows the excavation plan for the removal of the underground storage tank.

The Traffic Control Plan shows the traffic control proposed for pedestrians since the sidewalk will be closed during the work. Also shown are the areas where equipment and vehicles will be parked. All vehicles and equipment will be parked in the parking lane of Alameda Ave and no impact will be made to the traffic lanes during the work.



PUBLIC WORKS



City of Alameda



Interdepartmental Memorandum

Date: November 29, 2017

To: Permit Office

From: Oskar Garcia
Public Works Department

Re: Permit No. EN17-0518, removal of underground storage tank from property.

Job Address: 1300 Grand Street

Applicant: Yola Bayram
2363 Mariner Square Drive Suite 245
Alameda CA 94501

HOLD NOTICE

Public Works staff reviewed the submittal of permit EN17-0518 and determined that additional information is needed before this application can be approved. This permit is now placed on hold pending revisions to address the following comments:

Please review the following comments and respond to each item in writing, indicating where and how each item has been addressed. Resubmittals without written responses to the specific comments will not be accepted and will result in significant delays.

Specific Comments

Traffic

1. It is unclear the extent and scope of the work requirements on the public right of way.
 - Provide a clear excavation plan if the job requires digging to remove the tank.
 - Provide a traffic control plan if the job requires the use of the public road for equipment storage or work vehicles parking.
 - Provide a traffic control for pedestrians if the work requires the closure of the sidewalk. Pedestrians shall be properly detoured at **appropriate crossing locations** whenever a sidewalk/crosswalk is closed. See the California MUTCD for guidance. Please keep in mind those pedestrians that may be disabled. Only one crossing at an intersection shall

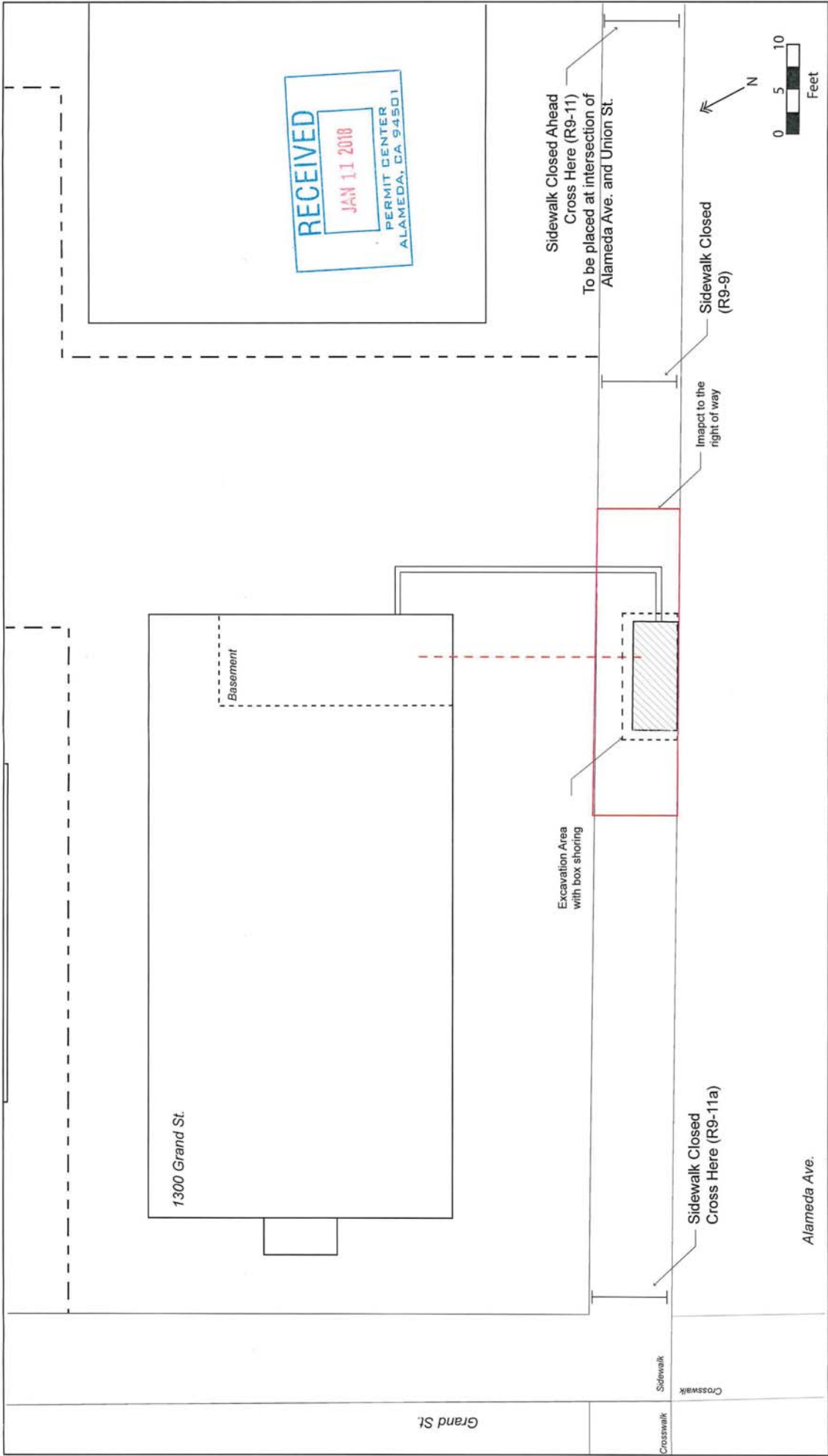
be closed at any time.

Additional hold notices may be forthcoming from other departments. When responding to Hold Notices, submit ALL information to Community Development Department Room 190, City Hall, 2263 Santa Clara Avenue to ensure correct processing of your application.

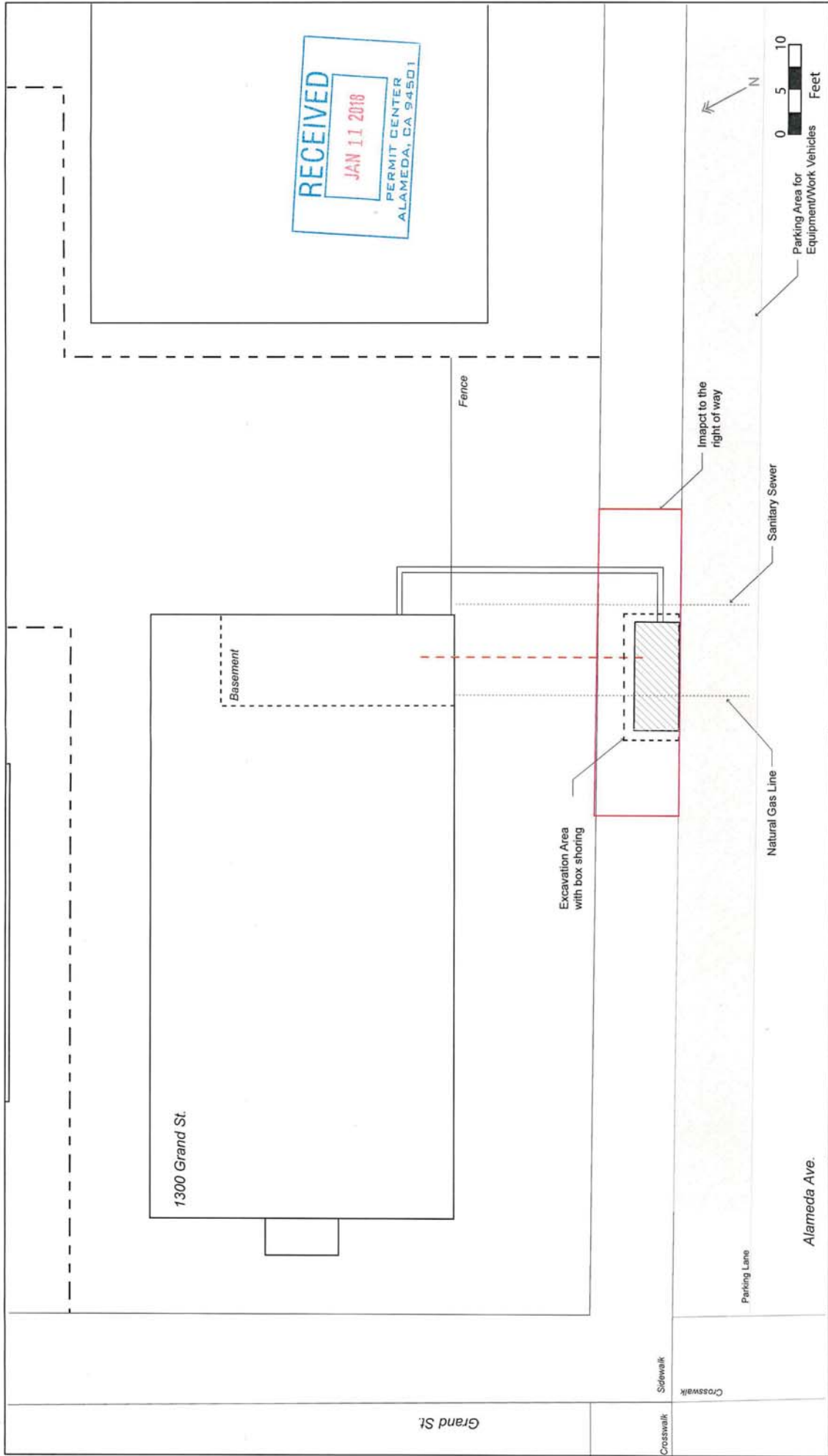
Should you require further clarification regarding these comments, contact Oskar Garcia at (510) 747-7964.

OG:lk

G:\pubworks\Permits\2017\Encroachment\EN17-0518.1300 Grand Removal of underground storage tank\EN17-0518.(H).1300 Grand Removal of underground storage tank.s1.doc



	<p>Pedestrian Traffic Control Plan</p> <p>1300 Grand St. Alameda, CA</p>	<ul style="list-style-type: none"> UST - 5' below ground surface Property Line Vent Pipe Product Line - 5' below ground surface
--	---	---



	<p>Site Map</p> <p>1300 Grand St. Alameda, CA</p>	<p>Legend:</p> <ul style="list-style-type: none"> UST - 5' below ground surface Product Line - 5' below ground surface Property Line Vent Pipe Ground Water is encountered 4-5' below ground surface
<p>Grand St</p> <p>Crosswalk</p> <p>Sidewalk</p>	<p>1300 Grand St.</p> <p>Basement</p> <p>Excavation Area with box shoring</p> <p>Natural Gas Line</p> <p>Sanitary Sewer</p> <p>Impact to the right of way</p> <p>Parking Area for Equipment/Work Vehicles</p>	<p>Scale: 0 5 10 Feet</p> <p>North Arrow</p>
<p>Grand St</p> <p>Crosswalk</p> <p>Sidewalk</p>	<p>Alameda Ave.</p> <p>Parking Lane</p>	<p>RECEIVED</p> <p>JAN 11 2018</p> <p>PERMIT CENTER</p> <p>ALAMEDA, CA 94501</p>

APPENDIX B

BORING LOGS



Boring ID: SB1

Location: 1300 Grand Street, Alameda

Date: 04/25/2018

Client: The Home of Truth

Drilling Company: Cascade

Logged by: Cheryl Cary

Driller: Art

Ground Water Sampling Method: Peristaltic Pump

Drilling Method: Hand Auger/Direct Push

Soil Sampling Method: NA

Grout Materials and Method: Neat Cement/Tremie

Depth (ft)	PID (ppm)	Sample	Saturated Zone	USCS	Graphic Log	Material Description	Remarks
0	0					Concrete	
1	0						
2	0			SP		Fine grain sand, brown, poorly sorted, dry, 5-10% organic content	
3	0					Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
4	0	SS					
5	0						
6	0						
7	0						Modeling visible 6-13 ft bgs
8	0						
9	0	SS					
10	0	GW					
11	0			SP			
12	0						
13	0	SS					
14	0						
15	0						
16	0						Total Depth: 16'
17							
18							
19							
20	0						

Boring ID: SB2

Location: 1300 Grand Street, Alameda

Date: 04/25/2018

Client: The Home of Truth

Drilling Company: Cascade

Logged by: Cheryl Cary

Driller: Art

Ground Water Sampling Method: Peristaltic Pump


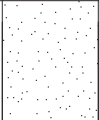
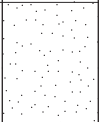
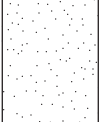
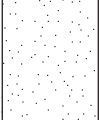

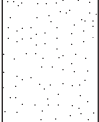
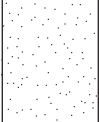
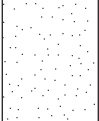
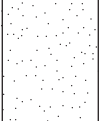
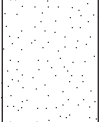
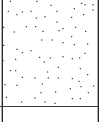


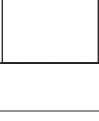

Drilling Method: Hand Auger/Direct Push

Soil Sampling Method: NA

Grout Materials and Method: Neat Cement/Tremie

Depth (ft)	PID (ppm)	Sample	Saturated Zone	USCS	Graphic Log	Material Description	Remarks
0						Landscaping Soil, Organic matter	
1	1						
2	1			SP		Fine grain sand, brown, poorly sorted, dry, 5-10% organic content	
3	0					Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
4	1						
5	1	SS		SP			
6		SS					
6.31			▽				DTW: 6.31 ft bgs at time of ground water sample
7	0						
8	0			SC		40-50% clay, 10-15% sand	
9	0					Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
10	0						
11	0			SP			
12	0						Total Depth: 12'
13							
14							
15							
16							
17							
18							
19							
20	0						


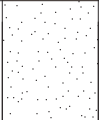
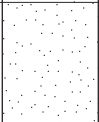
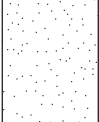
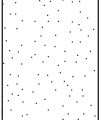
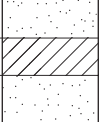
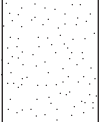

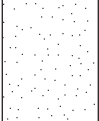
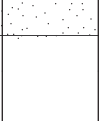





Boring ID: SB3	
Location: 1300 Grand Street, Alameda	Date: 04/25/2018
Client: The Home of Truth	Drilling Company: Cascade
Logged by: Cheryl Cary	Driller: Art
Ground Water Sampling Method: Peristaltic Pump	Drilling Method: Hand Auger/Direct Push
Soil Sampling Method: NA	Grout Materials and Method: Neat Cement/Tremie

Depth (ft)	PID (ppm)	Sample	Saturated Zone	USCS	Graphic Log	Material Description	Remarks
0	0					Concrete	
1	0					Fine grain sand, brown, poorly sorted, dry, 5-10% organic content	
2	0			SP		Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
3	0					Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
4	0	SS					DTW: 4.84 ft bgs at time of ground water sample
5	0						Modeling visible 6-13 ft bgs
6	105						Discoloration seen in hand auger cuttings at 6 ft bgs
7	23						Discoloration seen in core from 7.5 to 13 ft bgs
8	80						
9	50						
10	179						
11	98	SS		SP			
12	111						
13	30	GW					
14	10						
15	0						
16	0	SS					Total Depth: 16'
17	0						
18	0						
19	0						
20	0						

Boring ID: SB4	
Location: 1300 Grand Street, Alameda	Date: 04/25/2018
Client: The Home of Truth	Drilling Company: Cascade
Logged by: Cheryl Cary	Driller: Art
Ground Water Sampling Method: Peristaltic Pump	Drilling Method: Hand Auger/Direct Push
Soil Sampling Method: NA	Grout Materials and Method: Neat Cement/Tremie

Depth (ft)	PID (ppm)	Sample	Saturated Zone	USCS	Graphic Log	Material Description	Remarks
0	0					Concrete	
1	0						
2	0			SP		Fine grain sand, brown, poorly sorted, dry, 5-10% organic content	
3	0					Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
4	0	SS					DTW: 5.28 ft bgs at time of ground water sample
5	0						
6	0						
7	0						
8	0						
9	0	SS		SP			
10	0	GW					
11	0						
12	0						
13	0						
14	0						
15	0						
16	0						Total Depth: 16'
17							
18							
19							
20	0						

Boring ID: SB5	
Location: 1300 Grand Street, Alameda	Date: 04/25/2018
Client: The Home of Truth	Drilling Company: Cascade
Logged by: Cheryl Cary	Driller: Art
Ground Water Sampling Method: Peristaltic Pump	Drilling Method: Hand Auger
Soil Sampling Method: NA	Grout Materials and Method: Neat Cement/Tremie

Depth (ft)	PID (ppm)	Sample	Saturated Zone	USCS	Graphic Log	Material Description	Remarks
0	0					Landscaping Soil, Organic matter	
1	0					Fine grain sand, brown, poorly sorted, dry, 5-10% organic content	
2	0			SP		Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
3	0					Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
4	0					Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
5	0			SP		Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
6	0					Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
7	0	GW				Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	DTW: 5.85 ft bgs at time of sample
8	0			SC		40-50% clay, 10-15% sand	
9	0					Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
10	0	GW				Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
11	0			SP		Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
12	0					Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	Total Depth: 12'
13							
14							
15							
16							
17							
18							
19							
20							

Boring ID: SB6

Location: 1300 Grand Street, Alameda

Date: 04/25/2018

Client: The Home of Truth

Drilling Company: Cascade

Logged by: Cheryl Cary

Driller: Art

Ground Water Sampling Method: Peristaltic Pump

Drilling Method: Hand Auger

Soil Sampling Method: NA

Grout Materials and Method: Neat Cement/Tremie

Depth (ft)	PID (ppm)	Sample	Saturated Zone	USCS	Graphic Log	Material Description	Remarks
0						Landscaping Soil, Organic matter	
1	0						
2	0			SP		Fine grain sand, brown, poorly sorted, dry, 5-10% organic content	
3	0						
4	0						
5	0			SP		Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
6	0						
7	0	GW					DTW: 6.05 ft bgs at time of ground water sample
8	0			SC		40-50% clay, 10-15% sand	Ground water sample collected in open hole
9	0						
10	0	GW				Fine grain sand, brown, poorly sorted, dry, 5-10% silts and clay	
11	0			SP			
12	0						Total Depth: 12'
13							
14							
15							
16							
17							
18							
19							
20	0						

APPENDIX C

LABORATORY ANALYTICAL REPORTS



Applied Water Resources AWR- Alameda, CA

Sample Delivery Group: L989458
Samples Received: 04/27/2018
Project Number: THOT
Description: The Home of Truth

Report To: Yola Bayram
2363 Mariner Square Dr
Suite 245
Alameda, CA 94501

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1	1 Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	2 Tc
Cn: Case Narrative	6	
Sr: Sample Results	7	3 Ss
SB1-GW L989458-01	7	
SB1-4 L989458-02	9	4 Cn
SB1-9.5 L989458-03	11	5 Sr
SB1-11 L989458-04	13	
SB1-13 L989458-05	15	6 Qc
SB2-GW L989458-06	17	
SB2-4.5 L989458-07	19	7 Gl
SB2-5.5 L989458-08	21	8 Al
SB3-GW L989458-09	23	
SB3-4 L989458-10	25	9 Sc
SB3-9 L989458-11	27	
SB3-13 L989458-12	29	
SB4-GW L989458-13	31	
SB4-4 L989458-14	33	
SB4-9 L989458-15	35	
SB5-GW5 L989458-16	37	
SB6-GW5 L989458-17	39	
SB6-GW10 L989458-18	41	
Qc: Quality Control Summary	43	
Total Solids by Method 2540 G-2011	43	
Volatile Organic Compounds (GC) by Method 8015	46	
Volatile Organic Compounds (GC/MS) by Method 8260B	48	
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	62	
Semi-Volatile Organic Compounds (GC) by Method 8015	63	
Gl: Glossary of Terms	64	
Al: Accreditations & Locations	65	
Sc: Sample Chain of Custody	66	

SAMPLE SUMMARY



SB1-GW L989458-01 GW

Collected by
CC / TRF Collected date/time
04/25/18 16:00 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG1104689	1	04/29/18 14:33	04/29/18 14:33	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1104570	1	04/28/18 23:59	04/28/18 23:59	RAS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1104930	1.82	04/30/18 14:56	04/30/18 21:18	SHG

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

SB1-4 L989458-02 Solid

Collected by
CC / TRF Collected date/time
04/25/18 11:55 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1105483	1	05/01/18 17:09	05/01/18 17:14	KS
Volatile Organic Compounds (GC) by Method 8015	WG1104737	1	04/25/18 11:55	04/30/18 01:02	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1106089	1.1	04/25/18 11:55	05/03/18 06:06	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105376	1	05/02/18 09:57	05/03/18 16:24	MTJ

SB1-9.5 L989458-03 Solid

Collected by
CC / TRF Collected date/time
04/25/18 14:25 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1105483	1	05/01/18 17:09	05/01/18 17:14	KS
Volatile Organic Compounds (GC) by Method 8015	WG1104737	1	04/25/18 14:25	04/30/18 01:25	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1106089	1	04/25/18 14:25	05/03/18 06:27	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105376	1	05/02/18 09:57	05/03/18 16:40	MTJ

SB1-11 L989458-04 Solid

Collected by
CC / TRF Collected date/time
04/25/18 14:35 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1105483	1	05/01/18 17:09	05/01/18 17:14	KS
Volatile Organic Compounds (GC) by Method 8015	WG1104737	1	04/25/18 14:35	04/30/18 01:48	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1106089	1	04/25/18 14:35	05/03/18 06:47	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105376	1	05/02/18 09:57	05/03/18 19:26	MTJ

SB1-13 L989458-05 Solid

Collected by
CC / TRF Collected date/time
04/25/18 14:45 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1105483	1	05/01/18 17:09	05/01/18 17:14	KS
Volatile Organic Compounds (GC) by Method 8015	WG1104737	1	04/25/18 14:45	04/30/18 02:12	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1106089	1	04/25/18 14:45	05/03/18 07:08	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105376	1	05/02/18 09:57	05/03/18 17:55	MTJ

SB2-GW L989458-06 GW

Collected by
CC / TRF Collected date/time
04/25/18 16:25 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG1104689	1	04/29/18 14:55	04/29/18 14:55	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1104570	1	04/29/18 00:20	04/29/18 00:20	RAS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1104930	1	04/30/18 14:56	04/30/18 21:34	SHG

SAMPLE SUMMARY



SB2-4.5 L989458-07 Solid

Collected by
CC / TRF Collected date/time
04/25/18 10:40 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1105483	1	05/01/18 17:09	05/01/18 17:14	KS
Volatile Organic Compounds (GC) by Method 8015	WG1104737	1	04/25/18 10:40	04/30/18 02:35	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1106089	1.04	04/25/18 10:40	05/03/18 07:29	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105376	1	05/02/18 09:57	05/03/18 18:10	MTJ

1
Cp

2
Tc

3
Ss

4
Cn

SB2-5.5 L989458-08 Solid

Collected by
CC / TRF Collected date/time
04/25/18 11:05 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1105483	1	05/01/18 17:09	05/01/18 17:14	KS
Volatile Organic Compounds (GC) by Method 8015	WG1104737	1	04/25/18 11:05	04/30/18 06:49	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1106089	1	04/25/18 11:05	05/03/18 07:50	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105376	1	05/02/18 09:57	05/03/18 19:41	MTJ

5
Sr

6
Qc

7
Gl

SB3-GW L989458-09 GW

Collected by
CC / TRF Collected date/time
04/25/18 15:33 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG1104689	1	04/30/18 17:20	04/30/18 17:20	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1104570	1	04/29/18 00:41	04/29/18 00:41	RAS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1104930	1.25	04/30/18 14:56	04/30/18 21:50	SHG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1104930	6.25	04/30/18 14:56	05/01/18 15:22	MTJ

8
Al

9
Sc

SB3-4 L989458-10 Solid

Collected by
CC / TRF Collected date/time
04/25/18 11:45 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1105483	1	05/01/18 17:09	05/01/18 17:14	KS
Volatile Organic Compounds (GC) by Method 8015	WG1104737	1	04/25/18 11:45	04/30/18 07:13	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1106089	1	04/25/18 11:45	05/03/18 08:11	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105376	1	05/02/18 09:57	05/03/18 18:23	MTJ

SB3-9 L989458-11 Solid

Collected by
CC / TRF Collected date/time
04/25/18 13:30 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1105483	1	05/01/18 17:09	05/01/18 17:14	KS
Volatile Organic Compounds (GC) by Method 8015	WG1104737	1	04/25/18 13:30	04/30/18 07:36	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1106089	1	04/25/18 13:30	05/03/18 08:32	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105376	1	05/02/18 09:57	05/03/18 18:39	MTJ

SB3-13 L989458-12 Solid

Collected by
CC / TRF Collected date/time
04/25/18 13:45 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1105483	1	05/01/18 17:09	05/01/18 17:14	KS
Volatile Organic Compounds (GC) by Method 8015	WG1104737	500	04/25/18 13:45	05/02/18 02:41	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1106111	20	04/25/18 13:45	05/03/18 03:50	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105376	100	05/02/18 09:57	05/03/18 21:32	MTJ
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105376	2	05/02/18 09:57	05/03/18 19:54	MTJ

SAMPLE SUMMARY



SB4-GW L989458-13 GW

Collected by
CC / TRF Collected date/time
04/25/18 16:15 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG1104689	1	04/29/18 15:17	04/29/18 15:17	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1104570	1	04/29/18 01:02	04/29/18 01:02	RAS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1104930	1.03	04/30/18 14:56	04/30/18 22:06	SHG

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

SB4-4 L989458-14 Solid

Collected by
CC / TRF Collected date/time
04/25/18 15:05 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1105499	1	05/02/18 15:24	05/02/18 15:32	KS
Volatile Organic Compounds (GC) by Method 8015	WG1104737	1.02	04/25/18 15:05	05/02/18 03:59	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1106111	1.18	04/25/18 15:05	05/02/18 23:29	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105376	1	05/02/18 09:57	05/03/18 18:55	MTJ

SB4-9 L989458-15 Solid

Collected by
CC / TRF Collected date/time
04/25/18 15:15 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1106251	1	05/03/18 13:35	05/03/18 13:44	KS
Volatile Organic Compounds (GC) by Method 8015	WG1104737	1	04/25/18 15:15	05/02/18 04:23	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1106111	1.04	04/25/18 15:15	05/02/18 23:48	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105376	1	05/02/18 09:57	05/03/18 19:11	MTJ

SB5-GW5 L989458-16 GW

Collected by
CC / TRF Collected date/time
04/25/18 16:30 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG1104689	1	04/29/18 15:39	04/29/18 15:39	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1104570	1	04/29/18 01:24	04/29/18 01:24	RAS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1104930	1	04/30/18 14:56	04/30/18 22:22	SHG

SB6-GW5 L989458-17 GW

Collected by
CC / TRF Collected date/time
04/25/18 11:23 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG1104689	1	04/29/18 16:01	04/29/18 16:01	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1104570	1	04/29/18 01:45	04/29/18 01:45	RAS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1104930	1.05	04/30/18 14:56	04/30/18 22:38	SHG

SB6-GW10 L989458-18 GW

Collected by
CC / TRF Collected date/time
04/25/18 16:45 Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG1104689	1	04/29/18 16:23	04/29/18 16:23	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1104570	1	04/29/18 02:06	04/29/18 02:06	RAS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1104930	2.06	04/30/18 14:56	04/30/18 22:54	SHG



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

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



Collected date/time: 04/25/18 16:00

L989458

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPHG C5 - C12	ND		100	1	04/29/2018 14:33	WG1104689
(S) a, a, a-Trifluorotoluene(FID)	92.7		77.0-122		04/29/2018 14:33	WG1104689

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	04/28/2018 23:59	WG1104570
Acrolein	ND		50.0	1	04/28/2018 23:59	WG1104570
Acrylonitrile	ND		10.0	1	04/28/2018 23:59	WG1104570
Benzene	ND		1.00	1	04/28/2018 23:59	WG1104570
Bromobenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
Bromodichloromethane	ND		1.00	1	04/28/2018 23:59	WG1104570
Bromoform	ND		1.00	1	04/28/2018 23:59	WG1104570
Bromomethane	ND		5.00	1	04/28/2018 23:59	WG1104570
n-Butylbenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
sec-Butylbenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
tert-Butylbenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
Carbon tetrachloride	ND		1.00	1	04/28/2018 23:59	WG1104570
Chlorobenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
Chlorodibromomethane	ND		1.00	1	04/28/2018 23:59	WG1104570
Chloroethane	ND		5.00	1	04/28/2018 23:59	WG1104570
Chloroform	ND		5.00	1	04/28/2018 23:59	WG1104570
Chloromethane	ND		2.50	1	04/28/2018 23:59	WG1104570
2-Chlorotoluene	ND		1.00	1	04/28/2018 23:59	WG1104570
4-Chlorotoluene	ND		1.00	1	04/28/2018 23:59	WG1104570
1,2-Dibromo-3-Chloropropane	ND		5.00	1	04/28/2018 23:59	WG1104570
1,2-Dibromoethane	ND		1.00	1	04/28/2018 23:59	WG1104570
Dibromomethane	ND		1.00	1	04/28/2018 23:59	WG1104570
1,2-Dichlorobenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
1,3-Dichlorobenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
1,4-Dichlorobenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
Dichlorodifluoromethane	ND		5.00	1	04/28/2018 23:59	WG1104570
1,1-Dichloroethane	ND		1.00	1	04/28/2018 23:59	WG1104570
1,2-Dichloroethane	ND		1.00	1	04/28/2018 23:59	WG1104570
1,1-Dichloroethene	ND		1.00	1	04/28/2018 23:59	WG1104570
cis-1,2-Dichloroethene	ND		1.00	1	04/28/2018 23:59	WG1104570
trans-1,2-Dichloroethene	ND		1.00	1	04/28/2018 23:59	WG1104570
1,2-Dichloropropane	ND		1.00	1	04/28/2018 23:59	WG1104570
1,1-Dichloropropene	ND		1.00	1	04/28/2018 23:59	WG1104570
1,3-Dichloropropane	ND		1.00	1	04/28/2018 23:59	WG1104570
cis-1,3-Dichloropropene	ND		1.00	1	04/28/2018 23:59	WG1104570
trans-1,3-Dichloropropene	ND		1.00	1	04/28/2018 23:59	WG1104570
2,2-Dichloropropane	ND		1.00	1	04/28/2018 23:59	WG1104570
Di-isopropyl ether	ND		1.00	1	04/28/2018 23:59	WG1104570
Ethylbenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
Hexachloro-1,3-butadiene	ND		1.00	1	04/28/2018 23:59	WG1104570
Isopropylbenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
p-Isopropyltoluene	ND		1.00	1	04/28/2018 23:59	WG1104570
2-Butanone (MEK)	ND		10.0	1	04/28/2018 23:59	WG1104570
Methylene Chloride	ND		5.00	1	04/28/2018 23:59	WG1104570
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	04/28/2018 23:59	WG1104570
Methyl tert-butyl ether	ND		1.00	1	04/28/2018 23:59	WG1104570
Naphthalene	ND		5.00	1	04/28/2018 23:59	WG1104570
n-Propylbenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
Styrene	ND		1.00	1	04/28/2018 23:59	WG1104570

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/25/18 16:00

L989458

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	ND		1.00	1	04/28/2018 23:59	WG1104570
1,1,2,2-Tetrachloroethane	ND		1.00	1	04/28/2018 23:59	WG1104570
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	04/28/2018 23:59	WG1104570
Tetrachloroethene	ND		1.00	1	04/28/2018 23:59	WG1104570
Toluene	ND		1.00	1	04/28/2018 23:59	WG1104570
1,2,3-Trichlorobenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
1,2,4-Trichlorobenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
1,1,1-Trichloroethane	ND		1.00	1	04/28/2018 23:59	WG1104570
1,1,2-Trichloroethane	ND		1.00	1	04/28/2018 23:59	WG1104570
Trichloroethene	ND		1.00	1	04/28/2018 23:59	WG1104570
Trichlorofluoromethane	ND		5.00	1	04/28/2018 23:59	WG1104570
1,2,3-Trichloropropane	ND		2.50	1	04/28/2018 23:59	WG1104570
1,2,4-Trimethylbenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
1,2,3-Trimethylbenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
1,3,5-Trimethylbenzene	ND		1.00	1	04/28/2018 23:59	WG1104570
Vinyl chloride	ND		1.00	1	04/28/2018 23:59	WG1104570
Xylenes, Total	ND		3.00	1	04/28/2018 23:59	WG1104570
(S) Toluene-d8	95.2		80.0-120		04/28/2018 23:59	WG1104570
(S) Dibromofluoromethane	115		76.0-123		04/28/2018 23:59	WG1104570
(S) 4-Bromofluorobenzene	95.2		80.0-120		04/28/2018 23:59	WG1104570

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	957		182	1.82	04/30/2018 21:18	WG1104930
C22-C32 Hydrocarbons	527		182	1.82	04/30/2018 21:18	WG1104930
C32-C40 Hydrocarbons	ND		182	1.82	04/30/2018 21:18	WG1104930
(S) o-Terphenyl	69.0		52.0-156		04/30/2018 21:18	WG1104930



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.2		1	05/01/2018 17:14	WG1105483

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPHG C5 - C12	ND		0.120	1	04/30/2018 01:02	WG1104737
(S) a,a,a-Trifluorotoluene(FID)	103		77.0-120		04/30/2018 01:02	WG1104737

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0331	1.1	05/03/2018 06:06	WG1106089
Acrylonitrile	ND		0.0165	1.1	05/03/2018 06:06	WG1106089
Benzene	ND		0.00132	1.1	05/03/2018 06:06	WG1106089
Bromobenzene	ND		0.0165	1.1	05/03/2018 06:06	WG1106089
Bromodichloromethane	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
Bromoform	ND		0.0331	1.1	05/03/2018 06:06	WG1106089
Bromomethane	ND		0.0165	1.1	05/03/2018 06:06	WG1106089
n-Butylbenzene	ND		0.0165	1.1	05/03/2018 06:06	WG1106089
sec-Butylbenzene	ND		0.0165	1.1	05/03/2018 06:06	WG1106089
tert-Butylbenzene	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
Carbon tetrachloride	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
Chlorobenzene	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
Chlorodibromomethane	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
Chloroethane	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
Chloroform	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
Chloromethane	ND		0.0165	1.1	05/03/2018 06:06	WG1106089
2-Chlorotoluene	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
4-Chlorotoluene	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
1,2-Dibromo-3-Chloropropane	ND		0.0331	1.1	05/03/2018 06:06	WG1106089
1,2-Dibromoethane	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
Dibromomethane	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
1,2-Dichlorobenzene	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
1,3-Dichlorobenzene	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
1,4-Dichlorobenzene	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
Dichlorodifluoromethane	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
1,1-Dichloroethane	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
1,2-Dichloroethane	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
1,1-Dichloroethene	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
cis-1,2-Dichloroethene	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
trans-1,2-Dichloroethene	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
1,2-Dichloropropane	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
1,1-Dichloropropene	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
1,3-Dichloropropane	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
cis-1,3-Dichloropropene	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
trans-1,3-Dichloropropene	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
2,2-Dichloropropane	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
Di-isopropyl ether	ND		0.00132	1.1	05/03/2018 06:06	WG1106089
Ethylbenzene	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
Hexachloro-1,3-butadiene	ND		0.0331	1.1	05/03/2018 06:06	WG1106089
Isopropylbenzene	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
p-Isopropyltoluene	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
2-Butanone (MEK)	ND		0.0331	1.1	05/03/2018 06:06	WG1106089
Methylene Chloride	ND		0.0331	1.1	05/03/2018 06:06	WG1106089
4-Methyl-2-pentanone (MIBK)	ND		0.0331	1.1	05/03/2018 06:06	WG1106089

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/25/18 11:55

L989458

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND		0.00132	1.1	05/03/2018 06:06	WG1106089
Naphthalene	ND		0.0165	1.1	05/03/2018 06:06	WG1106089
n-Propylbenzene	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
Styrene	ND		0.0165	1.1	05/03/2018 06:06	WG1106089
1,1,1,2-Tetrachloroethane	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
1,1,2,2-Tetrachloroethane	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
1,1,2-Trichlorotrifluoroethane	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
Tetrachloroethene	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
Toluene	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
1,2,3-Trichlorobenzene	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
1,2,4-Trichlorobenzene	ND		0.0165	1.1	05/03/2018 06:06	WG1106089
1,1,1-Trichloroethane	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
1,1,2-Trichloroethane	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
Trichloroethene	ND		0.00132	1.1	05/03/2018 06:06	WG1106089
Trichlorofluoromethane	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
1,2,3-Trichloropropane	ND		0.0165	1.1	05/03/2018 06:06	WG1106089
1,2,4-Trimethylbenzene	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
1,2,3-Trimethylbenzene	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
1,3,5-Trimethylbenzene	ND		0.00661	1.1	05/03/2018 06:06	WG1106089
Vinyl chloride	ND		0.00331	1.1	05/03/2018 06:06	WG1106089
Xylenes, Total	ND		0.00860	1.1	05/03/2018 06:06	WG1106089
(S) Toluene-d8	112		80.0-120		05/03/2018 06:06	WG1106089
(S) Dibromofluoromethane	94.9		74.0-131		05/03/2018 06:06	WG1106089
(S) 4-Bromofluorobenzene	105		64.0-132		05/03/2018 06:06	WG1106089

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	ND		4.81	1	05/03/2018 16:24	WG1105376
C22-C32 Hydrocarbons	ND		4.81	1	05/03/2018 16:24	WG1105376
C32-C40 Hydrocarbons	ND		4.81	1	05/03/2018 16:24	WG1105376
(S) o-Terphenyl	82.3		18.0-148		05/03/2018 16:24	WG1105376



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.9		1	05/01/2018 17:14	WG1105483

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPHG C5 - C12	ND		0.121	1	04/30/2018 01:25	WG1104737
(S) a,a,a-Trifluorotoluene(FID)	103		77.0-120		04/30/2018 01:25	WG1104737

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	0.0453		0.0302	1	05/03/2018 06:27	WG1106089
Acrylonitrile	ND		0.0151	1	05/03/2018 06:27	WG1106089
Benzene	ND		0.00121	1	05/03/2018 06:27	WG1106089
Bromobenzene	ND		0.0151	1	05/03/2018 06:27	WG1106089
Bromodichloromethane	ND		0.00302	1	05/03/2018 06:27	WG1106089
Bromoform	ND		0.0302	1	05/03/2018 06:27	WG1106089
Bromomethane	ND		0.0151	1	05/03/2018 06:27	WG1106089
n-Butylbenzene	ND		0.0151	1	05/03/2018 06:27	WG1106089
sec-Butylbenzene	ND		0.0151	1	05/03/2018 06:27	WG1106089
tert-Butylbenzene	ND		0.00603	1	05/03/2018 06:27	WG1106089
Carbon tetrachloride	ND		0.00603	1	05/03/2018 06:27	WG1106089
Chlorobenzene	ND		0.00302	1	05/03/2018 06:27	WG1106089
Chlorodibromomethane	ND		0.00302	1	05/03/2018 06:27	WG1106089
Chloroethane	ND		0.00603	1	05/03/2018 06:27	WG1106089
Chloroform	ND		0.00302	1	05/03/2018 06:27	WG1106089
Chloromethane	ND		0.0151	1	05/03/2018 06:27	WG1106089
2-Chlorotoluene	ND		0.00302	1	05/03/2018 06:27	WG1106089
4-Chlorotoluene	ND		0.00603	1	05/03/2018 06:27	WG1106089
1,2-Dibromo-3-Chloropropane	ND		0.0302	1	05/03/2018 06:27	WG1106089
1,2-Dibromoethane	ND		0.00302	1	05/03/2018 06:27	WG1106089
Dibromomethane	ND		0.00603	1	05/03/2018 06:27	WG1106089
1,2-Dichlorobenzene	ND		0.00603	1	05/03/2018 06:27	WG1106089
1,3-Dichlorobenzene	ND		0.00603	1	05/03/2018 06:27	WG1106089
1,4-Dichlorobenzene	ND		0.00603	1	05/03/2018 06:27	WG1106089
Dichlorodifluoromethane	ND		0.00302	1	05/03/2018 06:27	WG1106089
1,1-Dichloroethane	ND		0.00302	1	05/03/2018 06:27	WG1106089
1,2-Dichloroethane	ND		0.00302	1	05/03/2018 06:27	WG1106089
1,1-Dichloroethene	ND		0.00302	1	05/03/2018 06:27	WG1106089
cis-1,2-Dichloroethene	ND		0.00302	1	05/03/2018 06:27	WG1106089
trans-1,2-Dichloroethene	ND		0.00603	1	05/03/2018 06:27	WG1106089
1,2-Dichloropropane	ND		0.00603	1	05/03/2018 06:27	WG1106089
1,1-Dichloropropene	ND		0.00302	1	05/03/2018 06:27	WG1106089
1,3-Dichloropropane	ND		0.00603	1	05/03/2018 06:27	WG1106089
cis-1,3-Dichloropropene	ND		0.00302	1	05/03/2018 06:27	WG1106089
trans-1,3-Dichloropropene	ND		0.00603	1	05/03/2018 06:27	WG1106089
2,2-Dichloropropane	ND		0.00302	1	05/03/2018 06:27	WG1106089
Di-isopropyl ether	ND		0.00121	1	05/03/2018 06:27	WG1106089
Ethylbenzene	ND		0.00302	1	05/03/2018 06:27	WG1106089
Hexachloro-1,3-butadiene	ND		0.0302	1	05/03/2018 06:27	WG1106089
Isopropylbenzene	ND		0.00302	1	05/03/2018 06:27	WG1106089
p-Isopropyltoluene	ND		0.00603	1	05/03/2018 06:27	WG1106089
2-Butanone (MEK)	ND		0.0302	1	05/03/2018 06:27	WG1106089
Methylene Chloride	ND		0.0302	1	05/03/2018 06:27	WG1106089
4-Methyl-2-pentanone (MIBK)	ND		0.0302	1	05/03/2018 06:27	WG1106089

- 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 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND		0.00121	1	05/03/2018 06:27	WG1106089
Naphthalene	ND		0.0151	1	05/03/2018 06:27	WG1106089
n-Propylbenzene	ND		0.00603	1	05/03/2018 06:27	WG1106089
Styrene	ND		0.0151	1	05/03/2018 06:27	WG1106089
1,1,1,2-Tetrachloroethane	ND		0.00302	1	05/03/2018 06:27	WG1106089
1,1,2,2-Tetrachloroethane	ND		0.00302	1	05/03/2018 06:27	WG1106089
1,1,2-Trichlorotrifluoroethane	ND		0.00302	1	05/03/2018 06:27	WG1106089
Tetrachloroethene	ND		0.00302	1	05/03/2018 06:27	WG1106089
Toluene	ND		0.00603	1	05/03/2018 06:27	WG1106089
1,2,3-Trichlorobenzene	ND		0.00302	1	05/03/2018 06:27	WG1106089
1,2,4-Trichlorobenzene	ND		0.0151	1	05/03/2018 06:27	WG1106089
1,1,1-Trichloroethane	ND		0.00302	1	05/03/2018 06:27	WG1106089
1,1,2-Trichloroethane	ND		0.00302	1	05/03/2018 06:27	WG1106089
Trichloroethene	ND		0.00121	1	05/03/2018 06:27	WG1106089
Trichlorofluoromethane	ND		0.00302	1	05/03/2018 06:27	WG1106089
1,2,3-Trichloropropane	ND		0.0151	1	05/03/2018 06:27	WG1106089
1,2,4-Trimethylbenzene	ND		0.00603	1	05/03/2018 06:27	WG1106089
1,2,3-Trimethylbenzene	ND		0.00603	1	05/03/2018 06:27	WG1106089
1,3,5-Trimethylbenzene	ND		0.00603	1	05/03/2018 06:27	WG1106089
Vinyl chloride	ND		0.00302	1	05/03/2018 06:27	WG1106089
Xylenes, Total	ND		0.00784	1	05/03/2018 06:27	WG1106089
(S) Toluene-d8	113		80.0-120		05/03/2018 06:27	WG1106089
(S) Dibromofluoromethane	94.5		74.0-131		05/03/2018 06:27	WG1106089
(S) 4-Bromofluorobenzene	110		64.0-132		05/03/2018 06:27	WG1106089

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	ND		4.82	1	05/03/2018 16:40	WG1105376
C22-C32 Hydrocarbons	ND		4.82	1	05/03/2018 16:40	WG1105376
C32-C40 Hydrocarbons	ND		4.82	1	05/03/2018 16:40	WG1105376
(S) o-Terphenyl	84.5		18.0-148		05/03/2018 16:40	WG1105376



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.5		1	05/01/2018 17:14	WG1105483

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPHG C5 - C12	ND		0.117	1	04/30/2018 01:48	WG1104737
(S) a,a,a-Trifluorotoluene(FID)	103		77.0-120		04/30/2018 01:48	WG1104737

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	0.0375		0.0292	1	05/03/2018 06:47	WG1106089
Acrylonitrile	ND		0.0146	1	05/03/2018 06:47	WG1106089
Benzene	ND		0.00117	1	05/03/2018 06:47	WG1106089
Bromobenzene	ND		0.0146	1	05/03/2018 06:47	WG1106089
Bromodichloromethane	ND		0.00292	1	05/03/2018 06:47	WG1106089
Bromoform	ND		0.0292	1	05/03/2018 06:47	WG1106089
Bromomethane	ND		0.0146	1	05/03/2018 06:47	WG1106089
n-Butylbenzene	ND		0.0146	1	05/03/2018 06:47	WG1106089
sec-Butylbenzene	ND		0.0146	1	05/03/2018 06:47	WG1106089
tert-Butylbenzene	ND		0.00585	1	05/03/2018 06:47	WG1106089
Carbon tetrachloride	ND		0.00585	1	05/03/2018 06:47	WG1106089
Chlorobenzene	ND		0.00292	1	05/03/2018 06:47	WG1106089
Chlorodibromomethane	ND		0.00292	1	05/03/2018 06:47	WG1106089
Chloroethane	ND		0.00585	1	05/03/2018 06:47	WG1106089
Chloroform	ND		0.00292	1	05/03/2018 06:47	WG1106089
Chloromethane	ND		0.0146	1	05/03/2018 06:47	WG1106089
2-Chlorotoluene	ND		0.00292	1	05/03/2018 06:47	WG1106089
4-Chlorotoluene	ND		0.00585	1	05/03/2018 06:47	WG1106089
1,2-Dibromo-3-Chloropropane	ND		0.0292	1	05/03/2018 06:47	WG1106089
1,2-Dibromoethane	ND		0.00292	1	05/03/2018 06:47	WG1106089
Dibromomethane	ND		0.00585	1	05/03/2018 06:47	WG1106089
1,2-Dichlorobenzene	ND		0.00585	1	05/03/2018 06:47	WG1106089
1,3-Dichlorobenzene	ND		0.00585	1	05/03/2018 06:47	WG1106089
1,4-Dichlorobenzene	ND		0.00585	1	05/03/2018 06:47	WG1106089
Dichlorodifluoromethane	ND		0.00292	1	05/03/2018 06:47	WG1106089
1,1-Dichloroethane	ND		0.00292	1	05/03/2018 06:47	WG1106089
1,2-Dichloroethane	ND		0.00292	1	05/03/2018 06:47	WG1106089
1,1-Dichloroethene	ND		0.00292	1	05/03/2018 06:47	WG1106089
cis-1,2-Dichloroethene	ND		0.00292	1	05/03/2018 06:47	WG1106089
trans-1,2-Dichloroethene	ND		0.00585	1	05/03/2018 06:47	WG1106089
1,2-Dichloropropane	ND		0.00585	1	05/03/2018 06:47	WG1106089
1,1-Dichloropropene	ND		0.00292	1	05/03/2018 06:47	WG1106089
1,3-Dichloropropane	ND		0.00585	1	05/03/2018 06:47	WG1106089
cis-1,3-Dichloropropene	ND		0.00292	1	05/03/2018 06:47	WG1106089
trans-1,3-Dichloropropene	ND		0.00585	1	05/03/2018 06:47	WG1106089
2,2-Dichloropropane	ND		0.00292	1	05/03/2018 06:47	WG1106089
Di-isopropyl ether	ND		0.00117	1	05/03/2018 06:47	WG1106089
Ethylbenzene	ND		0.00292	1	05/03/2018 06:47	WG1106089
Hexachloro-1,3-butadiene	ND		0.0292	1	05/03/2018 06:47	WG1106089
Isopropylbenzene	ND		0.00292	1	05/03/2018 06:47	WG1106089
p-Isopropyltoluene	ND		0.00585	1	05/03/2018 06:47	WG1106089
2-Butanone (MEK)	ND		0.0292	1	05/03/2018 06:47	WG1106089
Methylene Chloride	ND		0.0292	1	05/03/2018 06:47	WG1106089
4-Methyl-2-pentanone (MIBK)	ND		0.0292	1	05/03/2018 06:47	WG1106089

- 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 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND		0.00117	1	05/03/2018 06:47	WG1106089
Naphthalene	ND		0.0146	1	05/03/2018 06:47	WG1106089
n-Propylbenzene	ND		0.00585	1	05/03/2018 06:47	WG1106089
Styrene	ND		0.0146	1	05/03/2018 06:47	WG1106089
1,1,1,2-Tetrachloroethane	ND		0.00292	1	05/03/2018 06:47	WG1106089
1,1,2,2-Tetrachloroethane	ND		0.00292	1	05/03/2018 06:47	WG1106089
1,1,2-Trichlorotrifluoroethane	ND		0.00292	1	05/03/2018 06:47	WG1106089
Tetrachloroethene	ND		0.00292	1	05/03/2018 06:47	WG1106089
Toluene	ND		0.00585	1	05/03/2018 06:47	WG1106089
1,2,3-Trichlorobenzene	ND		0.00292	1	05/03/2018 06:47	WG1106089
1,2,4-Trichlorobenzene	ND		0.0146	1	05/03/2018 06:47	WG1106089
1,1,1-Trichloroethane	ND		0.00292	1	05/03/2018 06:47	WG1106089
1,1,2-Trichloroethane	ND		0.00292	1	05/03/2018 06:47	WG1106089
Trichloroethene	ND		0.00117	1	05/03/2018 06:47	WG1106089
Trichlorofluoromethane	ND		0.00292	1	05/03/2018 06:47	WG1106089
1,2,3-Trichloropropane	ND		0.0146	1	05/03/2018 06:47	WG1106089
1,2,4-Trimethylbenzene	ND		0.00585	1	05/03/2018 06:47	WG1106089
1,2,3-Trimethylbenzene	ND		0.00585	1	05/03/2018 06:47	WG1106089
1,3,5-Trimethylbenzene	ND		0.00585	1	05/03/2018 06:47	WG1106089
Vinyl chloride	ND		0.00292	1	05/03/2018 06:47	WG1106089
Xylenes, Total	ND		0.00760	1	05/03/2018 06:47	WG1106089
(S) Toluene-d8	115		80.0-120		05/03/2018 06:47	WG1106089
(S) Dibromofluoromethane	95.4		74.0-131		05/03/2018 06:47	WG1106089
(S) 4-Bromofluorobenzene	106		64.0-132		05/03/2018 06:47	WG1106089

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	ND		4.68	1	05/03/2018 19:26	WG1105376
C22-C32 Hydrocarbons	ND		4.68	1	05/03/2018 19:26	WG1105376
C32-C40 Hydrocarbons	ND		4.68	1	05/03/2018 19:26	WG1105376
(S) o-Terphenyl	74.2		18.0-148		05/03/2018 19:26	WG1105376



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	80.3		1	05/01/2018 17:14	WG1105483

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
TPHG C5 - C12	ND		0.125	1	04/30/2018 02:12	WG1104737
(S) a,a,a-Trifluorotoluene(FID)	103		77.0-120		04/30/2018 02:12	WG1104737

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
Acetone	ND		0.0311	1	05/03/2018 07:08	WG1106089
Acrylonitrile	ND		0.0156	1	05/03/2018 07:08	WG1106089
Benzene	ND		0.00125	1	05/03/2018 07:08	WG1106089
Bromobenzene	ND		0.0156	1	05/03/2018 07:08	WG1106089
Bromodichloromethane	ND		0.00311	1	05/03/2018 07:08	WG1106089
Bromoform	ND		0.0311	1	05/03/2018 07:08	WG1106089
Bromomethane	ND		0.0156	1	05/03/2018 07:08	WG1106089
n-Butylbenzene	ND		0.0156	1	05/03/2018 07:08	WG1106089
sec-Butylbenzene	ND		0.0156	1	05/03/2018 07:08	WG1106089
tert-Butylbenzene	ND		0.00623	1	05/03/2018 07:08	WG1106089
Carbon tetrachloride	ND		0.00623	1	05/03/2018 07:08	WG1106089
Chlorobenzene	ND		0.00311	1	05/03/2018 07:08	WG1106089
Chlorodibromomethane	ND		0.00311	1	05/03/2018 07:08	WG1106089
Chloroethane	ND		0.00623	1	05/03/2018 07:08	WG1106089
Chloroform	ND		0.00311	1	05/03/2018 07:08	WG1106089
Chloromethane	ND		0.0156	1	05/03/2018 07:08	WG1106089
2-Chlorotoluene	ND		0.00311	1	05/03/2018 07:08	WG1106089
4-Chlorotoluene	ND		0.00623	1	05/03/2018 07:08	WG1106089
1,2-Dibromo-3-Chloropropane	ND		0.0311	1	05/03/2018 07:08	WG1106089
1,2-Dibromoethane	ND		0.00311	1	05/03/2018 07:08	WG1106089
Dibromomethane	ND		0.00623	1	05/03/2018 07:08	WG1106089
1,2-Dichlorobenzene	ND		0.00623	1	05/03/2018 07:08	WG1106089
1,3-Dichlorobenzene	ND		0.00623	1	05/03/2018 07:08	WG1106089
1,4-Dichlorobenzene	ND		0.00623	1	05/03/2018 07:08	WG1106089
Dichlorodifluoromethane	ND		0.00311	1	05/03/2018 07:08	WG1106089
1,1-Dichloroethane	ND		0.00311	1	05/03/2018 07:08	WG1106089
1,2-Dichloroethane	ND		0.00311	1	05/03/2018 07:08	WG1106089
1,1-Dichloroethene	ND		0.00311	1	05/03/2018 07:08	WG1106089
cis-1,2-Dichloroethene	ND		0.00311	1	05/03/2018 07:08	WG1106089
trans-1,2-Dichloroethene	ND		0.00623	1	05/03/2018 07:08	WG1106089
1,2-Dichloropropane	ND		0.00623	1	05/03/2018 07:08	WG1106089
1,1-Dichloropropene	ND		0.00311	1	05/03/2018 07:08	WG1106089
1,3-Dichloropropane	ND		0.00623	1	05/03/2018 07:08	WG1106089
cis-1,3-Dichloropropene	ND		0.00311	1	05/03/2018 07:08	WG1106089
trans-1,3-Dichloropropene	ND		0.00623	1	05/03/2018 07:08	WG1106089
2,2-Dichloropropane	ND		0.00311	1	05/03/2018 07:08	WG1106089
Di-isopropyl ether	ND		0.00125	1	05/03/2018 07:08	WG1106089
Ethylbenzene	ND		0.00311	1	05/03/2018 07:08	WG1106089
Hexachloro-1,3-butadiene	ND		0.0311	1	05/03/2018 07:08	WG1106089
Isopropylbenzene	ND		0.00311	1	05/03/2018 07:08	WG1106089
p-Isopropyltoluene	ND		0.00623	1	05/03/2018 07:08	WG1106089
2-Butanone (MEK)	0.0356		0.0311	1	05/03/2018 07:08	WG1106089
Methylene Chloride	ND		0.0311	1	05/03/2018 07:08	WG1106089
4-Methyl-2-pentanone (MIBK)	ND		0.0311	1	05/03/2018 07:08	WG1106089

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 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND		0.00125	1	05/03/2018 07:08	WG1106089
Naphthalene	ND		0.0156	1	05/03/2018 07:08	WG1106089
n-Propylbenzene	ND		0.00623	1	05/03/2018 07:08	WG1106089
Styrene	ND		0.0156	1	05/03/2018 07:08	WG1106089
1,1,1,2-Tetrachloroethane	ND		0.00311	1	05/03/2018 07:08	WG1106089
1,1,2,2-Tetrachloroethane	ND		0.00311	1	05/03/2018 07:08	WG1106089
1,1,2-Trichlorotrifluoroethane	ND		0.00311	1	05/03/2018 07:08	WG1106089
Tetrachloroethene	ND		0.00311	1	05/03/2018 07:08	WG1106089
Toluene	ND		0.00623	1	05/03/2018 07:08	WG1106089
1,2,3-Trichlorobenzene	ND		0.00311	1	05/03/2018 07:08	WG1106089
1,2,4-Trichlorobenzene	ND		0.0156	1	05/03/2018 07:08	WG1106089
1,1,1-Trichloroethane	ND		0.00311	1	05/03/2018 07:08	WG1106089
1,1,2-Trichloroethane	ND		0.00311	1	05/03/2018 07:08	WG1106089
Trichloroethene	ND		0.00125	1	05/03/2018 07:08	WG1106089
Trichlorofluoromethane	ND		0.00311	1	05/03/2018 07:08	WG1106089
1,2,3-Trichloropropane	ND		0.0156	1	05/03/2018 07:08	WG1106089
1,2,4-Trimethylbenzene	ND		0.00623	1	05/03/2018 07:08	WG1106089
1,2,3-Trimethylbenzene	ND		0.00623	1	05/03/2018 07:08	WG1106089
1,3,5-Trimethylbenzene	ND		0.00623	1	05/03/2018 07:08	WG1106089
Vinyl chloride	ND		0.00311	1	05/03/2018 07:08	WG1106089
Xylenes, Total	ND		0.00810	1	05/03/2018 07:08	WG1106089
(S) Toluene-d8	118		80.0-120		05/03/2018 07:08	WG1106089
(S) Dibromofluoromethane	88.9		74.0-131		05/03/2018 07:08	WG1106089
(S) 4-Bromofluorobenzene	104		64.0-132		05/03/2018 07:08	WG1106089

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	ND		4.98	1	05/03/2018 17:55	WG1105376
C22-C32 Hydrocarbons	ND		4.98	1	05/03/2018 17:55	WG1105376
C32-C40 Hydrocarbons	ND		4.98	1	05/03/2018 17:55	WG1105376
(S) o-Terphenyl	84.9		18.0-148		05/03/2018 17:55	WG1105376



Collected date/time: 04/25/18 16:25

L989458

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPHG C5 - C12	ND		100	1	04/29/2018 14:55	WG1104689
(S) a, a, a-Trifluorotoluene(FID)	92.6		77.0-122		04/29/2018 14:55	WG1104689

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	04/29/2018 00:20	WG1104570
Acrolein	ND		50.0	1	04/29/2018 00:20	WG1104570
Acrylonitrile	ND		10.0	1	04/29/2018 00:20	WG1104570
Benzene	ND		1.00	1	04/29/2018 00:20	WG1104570
Bromobenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
Bromodichloromethane	ND		1.00	1	04/29/2018 00:20	WG1104570
Bromoform	ND		1.00	1	04/29/2018 00:20	WG1104570
Bromomethane	ND		5.00	1	04/29/2018 00:20	WG1104570
n-Butylbenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
sec-Butylbenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
tert-Butylbenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
Carbon tetrachloride	ND		1.00	1	04/29/2018 00:20	WG1104570
Chlorobenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
Chlorodibromomethane	ND		1.00	1	04/29/2018 00:20	WG1104570
Chloroethane	ND		5.00	1	04/29/2018 00:20	WG1104570
Chloroform	ND		5.00	1	04/29/2018 00:20	WG1104570
Chloromethane	ND		2.50	1	04/29/2018 00:20	WG1104570
2-Chlorotoluene	ND		1.00	1	04/29/2018 00:20	WG1104570
4-Chlorotoluene	ND		1.00	1	04/29/2018 00:20	WG1104570
1,2-Dibromo-3-Chloropropane	ND		5.00	1	04/29/2018 00:20	WG1104570
1,2-Dibromoethane	ND		1.00	1	04/29/2018 00:20	WG1104570
Dibromomethane	ND		1.00	1	04/29/2018 00:20	WG1104570
1,2-Dichlorobenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
1,3-Dichlorobenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
1,4-Dichlorobenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
Dichlorodifluoromethane	ND		5.00	1	04/29/2018 00:20	WG1104570
1,1-Dichloroethane	ND		1.00	1	04/29/2018 00:20	WG1104570
1,2-Dichloroethane	ND		1.00	1	04/29/2018 00:20	WG1104570
1,1-Dichloroethene	ND		1.00	1	04/29/2018 00:20	WG1104570
cis-1,2-Dichloroethene	ND		1.00	1	04/29/2018 00:20	WG1104570
trans-1,2-Dichloroethene	ND		1.00	1	04/29/2018 00:20	WG1104570
1,2-Dichloropropane	ND		1.00	1	04/29/2018 00:20	WG1104570
1,1-Dichloropropene	ND		1.00	1	04/29/2018 00:20	WG1104570
1,3-Dichloropropane	ND		1.00	1	04/29/2018 00:20	WG1104570
cis-1,3-Dichloropropene	ND		1.00	1	04/29/2018 00:20	WG1104570
trans-1,3-Dichloropropene	ND		1.00	1	04/29/2018 00:20	WG1104570
2,2-Dichloropropane	ND		1.00	1	04/29/2018 00:20	WG1104570
Di-isopropyl ether	ND		1.00	1	04/29/2018 00:20	WG1104570
Ethylbenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
Hexachloro-1,3-butadiene	ND		1.00	1	04/29/2018 00:20	WG1104570
Isopropylbenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
p-Isopropyltoluene	ND		1.00	1	04/29/2018 00:20	WG1104570
2-Butanone (MEK)	ND		10.0	1	04/29/2018 00:20	WG1104570
Methylene Chloride	ND		5.00	1	04/29/2018 00:20	WG1104570
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	04/29/2018 00:20	WG1104570
Methyl tert-butyl ether	ND		1.00	1	04/29/2018 00:20	WG1104570
Naphthalene	ND		5.00	1	04/29/2018 00:20	WG1104570
n-Propylbenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
Styrene	ND		1.00	1	04/29/2018 00:20	WG1104570

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 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	ND		1.00	1	04/29/2018 00:20	WG1104570
1,1,2,2-Tetrachloroethane	ND		1.00	1	04/29/2018 00:20	WG1104570
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	04/29/2018 00:20	WG1104570
Tetrachloroethene	ND		1.00	1	04/29/2018 00:20	WG1104570
Toluene	ND		1.00	1	04/29/2018 00:20	WG1104570
1,2,3-Trichlorobenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
1,2,4-Trichlorobenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
1,1,1-Trichloroethane	ND		1.00	1	04/29/2018 00:20	WG1104570
1,1,2-Trichloroethane	ND		1.00	1	04/29/2018 00:20	WG1104570
Trichloroethene	ND		1.00	1	04/29/2018 00:20	WG1104570
Trichlorofluoromethane	ND		5.00	1	04/29/2018 00:20	WG1104570
1,2,3-Trichloropropane	ND		2.50	1	04/29/2018 00:20	WG1104570
1,2,4-Trimethylbenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
1,2,3-Trimethylbenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
1,3,5-Trimethylbenzene	ND		1.00	1	04/29/2018 00:20	WG1104570
Vinyl chloride	ND		1.00	1	04/29/2018 00:20	WG1104570
Xylenes, Total	ND		3.00	1	04/29/2018 00:20	WG1104570
(S) Toluene-d8	95.9		80.0-120		04/29/2018 00:20	WG1104570
(S) Dibromofluoromethane	116		76.0-123		04/29/2018 00:20	WG1104570
(S) 4-Bromofluorobenzene	95.9		80.0-120		04/29/2018 00:20	WG1104570

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	ND		100	1	04/30/2018 21:34	WG1104930
C22-C32 Hydrocarbons	ND		100	1	04/30/2018 21:34	WG1104930
C32-C40 Hydrocarbons	ND		100	1	04/30/2018 21:34	WG1104930
(S) o-Terphenyl	83.4		52.0-156		04/30/2018 21:34	WG1104930



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.4		1	05/01/2018 17:14	WG1105483

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPHG C5 - C12	ND		0.118	1	04/30/2018 02:35	WG1104737
(S) a,a,a-Trifluorotoluene(FID)	103		77.0-120		04/30/2018 02:35	WG1104737

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	0.0376		0.0308	1.04	05/03/2018 07:29	WG1106089
Acrylonitrile	ND		0.0154	1.04	05/03/2018 07:29	WG1106089
Benzene	ND		0.00123	1.04	05/03/2018 07:29	WG1106089
Bromobenzene	ND		0.0154	1.04	05/03/2018 07:29	WG1106089
Bromodichloromethane	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
Bromoform	ND		0.0308	1.04	05/03/2018 07:29	WG1106089
Bromomethane	ND		0.0154	1.04	05/03/2018 07:29	WG1106089
n-Butylbenzene	ND		0.0154	1.04	05/03/2018 07:29	WG1106089
sec-Butylbenzene	ND		0.0154	1.04	05/03/2018 07:29	WG1106089
tert-Butylbenzene	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
Carbon tetrachloride	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
Chlorobenzene	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
Chlorodibromomethane	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
Chloroethane	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
Chloroform	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
Chloromethane	ND		0.0154	1.04	05/03/2018 07:29	WG1106089
2-Chlorotoluene	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
4-Chlorotoluene	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
1,2-Dibromo-3-Chloropropane	ND		0.0308	1.04	05/03/2018 07:29	WG1106089
1,2-Dibromoethane	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
Dibromomethane	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
1,2-Dichlorobenzene	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
1,3-Dichlorobenzene	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
1,4-Dichlorobenzene	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
Dichlorodifluoromethane	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
1,1-Dichloroethane	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
1,2-Dichloroethane	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
1,1-Dichloroethene	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
cis-1,2-Dichloroethene	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
trans-1,2-Dichloroethene	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
1,2-Dichloropropane	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
1,1-Dichloropropene	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
1,3-Dichloropropane	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
cis-1,3-Dichloropropene	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
trans-1,3-Dichloropropene	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
2,2-Dichloropropane	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
Di-isopropyl ether	ND		0.00123	1.04	05/03/2018 07:29	WG1106089
Ethylbenzene	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
Hexachloro-1,3-butadiene	ND		0.0308	1.04	05/03/2018 07:29	WG1106089
Isopropylbenzene	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
p-Isopropyltoluene	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
2-Butanone (MEK)	ND		0.0308	1.04	05/03/2018 07:29	WG1106089
Methylene Chloride	ND		0.0308	1.04	05/03/2018 07:29	WG1106089
4-Methyl-2-pentanone (MIBK)	ND		0.0308	1.04	05/03/2018 07:29	WG1106089

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



Collected date/time: 04/25/18 10:40

L989458

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND		0.00123	1.04	05/03/2018 07:29	WG1106089
Naphthalene	ND		0.0154	1.04	05/03/2018 07:29	WG1106089
n-Propylbenzene	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
Styrene	ND		0.0154	1.04	05/03/2018 07:29	WG1106089
1,1,1,2-Tetrachloroethane	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
1,1,2,2-Tetrachloroethane	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
1,1,2-Trichlorotrifluoroethane	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
Tetrachloroethene	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
Toluene	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
1,2,3-Trichlorobenzene	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
1,2,4-Trichlorobenzene	ND		0.0154	1.04	05/03/2018 07:29	WG1106089
1,1,1-Trichloroethane	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
1,1,2-Trichloroethane	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
Trichloroethene	ND		0.00123	1.04	05/03/2018 07:29	WG1106089
Trichlorofluoromethane	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
1,2,3-Trichloropropane	ND		0.0154	1.04	05/03/2018 07:29	WG1106089
1,2,4-Trimethylbenzene	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
1,2,3-Trimethylbenzene	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
1,3,5-Trimethylbenzene	ND		0.00616	1.04	05/03/2018 07:29	WG1106089
Vinyl chloride	ND		0.00308	1.04	05/03/2018 07:29	WG1106089
Xylenes, Total	ND		0.00801	1.04	05/03/2018 07:29	WG1106089
(S) Toluene-d8	115		80.0-120		05/03/2018 07:29	WG1106089
(S) Dibromofluoromethane	88.0		74.0-131		05/03/2018 07:29	WG1106089
(S) 4-Bromofluorobenzene	107		64.0-132		05/03/2018 07:29	WG1106089

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	ND		4.74	1	05/03/2018 18:10	WG1105376
C22-C32 Hydrocarbons	ND		4.74	1	05/03/2018 18:10	WG1105376
C32-C40 Hydrocarbons	ND		4.74	1	05/03/2018 18:10	WG1105376
(S) o-Terphenyl	77.5		18.0-148		05/03/2018 18:10	WG1105376



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.7		1	05/01/2018 17:14	WG1105483

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPHG C5 - C12	ND		0.119	1	04/30/2018 06:49	WG1104737
(S) a,a,a-Trifluorotoluene(FID)	103		77.0-120		04/30/2018 06:49	WG1104737

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	0.0764		0.0299	1	05/03/2018 07:50	WG1106089
Acrylonitrile	ND		0.0149	1	05/03/2018 07:50	WG1106089
Benzene	ND		0.00119	1	05/03/2018 07:50	WG1106089
Bromobenzene	ND		0.0149	1	05/03/2018 07:50	WG1106089
Bromodichloromethane	ND		0.00299	1	05/03/2018 07:50	WG1106089
Bromoform	ND		0.0299	1	05/03/2018 07:50	WG1106089
Bromomethane	ND		0.0149	1	05/03/2018 07:50	WG1106089
n-Butylbenzene	ND		0.0149	1	05/03/2018 07:50	WG1106089
sec-Butylbenzene	ND		0.0149	1	05/03/2018 07:50	WG1106089
tert-Butylbenzene	ND		0.00597	1	05/03/2018 07:50	WG1106089
Carbon tetrachloride	ND		0.00597	1	05/03/2018 07:50	WG1106089
Chlorobenzene	ND		0.00299	1	05/03/2018 07:50	WG1106089
Chlorodibromomethane	ND		0.00299	1	05/03/2018 07:50	WG1106089
Chloroethane	ND		0.00597	1	05/03/2018 07:50	WG1106089
Chloroform	ND		0.00299	1	05/03/2018 07:50	WG1106089
Chloromethane	ND		0.0149	1	05/03/2018 07:50	WG1106089
2-Chlorotoluene	ND		0.00299	1	05/03/2018 07:50	WG1106089
4-Chlorotoluene	ND		0.00597	1	05/03/2018 07:50	WG1106089
1,2-Dibromo-3-Chloropropane	ND		0.0299	1	05/03/2018 07:50	WG1106089
1,2-Dibromoethane	ND		0.00299	1	05/03/2018 07:50	WG1106089
Dibromomethane	ND		0.00597	1	05/03/2018 07:50	WG1106089
1,2-Dichlorobenzene	ND		0.00597	1	05/03/2018 07:50	WG1106089
1,3-Dichlorobenzene	ND		0.00597	1	05/03/2018 07:50	WG1106089
1,4-Dichlorobenzene	ND		0.00597	1	05/03/2018 07:50	WG1106089
Dichlorodifluoromethane	ND		0.00299	1	05/03/2018 07:50	WG1106089
1,1-Dichloroethane	ND		0.00299	1	05/03/2018 07:50	WG1106089
1,2-Dichloroethane	ND		0.00299	1	05/03/2018 07:50	WG1106089
1,1-Dichloroethene	ND		0.00299	1	05/03/2018 07:50	WG1106089
cis-1,2-Dichloroethene	ND		0.00299	1	05/03/2018 07:50	WG1106089
trans-1,2-Dichloroethene	ND		0.00597	1	05/03/2018 07:50	WG1106089
1,2-Dichloropropane	ND		0.00597	1	05/03/2018 07:50	WG1106089
1,1-Dichloropropene	ND		0.00299	1	05/03/2018 07:50	WG1106089
1,3-Dichloropropane	ND		0.00597	1	05/03/2018 07:50	WG1106089
cis-1,3-Dichloropropene	ND		0.00299	1	05/03/2018 07:50	WG1106089
trans-1,3-Dichloropropene	ND		0.00597	1	05/03/2018 07:50	WG1106089
2,2-Dichloropropane	ND		0.00299	1	05/03/2018 07:50	WG1106089
Di-isopropyl ether	ND		0.00119	1	05/03/2018 07:50	WG1106089
Ethylbenzene	ND		0.00299	1	05/03/2018 07:50	WG1106089
Hexachloro-1,3-butadiene	ND		0.0299	1	05/03/2018 07:50	WG1106089
Isopropylbenzene	ND		0.00299	1	05/03/2018 07:50	WG1106089
p-Isopropyltoluene	ND		0.00597	1	05/03/2018 07:50	WG1106089
2-Butanone (MEK)	ND		0.0299	1	05/03/2018 07:50	WG1106089
Methylene Chloride	ND		0.0299	1	05/03/2018 07:50	WG1106089
4-Methyl-2-pentanone (MIBK)	ND		0.0299	1	05/03/2018 07:50	WG1106089

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/25/18 11:05

L989458

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND		0.00119	1	05/03/2018 07:50	WG1106089
Naphthalene	ND		0.0149	1	05/03/2018 07:50	WG1106089
n-Propylbenzene	ND		0.00597	1	05/03/2018 07:50	WG1106089
Styrene	ND		0.0149	1	05/03/2018 07:50	WG1106089
1,1,1,2-Tetrachloroethane	ND		0.00299	1	05/03/2018 07:50	WG1106089
1,1,2,2-Tetrachloroethane	ND		0.00299	1	05/03/2018 07:50	WG1106089
1,1,2-Trichlorotrifluoroethane	ND		0.00299	1	05/03/2018 07:50	WG1106089
Tetrachloroethene	ND		0.00299	1	05/03/2018 07:50	WG1106089
Toluene	ND		0.00597	1	05/03/2018 07:50	WG1106089
1,2,3-Trichlorobenzene	ND		0.00299	1	05/03/2018 07:50	WG1106089
1,2,4-Trichlorobenzene	ND		0.0149	1	05/03/2018 07:50	WG1106089
1,1,1-Trichloroethane	ND		0.00299	1	05/03/2018 07:50	WG1106089
1,1,2-Trichloroethane	ND		0.00299	1	05/03/2018 07:50	WG1106089
Trichloroethene	ND		0.00119	1	05/03/2018 07:50	WG1106089
Trichlorofluoromethane	ND		0.00299	1	05/03/2018 07:50	WG1106089
1,2,3-Trichloropropane	ND		0.0149	1	05/03/2018 07:50	WG1106089
1,2,4-Trimethylbenzene	ND		0.00597	1	05/03/2018 07:50	WG1106089
1,2,3-Trimethylbenzene	ND		0.00597	1	05/03/2018 07:50	WG1106089
1,3,5-Trimethylbenzene	ND		0.00597	1	05/03/2018 07:50	WG1106089
Vinyl chloride	ND		0.00299	1	05/03/2018 07:50	WG1106089
Xylenes, Total	ND		0.00776	1	05/03/2018 07:50	WG1106089
(S) Toluene-d8	117		80.0-120		05/03/2018 07:50	WG1106089
(S) Dibromofluoromethane	90.6		74.0-131		05/03/2018 07:50	WG1106089
(S) 4-Bromofluorobenzene	107		64.0-132		05/03/2018 07:50	WG1106089

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	ND		4.78	1	05/03/2018 19:41	WG1105376
C22-C32 Hydrocarbons	ND		4.78	1	05/03/2018 19:41	WG1105376
C32-C40 Hydrocarbons	ND		4.78	1	05/03/2018 19:41	WG1105376
(S) o-Terphenyl	80.4		18.0-148		05/03/2018 19:41	WG1105376



Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPHG C5 - C12	2690		100	1	04/30/2018 17:20	WG1104689
(S) a, a, a-Trifluorotoluene(FID)	97.4		77.0-122		04/30/2018 17:20	WG1104689

1 Cp

2 Tc

3 Ss

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	04/29/2018 00:41	WG1104570
Acrolein	ND		50.0	1	04/29/2018 00:41	WG1104570
Acrylonitrile	ND		10.0	1	04/29/2018 00:41	WG1104570
Benzene	ND		1.00	1	04/29/2018 00:41	WG1104570
Bromobenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
Bromodichloromethane	ND		1.00	1	04/29/2018 00:41	WG1104570
Bromoform	ND		1.00	1	04/29/2018 00:41	WG1104570
Bromomethane	ND		5.00	1	04/29/2018 00:41	WG1104570
n-Butylbenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
sec-Butylbenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
tert-Butylbenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
Carbon tetrachloride	ND		1.00	1	04/29/2018 00:41	WG1104570
Chlorobenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
Chlorodibromomethane	ND		1.00	1	04/29/2018 00:41	WG1104570
Chloroethane	ND		5.00	1	04/29/2018 00:41	WG1104570
Chloroform	ND		5.00	1	04/29/2018 00:41	WG1104570
Chloromethane	ND		2.50	1	04/29/2018 00:41	WG1104570
2-Chlorotoluene	ND		1.00	1	04/29/2018 00:41	WG1104570
4-Chlorotoluene	ND		1.00	1	04/29/2018 00:41	WG1104570
1,2-Dibromo-3-Chloropropane	ND		5.00	1	04/29/2018 00:41	WG1104570
1,2-Dibromoethane	ND		1.00	1	04/29/2018 00:41	WG1104570
Dibromomethane	ND		1.00	1	04/29/2018 00:41	WG1104570
1,2-Dichlorobenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
1,3-Dichlorobenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
1,4-Dichlorobenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
Dichlorodifluoromethane	ND		5.00	1	04/29/2018 00:41	WG1104570
1,1-Dichloroethane	ND		1.00	1	04/29/2018 00:41	WG1104570
1,2-Dichloroethane	ND		1.00	1	04/29/2018 00:41	WG1104570
1,1-Dichloroethene	ND		1.00	1	04/29/2018 00:41	WG1104570
cis-1,2-Dichloroethene	ND		1.00	1	04/29/2018 00:41	WG1104570
trans-1,2-Dichloroethene	ND		1.00	1	04/29/2018 00:41	WG1104570
1,2-Dichloropropane	ND		1.00	1	04/29/2018 00:41	WG1104570
1,1-Dichloropropene	ND		1.00	1	04/29/2018 00:41	WG1104570
1,3-Dichloropropane	ND		1.00	1	04/29/2018 00:41	WG1104570
cis-1,3-Dichloropropene	ND		1.00	1	04/29/2018 00:41	WG1104570
trans-1,3-Dichloropropene	ND		1.00	1	04/29/2018 00:41	WG1104570
2,2-Dichloropropane	ND		1.00	1	04/29/2018 00:41	WG1104570
Di-isopropyl ether	ND		1.00	1	04/29/2018 00:41	WG1104570
Ethylbenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
Hexachloro-1,3-butadiene	ND		1.00	1	04/29/2018 00:41	WG1104570
Isopropylbenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
p-Isopropyltoluene	ND		1.00	1	04/29/2018 00:41	WG1104570
2-Butanone (MEK)	ND		10.0	1	04/29/2018 00:41	WG1104570
Methylene Chloride	ND		5.00	1	04/29/2018 00:41	WG1104570
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	04/29/2018 00:41	WG1104570
Methyl tert-butyl ether	ND		1.00	1	04/29/2018 00:41	WG1104570
Naphthalene	ND		5.00	1	04/29/2018 00:41	WG1104570
n-Propylbenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
Styrene	ND		1.00	1	04/29/2018 00:41	WG1104570

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	ND		1.00	1	04/29/2018 00:41	WG1104570
1,1,2,2-Tetrachloroethane	ND		1.00	1	04/29/2018 00:41	WG1104570
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	04/29/2018 00:41	WG1104570
Tetrachloroethene	ND		1.00	1	04/29/2018 00:41	WG1104570
Toluene	ND		1.00	1	04/29/2018 00:41	WG1104570
1,2,3-Trichlorobenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
1,2,4-Trichlorobenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
1,1,1-Trichloroethane	ND		1.00	1	04/29/2018 00:41	WG1104570
1,1,2-Trichloroethane	ND		1.00	1	04/29/2018 00:41	WG1104570
Trichloroethene	ND		1.00	1	04/29/2018 00:41	WG1104570
Trichlorofluoromethane	ND		5.00	1	04/29/2018 00:41	WG1104570
1,2,3-Trichloropropane	ND		2.50	1	04/29/2018 00:41	WG1104570
1,2,4-Trimethylbenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
1,2,3-Trimethylbenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
1,3,5-Trimethylbenzene	ND		1.00	1	04/29/2018 00:41	WG1104570
Vinyl chloride	ND		1.00	1	04/29/2018 00:41	WG1104570
Xylenes, Total	ND		3.00	1	04/29/2018 00:41	WG1104570
(S) Toluene-d8	96.5		80.0-120		04/29/2018 00:41	WG1104570
(S) Dibromofluoromethane	116		76.0-123		04/29/2018 00:41	WG1104570
(S) 4-Bromofluorobenzene	96.8		80.0-120		04/29/2018 00:41	WG1104570

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	25800		625	6.25	05/01/2018 15:22	WG1104930
C22-C32 Hydrocarbons	4300		125	1.25	04/30/2018 21:50	WG1104930
C32-C40 Hydrocarbons	170		125	1.25	04/30/2018 21:50	WG1104930
(S) o-Terphenyl	93.0		52.0-156		05/01/2018 15:22	WG1104930
(S) o-Terphenyl	1.79	J2	52.0-156		04/30/2018 21:50	WG1104930

Sample Narrative:

L989458-09 WG1104930: Low surrogate due to matrix interference.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.2		1	05/01/2018 17:14	WG1105483

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPHG C5 - C12	ND		0.120	1	04/30/2018 07:13	WG1104737
(S) a,a,a-Trifluorotoluene(FID)	103		77.0-120		04/30/2018 07:13	WG1104737

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	0.0360		0.0300	1	05/03/2018 08:11	WG1106089
Acrylonitrile	ND		0.0150	1	05/03/2018 08:11	WG1106089
Benzene	ND		0.00120	1	05/03/2018 08:11	WG1106089
Bromobenzene	ND		0.0150	1	05/03/2018 08:11	WG1106089
Bromodichloromethane	ND		0.00300	1	05/03/2018 08:11	WG1106089
Bromoform	ND		0.0300	1	05/03/2018 08:11	WG1106089
Bromomethane	ND		0.0150	1	05/03/2018 08:11	WG1106089
n-Butylbenzene	ND		0.0150	1	05/03/2018 08:11	WG1106089
sec-Butylbenzene	ND		0.0150	1	05/03/2018 08:11	WG1106089
tert-Butylbenzene	ND		0.00601	1	05/03/2018 08:11	WG1106089
Carbon tetrachloride	ND		0.00601	1	05/03/2018 08:11	WG1106089
Chlorobenzene	ND		0.00300	1	05/03/2018 08:11	WG1106089
Chlorodibromomethane	ND		0.00300	1	05/03/2018 08:11	WG1106089
Chloroethane	ND		0.00601	1	05/03/2018 08:11	WG1106089
Chloroform	ND		0.00300	1	05/03/2018 08:11	WG1106089
Chloromethane	ND		0.0150	1	05/03/2018 08:11	WG1106089
2-Chlorotoluene	ND		0.00300	1	05/03/2018 08:11	WG1106089
4-Chlorotoluene	ND		0.00601	1	05/03/2018 08:11	WG1106089
1,2-Dibromo-3-Chloropropane	ND		0.0300	1	05/03/2018 08:11	WG1106089
1,2-Dibromoethane	ND		0.00300	1	05/03/2018 08:11	WG1106089
Dibromomethane	ND		0.00601	1	05/03/2018 08:11	WG1106089
1,2-Dichlorobenzene	ND		0.00601	1	05/03/2018 08:11	WG1106089
1,3-Dichlorobenzene	ND		0.00601	1	05/03/2018 08:11	WG1106089
1,4-Dichlorobenzene	ND		0.00601	1	05/03/2018 08:11	WG1106089
Dichlorodifluoromethane	ND		0.00300	1	05/03/2018 08:11	WG1106089
1,1-Dichloroethane	ND		0.00300	1	05/03/2018 08:11	WG1106089
1,2-Dichloroethane	ND		0.00300	1	05/03/2018 08:11	WG1106089
1,1-Dichloroethene	ND		0.00300	1	05/03/2018 08:11	WG1106089
cis-1,2-Dichloroethene	ND		0.00300	1	05/03/2018 08:11	WG1106089
trans-1,2-Dichloroethene	ND		0.00601	1	05/03/2018 08:11	WG1106089
1,2-Dichloropropane	ND		0.00601	1	05/03/2018 08:11	WG1106089
1,1-Dichloropropene	ND		0.00300	1	05/03/2018 08:11	WG1106089
1,3-Dichloropropane	ND		0.00601	1	05/03/2018 08:11	WG1106089
cis-1,3-Dichloropropene	ND		0.00300	1	05/03/2018 08:11	WG1106089
trans-1,3-Dichloropropene	ND		0.00601	1	05/03/2018 08:11	WG1106089
2,2-Dichloropropane	ND		0.00300	1	05/03/2018 08:11	WG1106089
Di-isopropyl ether	ND		0.00120	1	05/03/2018 08:11	WG1106089
Ethylbenzene	ND		0.00300	1	05/03/2018 08:11	WG1106089
Hexachloro-1,3-butadiene	ND		0.0300	1	05/03/2018 08:11	WG1106089
Isopropylbenzene	ND		0.00300	1	05/03/2018 08:11	WG1106089
p-Isopropyltoluene	ND		0.00601	1	05/03/2018 08:11	WG1106089
2-Butanone (MEK)	ND		0.0300	1	05/03/2018 08:11	WG1106089
Methylene Chloride	ND		0.0300	1	05/03/2018 08:11	WG1106089
4-Methyl-2-pentanone (MIBK)	ND		0.0300	1	05/03/2018 08:11	WG1106089

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



Collected date/time: 04/25/18 11:45

L989458

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND		0.00120	1	05/03/2018 08:11	WG1106089
Naphthalene	ND		0.0150	1	05/03/2018 08:11	WG1106089
n-Propylbenzene	ND		0.00601	1	05/03/2018 08:11	WG1106089
Styrene	ND		0.0150	1	05/03/2018 08:11	WG1106089
1,1,1,2-Tetrachloroethane	ND		0.00300	1	05/03/2018 08:11	WG1106089
1,1,2,2-Tetrachloroethane	ND		0.00300	1	05/03/2018 08:11	WG1106089
1,1,2-Trichlorotrifluoroethane	ND		0.00300	1	05/03/2018 08:11	WG1106089
Tetrachloroethene	ND		0.00300	1	05/03/2018 08:11	WG1106089
Toluene	ND		0.00601	1	05/03/2018 08:11	WG1106089
1,2,3-Trichlorobenzene	ND		0.00300	1	05/03/2018 08:11	WG1106089
1,2,4-Trichlorobenzene	ND		0.0150	1	05/03/2018 08:11	WG1106089
1,1,1-Trichloroethane	ND		0.00300	1	05/03/2018 08:11	WG1106089
1,1,2-Trichloroethane	ND		0.00300	1	05/03/2018 08:11	WG1106089
Trichloroethene	ND		0.00120	1	05/03/2018 08:11	WG1106089
Trichlorofluoromethane	ND		0.00300	1	05/03/2018 08:11	WG1106089
1,2,3-Trichloropropane	ND		0.0150	1	05/03/2018 08:11	WG1106089
1,2,4-Trimethylbenzene	ND		0.00601	1	05/03/2018 08:11	WG1106089
1,2,3-Trimethylbenzene	ND		0.00601	1	05/03/2018 08:11	WG1106089
1,3,5-Trimethylbenzene	ND		0.00601	1	05/03/2018 08:11	WG1106089
Vinyl chloride	ND		0.00300	1	05/03/2018 08:11	WG1106089
Xylenes, Total	ND		0.00781	1	05/03/2018 08:11	WG1106089
(S) Toluene-d8	116		80.0-120		05/03/2018 08:11	WG1106089
(S) Dibromofluoromethane	81.6		74.0-131		05/03/2018 08:11	WG1106089
(S) 4-Bromofluorobenzene	104		64.0-132		05/03/2018 08:11	WG1106089

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	ND		4.81	1	05/03/2018 18:23	WG1105376
C22-C32 Hydrocarbons	ND		4.81	1	05/03/2018 18:23	WG1105376
C32-C40 Hydrocarbons	ND		4.81	1	05/03/2018 18:23	WG1105376
(S) o-Terphenyl	76.8		18.0-148		05/03/2018 18:23	WG1105376



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.3		1	05/01/2018 17:14	WG1105483

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPHG C5 - C12	ND		0.119	1	04/30/2018 07:36	WG1104737
(S) a,a,a-Trifluorotoluene(FID)	103		77.0-120		04/30/2018 07:36	WG1104737

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0297	1	05/03/2018 08:32	WG1106089
Acrylonitrile	ND		0.0148	1	05/03/2018 08:32	WG1106089
Benzene	ND		0.00119	1	05/03/2018 08:32	WG1106089
Bromobenzene	ND		0.0148	1	05/03/2018 08:32	WG1106089
Bromodichloromethane	ND		0.00297	1	05/03/2018 08:32	WG1106089
Bromoform	ND		0.0297	1	05/03/2018 08:32	WG1106089
Bromomethane	ND		0.0148	1	05/03/2018 08:32	WG1106089
n-Butylbenzene	ND		0.0148	1	05/03/2018 08:32	WG1106089
sec-Butylbenzene	ND		0.0148	1	05/03/2018 08:32	WG1106089
tert-Butylbenzene	ND		0.00593	1	05/03/2018 08:32	WG1106089
Carbon tetrachloride	ND		0.00593	1	05/03/2018 08:32	WG1106089
Chlorobenzene	ND		0.00297	1	05/03/2018 08:32	WG1106089
Chlorodibromomethane	ND		0.00297	1	05/03/2018 08:32	WG1106089
Chloroethane	ND		0.00593	1	05/03/2018 08:32	WG1106089
Chloroform	ND		0.00297	1	05/03/2018 08:32	WG1106089
Chloromethane	ND		0.0148	1	05/03/2018 08:32	WG1106089
2-Chlorotoluene	ND		0.00297	1	05/03/2018 08:32	WG1106089
4-Chlorotoluene	ND		0.00593	1	05/03/2018 08:32	WG1106089
1,2-Dibromo-3-Chloropropane	ND		0.0297	1	05/03/2018 08:32	WG1106089
1,2-Dibromoethane	ND		0.00297	1	05/03/2018 08:32	WG1106089
Dibromomethane	ND		0.00593	1	05/03/2018 08:32	WG1106089
1,2-Dichlorobenzene	ND		0.00593	1	05/03/2018 08:32	WG1106089
1,3-Dichlorobenzene	ND		0.00593	1	05/03/2018 08:32	WG1106089
1,4-Dichlorobenzene	ND		0.00593	1	05/03/2018 08:32	WG1106089
Dichlorodifluoromethane	ND		0.00297	1	05/03/2018 08:32	WG1106089
1,1-Dichloroethane	ND		0.00297	1	05/03/2018 08:32	WG1106089
1,2-Dichloroethane	ND		0.00297	1	05/03/2018 08:32	WG1106089
1,1-Dichloroethene	ND		0.00297	1	05/03/2018 08:32	WG1106089
cis-1,2-Dichloroethene	ND		0.00297	1	05/03/2018 08:32	WG1106089
trans-1,2-Dichloroethene	ND		0.00593	1	05/03/2018 08:32	WG1106089
1,2-Dichloropropane	ND		0.00593	1	05/03/2018 08:32	WG1106089
1,1-Dichloropropene	ND		0.00297	1	05/03/2018 08:32	WG1106089
1,3-Dichloropropane	ND		0.00593	1	05/03/2018 08:32	WG1106089
cis-1,3-Dichloropropene	ND		0.00297	1	05/03/2018 08:32	WG1106089
trans-1,3-Dichloropropene	ND		0.00593	1	05/03/2018 08:32	WG1106089
2,2-Dichloropropane	ND		0.00297	1	05/03/2018 08:32	WG1106089
Di-isopropyl ether	ND		0.00119	1	05/03/2018 08:32	WG1106089
Ethylbenzene	ND		0.00297	1	05/03/2018 08:32	WG1106089
Hexachloro-1,3-butadiene	ND		0.0297	1	05/03/2018 08:32	WG1106089
Isopropylbenzene	ND		0.00297	1	05/03/2018 08:32	WG1106089
p-Isopropyltoluene	ND		0.00593	1	05/03/2018 08:32	WG1106089
2-Butanone (MEK)	ND		0.0297	1	05/03/2018 08:32	WG1106089
Methylene Chloride	ND		0.0297	1	05/03/2018 08:32	WG1106089
4-Methyl-2-pentanone (MIBK)	ND		0.0297	1	05/03/2018 08:32	WG1106089

- 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 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND		0.00119	1	05/03/2018 08:32	WG1106089
Naphthalene	ND		0.0148	1	05/03/2018 08:32	WG1106089
n-Propylbenzene	ND		0.00593	1	05/03/2018 08:32	WG1106089
Styrene	ND		0.0148	1	05/03/2018 08:32	WG1106089
1,1,1,2-Tetrachloroethane	ND		0.00297	1	05/03/2018 08:32	WG1106089
1,1,2,2-Tetrachloroethane	ND		0.00297	1	05/03/2018 08:32	WG1106089
1,1,2-Trichlorotrifluoroethane	ND		0.00297	1	05/03/2018 08:32	WG1106089
Tetrachloroethene	ND		0.00297	1	05/03/2018 08:32	WG1106089
Toluene	ND		0.00593	1	05/03/2018 08:32	WG1106089
1,2,3-Trichlorobenzene	ND		0.00297	1	05/03/2018 08:32	WG1106089
1,2,4-Trichlorobenzene	ND		0.0148	1	05/03/2018 08:32	WG1106089
1,1,1-Trichloroethane	ND		0.00297	1	05/03/2018 08:32	WG1106089
1,1,2-Trichloroethane	ND		0.00297	1	05/03/2018 08:32	WG1106089
Trichloroethene	ND		0.00119	1	05/03/2018 08:32	WG1106089
Trichlorofluoromethane	ND		0.00297	1	05/03/2018 08:32	WG1106089
1,2,3-Trichloropropane	ND		0.0148	1	05/03/2018 08:32	WG1106089
1,2,4-Trimethylbenzene	ND		0.00593	1	05/03/2018 08:32	WG1106089
1,2,3-Trimethylbenzene	ND		0.00593	1	05/03/2018 08:32	WG1106089
1,3,5-Trimethylbenzene	ND		0.00593	1	05/03/2018 08:32	WG1106089
Vinyl chloride	ND		0.00297	1	05/03/2018 08:32	WG1106089
Xylenes, Total	ND		0.00771	1	05/03/2018 08:32	WG1106089
(S) Toluene-d8	111		80.0-120		05/03/2018 08:32	WG1106089
(S) Dibromofluoromethane	84.3		74.0-131		05/03/2018 08:32	WG1106089
(S) 4-Bromofluorobenzene	103		64.0-132		05/03/2018 08:32	WG1106089

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	ND		4.75	1	05/03/2018 18:39	WG1105376
C22-C32 Hydrocarbons	ND		4.75	1	05/03/2018 18:39	WG1105376
C32-C40 Hydrocarbons	ND		4.75	1	05/03/2018 18:39	WG1105376
(S) o-Terphenyl	75.8		18.0-148		05/03/2018 18:39	WG1105376



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.2		1	05/01/2018 17:14	WG1105483

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPHG C5 - C12	2430		60.9	500	05/02/2018 02:41	WG1104737
(S) a,a,a-Trifluorotoluene(FID)	107		77.0-120		05/02/2018 02:41	WG1104737

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.609	20	05/03/2018 03:50	WG1106111
Acrylonitrile	ND		0.304	20	05/03/2018 03:50	WG1106111
Benzene	ND		0.0243	20	05/03/2018 03:50	WG1106111
Bromobenzene	ND		0.304	20	05/03/2018 03:50	WG1106111
Bromodichloromethane	ND		0.0609	20	05/03/2018 03:50	WG1106111
Bromoform	ND		0.609	20	05/03/2018 03:50	WG1106111
Bromomethane	ND		0.304	20	05/03/2018 03:50	WG1106111
n-Butylbenzene	3.86		0.304	20	05/03/2018 03:50	WG1106111
sec-Butylbenzene	2.99		0.304	20	05/03/2018 03:50	WG1106111
tert-Butylbenzene	ND		0.122	20	05/03/2018 03:50	WG1106111
Carbon tetrachloride	ND		0.122	20	05/03/2018 03:50	WG1106111
Chlorobenzene	ND		0.0609	20	05/03/2018 03:50	WG1106111
Chlorodibromomethane	ND		0.0609	20	05/03/2018 03:50	WG1106111
Chloroethane	ND		0.122	20	05/03/2018 03:50	WG1106111
Chloroform	ND		0.0609	20	05/03/2018 03:50	WG1106111
Chloromethane	ND		0.304	20	05/03/2018 03:50	WG1106111
2-Chlorotoluene	ND		0.0609	20	05/03/2018 03:50	WG1106111
4-Chlorotoluene	ND		0.122	20	05/03/2018 03:50	WG1106111
1,2-Dibromo-3-Chloropropane	ND		0.609	20	05/03/2018 03:50	WG1106111
1,2-Dibromoethane	ND		0.0609	20	05/03/2018 03:50	WG1106111
Dibromomethane	ND		0.122	20	05/03/2018 03:50	WG1106111
1,2-Dichlorobenzene	ND		0.122	20	05/03/2018 03:50	WG1106111
1,3-Dichlorobenzene	ND		0.122	20	05/03/2018 03:50	WG1106111
1,4-Dichlorobenzene	ND		0.122	20	05/03/2018 03:50	WG1106111
Dichlorodifluoromethane	ND		0.0609	20	05/03/2018 03:50	WG1106111
1,1-Dichloroethane	ND		0.0609	20	05/03/2018 03:50	WG1106111
1,2-Dichloroethane	ND		0.0609	20	05/03/2018 03:50	WG1106111
1,1-Dichloroethene	ND		0.0609	20	05/03/2018 03:50	WG1106111
cis-1,2-Dichloroethene	ND		0.0609	20	05/03/2018 03:50	WG1106111
trans-1,2-Dichloroethene	ND		0.122	20	05/03/2018 03:50	WG1106111
1,2-Dichloropropane	ND		0.122	20	05/03/2018 03:50	WG1106111
1,1-Dichloropropene	ND		0.0609	20	05/03/2018 03:50	WG1106111
1,3-Dichloropropane	ND		0.122	20	05/03/2018 03:50	WG1106111
cis-1,3-Dichloropropene	ND		0.0609	20	05/03/2018 03:50	WG1106111
trans-1,3-Dichloropropene	ND		0.122	20	05/03/2018 03:50	WG1106111
2,2-Dichloropropane	ND		0.0609	20	05/03/2018 03:50	WG1106111
Di-isopropyl ether	ND		0.0243	20	05/03/2018 03:50	WG1106111
Ethylbenzene	1.80		0.0609	20	05/03/2018 03:50	WG1106111
Hexachloro-1,3-butadiene	ND		0.609	20	05/03/2018 03:50	WG1106111
Isopropylbenzene	1.85		0.0609	20	05/03/2018 03:50	WG1106111
p-Isopropyltoluene	3.64		0.122	20	05/03/2018 03:50	WG1106111
2-Butanone (MEK)	ND		0.609	20	05/03/2018 03:50	WG1106111
Methylene Chloride	ND		0.609	20	05/03/2018 03:50	WG1106111
4-Methyl-2-pentanone (MIBK)	ND		0.609	20	05/03/2018 03:50	WG1106111

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/25/18 13:45

L989458

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND		0.0243	20	05/03/2018 03:50	WG1106111
Naphthalene	40.3		0.304	20	05/03/2018 03:50	WG1106111
n-Propylbenzene	3.50		0.122	20	05/03/2018 03:50	WG1106111
Styrene	ND		0.304	20	05/03/2018 03:50	WG1106111
1,1,1,2-Tetrachloroethane	ND		0.0609	20	05/03/2018 03:50	WG1106111
1,1,2,2-Tetrachloroethane	ND		0.0609	20	05/03/2018 03:50	WG1106111
1,1,2-Trichlorotrifluoroethane	ND		0.0609	20	05/03/2018 03:50	WG1106111
Tetrachloroethene	ND		0.0609	20	05/03/2018 03:50	WG1106111
Toluene	0.147		0.122	20	05/03/2018 03:50	WG1106111
1,2,3-Trichlorobenzene	ND		0.0609	20	05/03/2018 03:50	WG1106111
1,2,4-Trichlorobenzene	ND		0.304	20	05/03/2018 03:50	WG1106111
1,1,1-Trichloroethane	ND		0.0609	20	05/03/2018 03:50	WG1106111
1,1,2-Trichloroethane	ND		0.0609	20	05/03/2018 03:50	WG1106111
Trichloroethene	0.116		0.0243	20	05/03/2018 03:50	WG1106111
Trichlorofluoromethane	ND		0.0609	20	05/03/2018 03:50	WG1106111
1,2,3-Trichloropropane	ND		0.304	20	05/03/2018 03:50	WG1106111
1,2,4-Trimethylbenzene	3.76		0.122	20	05/03/2018 03:50	WG1106111
1,2,3-Trimethylbenzene	0.849		0.122	20	05/03/2018 03:50	WG1106111
1,3,5-Trimethylbenzene	5.99		0.122	20	05/03/2018 03:50	WG1106111
Vinyl chloride	ND		0.0609	20	05/03/2018 03:50	WG1106111
Xylenes, Total	0.436		0.158	20	05/03/2018 03:50	WG1106111
(S) Toluene-d8	107		80.0-120		05/03/2018 03:50	WG1106111
(S) Dibromofluoromethane	116		74.0-131		05/03/2018 03:50	WG1106111
(S) 4-Bromofluorobenzene	119		64.0-132		05/03/2018 03:50	WG1106111

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

Sample Narrative:

L989458-12 WG1106111: Non-target compounds too high to run at a lower dilution.

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	13400		487	100	05/03/2018 21:32	WG1105376
C22-C32 Hydrocarbons	1610		487	100	05/03/2018 21:32	WG1105376
C32-C40 Hydrocarbons	56.2		9.74	2	05/03/2018 19:54	WG1105376
(S) o-Terphenyl	0.000	J7	18.0-148		05/03/2018 21:32	WG1105376
(S) o-Terphenyl	14.4	J2	18.0-148		05/03/2018 19:54	WG1105376

Sample Narrative:

L989458-12 WG1105376: Low surrogate due to matrix interference.



Collected date/time: 04/25/18 16:15

L989458

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPHG C5 - C12	ND		100	1	04/29/2018 15:17	WG1104689
(S) a, a, a-Trifluorotoluene(FID)	92.7		77.0-122		04/29/2018 15:17	WG1104689

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	04/29/2018 01:02	WG1104570
Acrolein	ND		50.0	1	04/29/2018 01:02	WG1104570
Acrylonitrile	ND		10.0	1	04/29/2018 01:02	WG1104570
Benzene	ND		1.00	1	04/29/2018 01:02	WG1104570
Bromobenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
Bromodichloromethane	ND		1.00	1	04/29/2018 01:02	WG1104570
Bromoform	ND		1.00	1	04/29/2018 01:02	WG1104570
Bromomethane	ND		5.00	1	04/29/2018 01:02	WG1104570
n-Butylbenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
sec-Butylbenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
tert-Butylbenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
Carbon tetrachloride	ND		1.00	1	04/29/2018 01:02	WG1104570
Chlorobenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
Chlorodibromomethane	ND		1.00	1	04/29/2018 01:02	WG1104570
Chloroethane	ND		5.00	1	04/29/2018 01:02	WG1104570
Chloroform	ND		5.00	1	04/29/2018 01:02	WG1104570
Chloromethane	ND		2.50	1	04/29/2018 01:02	WG1104570
2-Chlorotoluene	ND		1.00	1	04/29/2018 01:02	WG1104570
4-Chlorotoluene	ND		1.00	1	04/29/2018 01:02	WG1104570
1,2-Dibromo-3-Chloropropane	ND		5.00	1	04/29/2018 01:02	WG1104570
1,2-Dibromoethane	ND		1.00	1	04/29/2018 01:02	WG1104570
Dibromomethane	ND		1.00	1	04/29/2018 01:02	WG1104570
1,2-Dichlorobenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
1,3-Dichlorobenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
1,4-Dichlorobenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
Dichlorodifluoromethane	ND		5.00	1	04/29/2018 01:02	WG1104570
1,1-Dichloroethane	ND		1.00	1	04/29/2018 01:02	WG1104570
1,2-Dichloroethane	ND		1.00	1	04/29/2018 01:02	WG1104570
1,1-Dichloroethene	ND		1.00	1	04/29/2018 01:02	WG1104570
cis-1,2-Dichloroethene	ND		1.00	1	04/29/2018 01:02	WG1104570
trans-1,2-Dichloroethene	ND		1.00	1	04/29/2018 01:02	WG1104570
1,2-Dichloropropane	ND		1.00	1	04/29/2018 01:02	WG1104570
1,1-Dichloropropene	ND		1.00	1	04/29/2018 01:02	WG1104570
1,3-Dichloropropane	ND		1.00	1	04/29/2018 01:02	WG1104570
cis-1,3-Dichloropropene	ND		1.00	1	04/29/2018 01:02	WG1104570
trans-1,3-Dichloropropene	ND		1.00	1	04/29/2018 01:02	WG1104570
2,2-Dichloropropane	ND		1.00	1	04/29/2018 01:02	WG1104570
Di-isopropyl ether	ND		1.00	1	04/29/2018 01:02	WG1104570
Ethylbenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
Hexachloro-1,3-butadiene	ND		1.00	1	04/29/2018 01:02	WG1104570
Isopropylbenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
p-Isopropyltoluene	ND		1.00	1	04/29/2018 01:02	WG1104570
2-Butanone (MEK)	ND		10.0	1	04/29/2018 01:02	WG1104570
Methylene Chloride	ND		5.00	1	04/29/2018 01:02	WG1104570
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	04/29/2018 01:02	WG1104570
Methyl tert-butyl ether	ND		1.00	1	04/29/2018 01:02	WG1104570
Naphthalene	ND		5.00	1	04/29/2018 01:02	WG1104570
n-Propylbenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
Styrene	ND		1.00	1	04/29/2018 01:02	WG1104570

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/25/18 16:15

L989458

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	ND		1.00	1	04/29/2018 01:02	WG1104570
1,1,2,2-Tetrachloroethane	ND		1.00	1	04/29/2018 01:02	WG1104570
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	04/29/2018 01:02	WG1104570
Tetrachloroethene	ND		1.00	1	04/29/2018 01:02	WG1104570
Toluene	ND		1.00	1	04/29/2018 01:02	WG1104570
1,2,3-Trichlorobenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
1,2,4-Trichlorobenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
1,1,1-Trichloroethane	ND		1.00	1	04/29/2018 01:02	WG1104570
1,1,2-Trichloroethane	ND		1.00	1	04/29/2018 01:02	WG1104570
Trichloroethene	ND		1.00	1	04/29/2018 01:02	WG1104570
Trichlorofluoromethane	ND		5.00	1	04/29/2018 01:02	WG1104570
1,2,3-Trichloropropane	ND		2.50	1	04/29/2018 01:02	WG1104570
1,2,4-Trimethylbenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
1,2,3-Trimethylbenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
1,3,5-Trimethylbenzene	ND		1.00	1	04/29/2018 01:02	WG1104570
Vinyl chloride	ND		1.00	1	04/29/2018 01:02	WG1104570
Xylenes, Total	ND		3.00	1	04/29/2018 01:02	WG1104570
(S) Toluene-d8	93.6		80.0-120		04/29/2018 01:02	WG1104570
(S) Dibromofluoromethane	115		76.0-123		04/29/2018 01:02	WG1104570
(S) 4-Bromofluorobenzene	95.3		80.0-120		04/29/2018 01:02	WG1104570

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	221		103	1.03	04/30/2018 22:06	WG1104930
C22-C32 Hydrocarbons	161		103	1.03	04/30/2018 22:06	WG1104930
C32-C40 Hydrocarbons	ND		103	1.03	04/30/2018 22:06	WG1104930
(S) o-Terphenyl	88.0		52.0-156		04/30/2018 22:06	WG1104930

Sample Narrative:

L989458-13 WG1104930: Dilution due to sample volume



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	90.5		1	05/02/2018 15:32	WG1105499

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
TPHG C5 - C12	ND		0.113	1.02	05/02/2018 03:59	WG1104737
(S) a,a,a-Trifluorotoluene(FID)	106		77.0-120		05/02/2018 03:59	WG1104737

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
Acetone	ND		0.0326	1.18	05/02/2018 23:29	WG1106111
Acrylonitrile	ND		0.0163	1.18	05/02/2018 23:29	WG1106111
Benzene	ND		0.00130	1.18	05/02/2018 23:29	WG1106111
Bromobenzene	ND		0.0163	1.18	05/02/2018 23:29	WG1106111
Bromodichloromethane	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
Bromoform	ND		0.0326	1.18	05/02/2018 23:29	WG1106111
Bromomethane	ND		0.0163	1.18	05/02/2018 23:29	WG1106111
n-Butylbenzene	ND		0.0163	1.18	05/02/2018 23:29	WG1106111
sec-Butylbenzene	ND		0.0163	1.18	05/02/2018 23:29	WG1106111
tert-Butylbenzene	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
Carbon tetrachloride	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
Chlorobenzene	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
Chlorodibromomethane	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
Chloroethane	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
Chloroform	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
Chloromethane	ND		0.0163	1.18	05/02/2018 23:29	WG1106111
2-Chlorotoluene	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
4-Chlorotoluene	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
1,2-Dibromo-3-Chloropropane	ND		0.0326	1.18	05/02/2018 23:29	WG1106111
1,2-Dibromoethane	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
Dibromomethane	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
1,2-Dichlorobenzene	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
1,3-Dichlorobenzene	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
1,4-Dichlorobenzene	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
Dichlorodifluoromethane	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
1,1-Dichloroethane	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
1,2-Dichloroethane	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
1,1-Dichloroethene	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
cis-1,2-Dichloroethene	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
trans-1,2-Dichloroethene	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
1,2-Dichloropropane	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
1,1-Dichloropropene	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
1,3-Dichloropropane	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
cis-1,3-Dichloropropene	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
trans-1,3-Dichloropropene	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
2,2-Dichloropropane	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
Di-isopropyl ether	ND		0.00130	1.18	05/02/2018 23:29	WG1106111
Ethylbenzene	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
Hexachloro-1,3-butadiene	ND		0.0326	1.18	05/02/2018 23:29	WG1106111
Isopropylbenzene	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
p-Isopropyltoluene	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
2-Butanone (MEK)	ND		0.0326	1.18	05/02/2018 23:29	WG1106111
Methylene Chloride	ND		0.0326	1.18	05/02/2018 23:29	WG1106111
4-Methyl-2-pentanone (MIBK)	ND		0.0326	1.18	05/02/2018 23:29	WG1106111

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



Collected date/time: 04/25/18 15:05

L989458

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND		0.00130	1.18	05/02/2018 23:29	WG1106111
Naphthalene	ND		0.0163	1.18	05/02/2018 23:29	WG1106111
n-Propylbenzene	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
Styrene	ND		0.0163	1.18	05/02/2018 23:29	WG1106111
1,1,1,2-Tetrachloroethane	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
1,1,2,2-Tetrachloroethane	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
1,1,2-Trichlorotrifluoroethane	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
Tetrachloroethene	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
Toluene	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
1,2,3-Trichlorobenzene	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
1,2,4-Trichlorobenzene	ND		0.0163	1.18	05/02/2018 23:29	WG1106111
1,1,1-Trichloroethane	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
1,1,2-Trichloroethane	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
Trichloroethene	ND		0.00130	1.18	05/02/2018 23:29	WG1106111
Trichlorofluoromethane	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
1,2,3-Trichloropropane	ND		0.0163	1.18	05/02/2018 23:29	WG1106111
1,2,4-Trimethylbenzene	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
1,2,3-Trimethylbenzene	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
1,3,5-Trimethylbenzene	ND		0.00652	1.18	05/02/2018 23:29	WG1106111
Vinyl chloride	ND		0.00326	1.18	05/02/2018 23:29	WG1106111
Xylenes, Total	ND		0.00847	1.18	05/02/2018 23:29	WG1106111
(S) Toluene-d8	113		80.0-120		05/02/2018 23:29	WG1106111
(S) Dibromofluoromethane	105		74.0-131		05/02/2018 23:29	WG1106111
(S) 4-Bromofluorobenzene	110		64.0-132		05/02/2018 23:29	WG1106111

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	ND		4.42	1	05/03/2018 18:55	WG1105376
C22-C32 Hydrocarbons	ND		4.42	1	05/03/2018 18:55	WG1105376
C32-C40 Hydrocarbons	ND		4.42	1	05/03/2018 18:55	WG1105376
(S) o-Terphenyl	83.8		18.0-148		05/03/2018 18:55	WG1105376



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	78.6		1	05/03/2018 13:44	WG1106251

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
TPHG C5 - C12	ND		0.127	1	05/02/2018 04:23	WG1104737
(S) a,a,a-Trifluorotoluene(FID)	106		77.0-120		05/02/2018 04:23	WG1104737

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
Acetone	ND		0.0331	1.04	05/02/2018 23:48	WG1106111
Acrylonitrile	ND		0.0165	1.04	05/02/2018 23:48	WG1106111
Benzene	ND		0.00132	1.04	05/02/2018 23:48	WG1106111
Bromobenzene	ND		0.0165	1.04	05/02/2018 23:48	WG1106111
Bromodichloromethane	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
Bromoform	ND		0.0331	1.04	05/02/2018 23:48	WG1106111
Bromomethane	ND		0.0165	1.04	05/02/2018 23:48	WG1106111
n-Butylbenzene	ND		0.0165	1.04	05/02/2018 23:48	WG1106111
sec-Butylbenzene	ND		0.0165	1.04	05/02/2018 23:48	WG1106111
tert-Butylbenzene	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
Carbon tetrachloride	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
Chlorobenzene	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
Chlorodibromomethane	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
Chloroethane	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
Chloroform	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
Chloromethane	ND		0.0165	1.04	05/02/2018 23:48	WG1106111
2-Chlorotoluene	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
4-Chlorotoluene	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
1,2-Dibromo-3-Chloropropane	ND		0.0331	1.04	05/02/2018 23:48	WG1106111
1,2-Dibromoethane	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
Dibromomethane	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
1,2-Dichlorobenzene	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
1,3-Dichlorobenzene	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
1,4-Dichlorobenzene	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
Dichlorodifluoromethane	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
1,1-Dichloroethane	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
1,2-Dichloroethane	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
1,1-Dichloroethene	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
cis-1,2-Dichloroethene	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
trans-1,2-Dichloroethene	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
1,2-Dichloropropane	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
1,1-Dichloropropene	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
1,3-Dichloropropane	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
cis-1,3-Dichloropropene	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
trans-1,3-Dichloropropene	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
2,2-Dichloropropane	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
Di-isopropyl ether	ND		0.00132	1.04	05/02/2018 23:48	WG1106111
Ethylbenzene	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
Hexachloro-1,3-butadiene	ND		0.0331	1.04	05/02/2018 23:48	WG1106111
Isopropylbenzene	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
p-Isopropyltoluene	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
2-Butanone (MEK)	ND		0.0331	1.04	05/02/2018 23:48	WG1106111
Methylene Chloride	ND		0.0331	1.04	05/02/2018 23:48	WG1106111
4-Methyl-2-pentanone (MIBK)	ND		0.0331	1.04	05/02/2018 23:48	WG1106111

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



Collected date/time: 04/25/18 15:15

L989458

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	ND		0.00132	1.04	05/02/2018 23:48	WG1106111
Naphthalene	ND		0.0165	1.04	05/02/2018 23:48	WG1106111
n-Propylbenzene	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
Styrene	ND		0.0165	1.04	05/02/2018 23:48	WG1106111
1,1,1,2-Tetrachloroethane	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
1,1,2,2-Tetrachloroethane	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
1,1,2-Trichlorotrifluoroethane	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
Tetrachloroethene	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
Toluene	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
1,2,3-Trichlorobenzene	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
1,2,4-Trichlorobenzene	ND		0.0165	1.04	05/02/2018 23:48	WG1106111
1,1,1-Trichloroethane	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
1,1,2-Trichloroethane	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
Trichloroethene	ND		0.00132	1.04	05/02/2018 23:48	WG1106111
Trichlorofluoromethane	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
1,2,3-Trichloropropane	ND		0.0165	1.04	05/02/2018 23:48	WG1106111
1,2,4-Trimethylbenzene	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
1,2,3-Trimethylbenzene	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
1,3,5-Trimethylbenzene	ND		0.00662	1.04	05/02/2018 23:48	WG1106111
Vinyl chloride	ND		0.00331	1.04	05/02/2018 23:48	WG1106111
Xylenes, Total	ND		0.00860	1.04	05/02/2018 23:48	WG1106111
(S) Toluene-d8	114		80.0-120		05/02/2018 23:48	WG1106111
(S) Dibromofluoromethane	101		74.0-131		05/02/2018 23:48	WG1106111
(S) 4-Bromofluorobenzene	116		64.0-132		05/02/2018 23:48	WG1106111

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	ND		5.09	1	05/03/2018 19:11	WG1105376
C22-C32 Hydrocarbons	ND		5.09	1	05/03/2018 19:11	WG1105376
C32-C40 Hydrocarbons	ND		5.09	1	05/03/2018 19:11	WG1105376
(S) o-Terphenyl	85.3		18.0-148		05/03/2018 19:11	WG1105376



Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPHG C5 - C12	ND		100	1	04/29/2018 15:39	WG1104689
(S) a, a, a-Trifluorotoluene(FID)	92.8		77.0-122		04/29/2018 15:39	WG1104689

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	04/29/2018 01:24	WG1104570
Acrolein	ND		50.0	1	04/29/2018 01:24	WG1104570
Acrylonitrile	ND		10.0	1	04/29/2018 01:24	WG1104570
Benzene	ND		1.00	1	04/29/2018 01:24	WG1104570
Bromobenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
Bromodichloromethane	ND		1.00	1	04/29/2018 01:24	WG1104570
Bromoform	ND		1.00	1	04/29/2018 01:24	WG1104570
Bromomethane	ND		5.00	1	04/29/2018 01:24	WG1104570
n-Butylbenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
sec-Butylbenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
tert-Butylbenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
Carbon tetrachloride	ND		1.00	1	04/29/2018 01:24	WG1104570
Chlorobenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
Chlorodibromomethane	ND		1.00	1	04/29/2018 01:24	WG1104570
Chloroethane	ND		5.00	1	04/29/2018 01:24	WG1104570
Chloroform	ND		5.00	1	04/29/2018 01:24	WG1104570
Chloromethane	ND		2.50	1	04/29/2018 01:24	WG1104570
2-Chlorotoluene	ND		1.00	1	04/29/2018 01:24	WG1104570
4-Chlorotoluene	ND		1.00	1	04/29/2018 01:24	WG1104570
1,2-Dibromo-3-Chloropropane	ND		5.00	1	04/29/2018 01:24	WG1104570
1,2-Dibromoethane	ND		1.00	1	04/29/2018 01:24	WG1104570
Dibromomethane	ND		1.00	1	04/29/2018 01:24	WG1104570
1,2-Dichlorobenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
1,3-Dichlorobenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
1,4-Dichlorobenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
Dichlorodifluoromethane	ND		5.00	1	04/29/2018 01:24	WG1104570
1,1-Dichloroethane	ND		1.00	1	04/29/2018 01:24	WG1104570
1,2-Dichloroethane	ND		1.00	1	04/29/2018 01:24	WG1104570
1,1-Dichloroethene	ND		1.00	1	04/29/2018 01:24	WG1104570
cis-1,2-Dichloroethene	ND		1.00	1	04/29/2018 01:24	WG1104570
trans-1,2-Dichloroethene	ND		1.00	1	04/29/2018 01:24	WG1104570
1,2-Dichloropropane	ND		1.00	1	04/29/2018 01:24	WG1104570
1,1-Dichloropropene	ND		1.00	1	04/29/2018 01:24	WG1104570
1,3-Dichloropropane	ND		1.00	1	04/29/2018 01:24	WG1104570
cis-1,3-Dichloropropene	ND		1.00	1	04/29/2018 01:24	WG1104570
trans-1,3-Dichloropropene	ND		1.00	1	04/29/2018 01:24	WG1104570
2,2-Dichloropropane	ND		1.00	1	04/29/2018 01:24	WG1104570
Di-isopropyl ether	ND		1.00	1	04/29/2018 01:24	WG1104570
Ethylbenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
Hexachloro-1,3-butadiene	ND		1.00	1	04/29/2018 01:24	WG1104570
Isopropylbenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
p-Isopropyltoluene	ND		1.00	1	04/29/2018 01:24	WG1104570
2-Butanone (MEK)	ND		10.0	1	04/29/2018 01:24	WG1104570
Methylene Chloride	ND		5.00	1	04/29/2018 01:24	WG1104570
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	04/29/2018 01:24	WG1104570
Methyl tert-butyl ether	ND		1.00	1	04/29/2018 01:24	WG1104570
Naphthalene	ND		5.00	1	04/29/2018 01:24	WG1104570
n-Propylbenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
Styrene	ND		1.00	1	04/29/2018 01:24	WG1104570

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/25/18 16:30

L989458

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	ND		1.00	1	04/29/2018 01:24	WG1104570
1,1,2,2-Tetrachloroethane	ND		1.00	1	04/29/2018 01:24	WG1104570
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	04/29/2018 01:24	WG1104570
Tetrachloroethene	ND		1.00	1	04/29/2018 01:24	WG1104570
Toluene	ND		1.00	1	04/29/2018 01:24	WG1104570
1,2,3-Trichlorobenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
1,2,4-Trichlorobenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
1,1,1-Trichloroethane	ND		1.00	1	04/29/2018 01:24	WG1104570
1,1,2-Trichloroethane	ND		1.00	1	04/29/2018 01:24	WG1104570
Trichloroethene	ND		1.00	1	04/29/2018 01:24	WG1104570
Trichlorofluoromethane	ND		5.00	1	04/29/2018 01:24	WG1104570
1,2,3-Trichloropropane	ND		2.50	1	04/29/2018 01:24	WG1104570
1,2,4-Trimethylbenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
1,2,3-Trimethylbenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
1,3,5-Trimethylbenzene	ND		1.00	1	04/29/2018 01:24	WG1104570
Vinyl chloride	ND		1.00	1	04/29/2018 01:24	WG1104570
Xylenes, Total	ND		3.00	1	04/29/2018 01:24	WG1104570
(S) Toluene-d8	95.4		80.0-120		04/29/2018 01:24	WG1104570
(S) Dibromofluoromethane	115		76.0-123		04/29/2018 01:24	WG1104570
(S) 4-Bromofluorobenzene	95.1		80.0-120		04/29/2018 01:24	WG1104570

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	ND		100	1	04/30/2018 22:22	WG1104930
C22-C32 Hydrocarbons	ND		100	1	04/30/2018 22:22	WG1104930
C32-C40 Hydrocarbons	ND		100	1	04/30/2018 22:22	WG1104930
(S) o-Terphenyl	94.4		52.0-156		04/30/2018 22:22	WG1104930



Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPHG C5 - C12	ND		100	1	04/29/2018 16:01	WG1104689
(S) a, a, a-Trifluorotoluene(FID)	92.7		77.0-122		04/29/2018 16:01	WG1104689

1 Cp

2 Tc

3 Ss

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	04/29/2018 01:45	WG1104570
Acrolein	ND		50.0	1	04/29/2018 01:45	WG1104570
Acrylonitrile	ND		10.0	1	04/29/2018 01:45	WG1104570
Benzene	ND		1.00	1	04/29/2018 01:45	WG1104570
Bromobenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
Bromodichloromethane	ND		1.00	1	04/29/2018 01:45	WG1104570
Bromoform	ND		1.00	1	04/29/2018 01:45	WG1104570
Bromomethane	ND		5.00	1	04/29/2018 01:45	WG1104570
n-Butylbenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
sec-Butylbenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
tert-Butylbenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
Carbon tetrachloride	ND		1.00	1	04/29/2018 01:45	WG1104570
Chlorobenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
Chlorodibromomethane	ND		1.00	1	04/29/2018 01:45	WG1104570
Chloroethane	ND		5.00	1	04/29/2018 01:45	WG1104570
Chloroform	ND		5.00	1	04/29/2018 01:45	WG1104570
Chloromethane	ND		2.50	1	04/29/2018 01:45	WG1104570
2-Chlorotoluene	ND		1.00	1	04/29/2018 01:45	WG1104570
4-Chlorotoluene	ND		1.00	1	04/29/2018 01:45	WG1104570
1,2-Dibromo-3-Chloropropane	ND		5.00	1	04/29/2018 01:45	WG1104570
1,2-Dibromoethane	ND		1.00	1	04/29/2018 01:45	WG1104570
Dibromomethane	ND		1.00	1	04/29/2018 01:45	WG1104570
1,2-Dichlorobenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
1,3-Dichlorobenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
1,4-Dichlorobenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
Dichlorodifluoromethane	ND		5.00	1	04/29/2018 01:45	WG1104570
1,1-Dichloroethane	ND		1.00	1	04/29/2018 01:45	WG1104570
1,2-Dichloroethane	ND		1.00	1	04/29/2018 01:45	WG1104570
1,1-Dichloroethene	ND		1.00	1	04/29/2018 01:45	WG1104570
cis-1,2-Dichloroethene	ND		1.00	1	04/29/2018 01:45	WG1104570
trans-1,2-Dichloroethene	ND		1.00	1	04/29/2018 01:45	WG1104570
1,2-Dichloropropane	ND		1.00	1	04/29/2018 01:45	WG1104570
1,1-Dichloropropene	ND		1.00	1	04/29/2018 01:45	WG1104570
1,3-Dichloropropane	ND		1.00	1	04/29/2018 01:45	WG1104570
cis-1,3-Dichloropropene	ND		1.00	1	04/29/2018 01:45	WG1104570
trans-1,3-Dichloropropene	ND		1.00	1	04/29/2018 01:45	WG1104570
2,2-Dichloropropane	ND		1.00	1	04/29/2018 01:45	WG1104570
Di-isopropyl ether	ND		1.00	1	04/29/2018 01:45	WG1104570
Ethylbenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
Hexachloro-1,3-butadiene	ND		1.00	1	04/29/2018 01:45	WG1104570
Isopropylbenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
p-Isopropyltoluene	ND		1.00	1	04/29/2018 01:45	WG1104570
2-Butanone (MEK)	ND		10.0	1	04/29/2018 01:45	WG1104570
Methylene Chloride	ND		5.00	1	04/29/2018 01:45	WG1104570
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	04/29/2018 01:45	WG1104570
Methyl tert-butyl ether	ND		1.00	1	04/29/2018 01:45	WG1104570
Naphthalene	ND		5.00	1	04/29/2018 01:45	WG1104570
n-Propylbenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
Styrene	ND		1.00	1	04/29/2018 01:45	WG1104570

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	ND		1.00	1	04/29/2018 01:45	WG1104570
1,1,2,2-Tetrachloroethane	ND		1.00	1	04/29/2018 01:45	WG1104570
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	04/29/2018 01:45	WG1104570
Tetrachloroethene	ND		1.00	1	04/29/2018 01:45	WG1104570
Toluene	ND		1.00	1	04/29/2018 01:45	WG1104570
1,2,3-Trichlorobenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
1,2,4-Trichlorobenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
1,1,1-Trichloroethane	ND		1.00	1	04/29/2018 01:45	WG1104570
1,1,2-Trichloroethane	ND		1.00	1	04/29/2018 01:45	WG1104570
Trichloroethene	ND		1.00	1	04/29/2018 01:45	WG1104570
Trichlorofluoromethane	ND		5.00	1	04/29/2018 01:45	WG1104570
1,2,3-Trichloropropane	ND		2.50	1	04/29/2018 01:45	WG1104570
1,2,4-Trimethylbenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
1,2,3-Trimethylbenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
1,3,5-Trimethylbenzene	ND		1.00	1	04/29/2018 01:45	WG1104570
Vinyl chloride	ND		1.00	1	04/29/2018 01:45	WG1104570
Xylenes, Total	ND		3.00	1	04/29/2018 01:45	WG1104570
(S) Toluene-d8	95.5		80.0-120		04/29/2018 01:45	WG1104570
(S) Dibromofluoromethane	114		76.0-123		04/29/2018 01:45	WG1104570
(S) 4-Bromofluorobenzene	95.4		80.0-120		04/29/2018 01:45	WG1104570

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	ND		105	1.05	04/30/2018 22:38	WG1104930
C22-C32 Hydrocarbons	ND		105	1.05	04/30/2018 22:38	WG1104930
C32-C40 Hydrocarbons	ND		105	1.05	04/30/2018 22:38	WG1104930
(S) o-Terphenyl	87.2		52.0-156		04/30/2018 22:38	WG1104930

Sample Narrative:

L989458-17 WG1104930: Dilution due to sample volume



Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPHG C5 - C12	ND		100	1	04/29/2018 16:23	WG1104689
(S) a, a, a-Trifluorotoluene(FID)	92.8		77.0-122		04/29/2018 16:23	WG1104689

1 Cp

2 Tc

3 Ss

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	04/29/2018 02:06	WG1104570
Acrolein	ND		50.0	1	04/29/2018 02:06	WG1104570
Acrylonitrile	ND		10.0	1	04/29/2018 02:06	WG1104570
Benzene	ND		1.00	1	04/29/2018 02:06	WG1104570
Bromobenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
Bromodichloromethane	ND		1.00	1	04/29/2018 02:06	WG1104570
Bromoform	ND		1.00	1	04/29/2018 02:06	WG1104570
Bromomethane	ND		5.00	1	04/29/2018 02:06	WG1104570
n-Butylbenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
sec-Butylbenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
tert-Butylbenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
Carbon tetrachloride	ND		1.00	1	04/29/2018 02:06	WG1104570
Chlorobenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
Chlorodibromomethane	ND		1.00	1	04/29/2018 02:06	WG1104570
Chloroethane	ND		5.00	1	04/29/2018 02:06	WG1104570
Chloroform	ND		5.00	1	04/29/2018 02:06	WG1104570
Chloromethane	ND		2.50	1	04/29/2018 02:06	WG1104570
2-Chlorotoluene	ND		1.00	1	04/29/2018 02:06	WG1104570
4-Chlorotoluene	ND		1.00	1	04/29/2018 02:06	WG1104570
1,2-Dibromo-3-Chloropropane	ND		5.00	1	04/29/2018 02:06	WG1104570
1,2-Dibromoethane	ND		1.00	1	04/29/2018 02:06	WG1104570
Dibromomethane	ND		1.00	1	04/29/2018 02:06	WG1104570
1,2-Dichlorobenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
1,3-Dichlorobenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
1,4-Dichlorobenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
Dichlorodifluoromethane	ND		5.00	1	04/29/2018 02:06	WG1104570
1,1-Dichloroethane	ND		1.00	1	04/29/2018 02:06	WG1104570
1,2-Dichloroethane	ND		1.00	1	04/29/2018 02:06	WG1104570
1,1-Dichloroethene	ND		1.00	1	04/29/2018 02:06	WG1104570
cis-1,2-Dichloroethene	ND		1.00	1	04/29/2018 02:06	WG1104570
trans-1,2-Dichloroethene	ND		1.00	1	04/29/2018 02:06	WG1104570
1,2-Dichloropropane	ND		1.00	1	04/29/2018 02:06	WG1104570
1,1-Dichloropropene	ND		1.00	1	04/29/2018 02:06	WG1104570
1,3-Dichloropropane	ND		1.00	1	04/29/2018 02:06	WG1104570
cis-1,3-Dichloropropene	ND		1.00	1	04/29/2018 02:06	WG1104570
trans-1,3-Dichloropropene	ND		1.00	1	04/29/2018 02:06	WG1104570
2,2-Dichloropropane	ND		1.00	1	04/29/2018 02:06	WG1104570
Di-isopropyl ether	ND		1.00	1	04/29/2018 02:06	WG1104570
Ethylbenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
Hexachloro-1,3-butadiene	ND		1.00	1	04/29/2018 02:06	WG1104570
Isopropylbenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
p-Isopropyltoluene	ND		1.00	1	04/29/2018 02:06	WG1104570
2-Butanone (MEK)	ND		10.0	1	04/29/2018 02:06	WG1104570
Methylene Chloride	ND		5.00	1	04/29/2018 02:06	WG1104570
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	04/29/2018 02:06	WG1104570
Methyl tert-butyl ether	ND		1.00	1	04/29/2018 02:06	WG1104570
Naphthalene	ND		5.00	1	04/29/2018 02:06	WG1104570
n-Propylbenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
Styrene	ND		1.00	1	04/29/2018 02:06	WG1104570

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	ND		1.00	1	04/29/2018 02:06	WG1104570
1,1,2,2-Tetrachloroethane	ND		1.00	1	04/29/2018 02:06	WG1104570
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	04/29/2018 02:06	WG1104570
Tetrachloroethene	ND		1.00	1	04/29/2018 02:06	WG1104570
Toluene	ND		1.00	1	04/29/2018 02:06	WG1104570
1,2,3-Trichlorobenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
1,2,4-Trichlorobenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
1,1,1-Trichloroethane	ND		1.00	1	04/29/2018 02:06	WG1104570
1,1,2-Trichloroethane	ND		1.00	1	04/29/2018 02:06	WG1104570
Trichloroethene	ND		1.00	1	04/29/2018 02:06	WG1104570
Trichlorofluoromethane	ND		5.00	1	04/29/2018 02:06	WG1104570
1,2,3-Trichloropropane	ND		2.50	1	04/29/2018 02:06	WG1104570
1,2,4-Trimethylbenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
1,2,3-Trimethylbenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
1,3,5-Trimethylbenzene	ND		1.00	1	04/29/2018 02:06	WG1104570
Vinyl chloride	ND		1.00	1	04/29/2018 02:06	WG1104570
Xylenes, Total	ND		3.00	1	04/29/2018 02:06	WG1104570
(S) Toluene-d8	96.0		80.0-120		04/29/2018 02:06	WG1104570
(S) Dibromofluoromethane	115		76.0-123		04/29/2018 02:06	WG1104570
(S) 4-Bromofluorobenzene	94.7		80.0-120		04/29/2018 02:06	WG1104570

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	ND		206	2.06	04/30/2018 22:54	WG1104930
C22-C32 Hydrocarbons	ND		206	2.06	04/30/2018 22:54	WG1104930
C32-C40 Hydrocarbons	ND		206	2.06	04/30/2018 22:54	WG1104930
(S) o-Terphenyl	87.4		52.0-156		04/30/2018 22:54	WG1104930

Sample Narrative:

L989458-18 WG1104930: Dilution due to matrix impact during extraction procedure



Method Blank (MB)

(MB) R3306377-1 05/01/18 17:14

Analyte	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00100			

L989458-02 Original Sample (OS) • Duplicate (DUP)

(OS) L989458-02 05/01/18 17:14 • (DUP) R3306377-3 05/01/18 17:14

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	83.2	84.4	1	1.45		5

Laboratory Control Sample (LCS)

(LCS) R3306377-2 05/01/18 17:14

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Total Solids	50.0	50.0	100	85.0-115	

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



Method Blank (MB)

(MB) R3306720-1 05/02/18 15:32

Analyte	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00100			

L989443-34 Original Sample (OS) • Duplicate (DUP)

(OS) L989443-34 05/02/18 15:32 • (DUP) R3306720-3 05/02/18 15:32

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	82.3	85.2	1	3.45		5

Laboratory Control Sample (LCS)

(LCS) R3306720-2 05/02/18 15:32

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Total Solids	50.0	50.0	100	85.0-115	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3307054-1 05/03/18 13:44

Analyte	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00100			

L989256-01 Original Sample (OS) • Duplicate (DUP)

(OS) L989256-01 05/03/18 13:44 • (DUP) R3307054-3 05/03/18 13:44

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	75.2	75.4	1	0.239		5

Laboratory Control Sample (LCS)

(LCS) R3307054-2 05/03/18 13:44

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Total Solids	50.0	50.0	100	85.0-115	

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



Method Blank (MB)

(MB) R3305722-3 04/29/18 12:21

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TPHG C5 - C12	36.8	J	30.4	100
^(S) a,a,a-Trifluorotoluene(FID)	92.6			77.0-122

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

(LCS) R3305722-1 04/29/18 11:15 • (LCSD) R3305722-2 04/29/18 11:37

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 %
TPHG C5 - C12	5500	5290	5570	96.1	101	71.0-130			5.28	20
^(S) a,a,a-Trifluorotoluene(FID)				99.5	101	77.0-122				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc



Method Blank (MB)

(MB) R3306092-3 04/29/18 23:06

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C5 - C12	U	0.0332	0.100	0.100
^(S) <i>a,a,a</i> -Trifluorotoluene(FID)	104		77.0-120	

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

(LCS) R3306092-1 04/29/18 21:57 • (LCSD) R3306092-2 04/29/18 22:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPHG C5 - C12	5.50	4.90	5.08	89.0	92.4	75.0-128			3.75	20
^(S) <i>a,a,a</i> -Trifluorotoluene(FID)		97.8	98.1	97.8	98.1	77.0-120				

L989372-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L989372-01 04/30/18 13:33 • (MS) R3306092-4 04/30/18 13:57 • (MSD) R3306092-5 04/30/18 14:20

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPHG C5 - C12	5.50	559	764	746	37.1	33.9	100	10.0-146			2.39	35
^(S) <i>a,a,a</i> -Trifluorotoluene(FID)		102	102	102	102	102	77.0-120	77.0-120				

Method Blank (MB)

(MB) R3306751-3 04/28/18 20:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Acrolein	U		8.87	50.0
Acrylonitrile	U		1.87	10.0
Benzene	U		0.331	1.00
Bromobenzene	U		0.352	1.00
Bromodichloromethane	U		0.380	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
n-Butylbenzene	U		0.361	1.00
sec-Butylbenzene	U		0.365	1.00
tet-Butylbenzene	U		0.399	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
2-Chlorotoluene	U		0.375	1.00
4-Chlorotoluene	U		0.351	1.00
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
Dibromomethane	U		0.346	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
1,1-Dichloropropene	U		0.352	1.00
1,3-Dichloropropane	U		0.366	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
2,2-Dichloropropane	U		0.321	1.00
Di-isopropyl ether	U		0.320	1.00
Ethylbenzene	U		0.384	1.00
Hexachloro-1,3-butadiene	U		0.256	1.00

Method Blank (MB)

(MB) R3306751-3 04/28/18 20:48

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Isopropylbenzene	U		0.326	1.00
p-Isopropyltoluene	U		0.350	1.00
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.349	1.00
Styrene	U		0.307	1.00
1,1,1,2-Tetrachloroethane	U		0.385	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,3-Trichloropropane	U		0.807	2.50
1,2,3-Trimethylbenzene	U		0.321	1.00
1,2,4-Trimethylbenzene	U		0.373	1.00
1,3,5-Trimethylbenzene	U		0.387	1.00
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	92.7			80.0-120
(S) Dibromofluoromethane	117			76.0-123
(S) 4-Bromofluorobenzene	96.4			80.0-120

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

(LCS) R3306751-1 04/28/18 19:23 • (LCSD) R3306751-2 04/28/18 19:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Acetone	125	110	115	88.0	92.3	10.0-160		4.79	4.79	23
Acrolein	125	87.7	90.1	70.1	72.1	10.0-160		2.70	2.70	20
Acrylonitrile	125	151	138	121	111	60.0-142		9.02	9.02	20
Benzene	25.0	28.2	26.9	113	107	69.0-123		4.87	4.87	20

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

(LCS) R3306751-1 04/28/18 19:23 • (LCSD) R3306751-2 04/28/18 19:44

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	
				%	%	%	%					%	%
Bromobenzene	25.0	21.6	21.5	86.2	86.2	86.2	86.2	79.0-120		0.0789	0.0789	20	20
Bromodichloromethane	25.0	24.6	23.3	98.4	98.4	93.1	93.1	76.0-120		5.53	5.53	20	20
Bromoform	25.0	21.2	21.7	84.7	84.7	86.8	86.8	67.0-132		2.52	2.52	20	20
Bromomethane	25.0	33.0	31.0	132	132	124	124	18.0-160		6.27	6.27	20	20
n-Butylbenzene	25.0	23.4	23.3	93.7	93.7	93.1	93.1	72.0-126		0.666	0.666	20	20
sec-Butylbenzene	25.0	22.2	21.6	88.9	88.9	86.5	86.5	74.0-121		2.73	2.73	20	20
tet-Butylbenzene	25.0	21.8	21.1	87.0	87.0	84.4	84.4	75.0-122		3.05	3.05	20	20
Carbon tetrachloride	25.0	28.2	26.5	113	113	106	106	63.0-122		6.12	6.12	20	20
Chlorobenzene	25.0	22.8	21.9	91.1	91.1	87.4	87.4	79.0-121		4.18	4.18	20	20
Chlorodibromomethane	25.0	23.3	22.6	93.1	93.1	90.3	90.3	75.0-125		2.98	2.98	20	20
Chloroethane	25.0	32.9	29.8	132	132	119	119	47.0-152		9.90	9.90	20	20
Chloroform	25.0	26.5	24.8	106	106	99.4	99.4	72.0-121		6.64	6.64	20	20
Chloromethane	25.0	25.2	24.2	101	101	96.9	96.9	48.0-139		3.88	3.88	20	20
2-Chlorotoluene	25.0	22.8	22.5	91.4	91.4	90.1	90.1	74.0-122		1.43	1.43	20	20
4-Chlorotoluene	25.0	21.8	21.6	87.1	87.1	86.6	86.6	79.0-120		0.630	0.630	20	20
1,2-Dibromo-3-Chloropropane	25.0	21.7	22.0	86.8	86.8	87.9	87.9	64.0-127		1.32	1.32	20	20
1,2-Dibromoethane	25.0	23.0	22.8	92.0	92.0	91.2	91.2	77.0-123		0.924	0.924	20	20
Dibromomethane	25.0	27.7	26.2	111	111	105	105	78.0-120		5.70	5.70	20	20
1,2-Dichlorobenzene	25.0	23.2	23.5	92.9	92.9	94.2	94.2	80.0-120		1.36	1.36	20	20
1,3-Dichlorobenzene	25.0	22.0	21.9	88.0	88.0	87.8	87.8	72.0-123		0.302	0.302	20	20
1,4-Dichlorobenzene	25.0	23.1	23.1	92.5	92.5	92.5	92.5	77.0-120		0.00946	0.00946	20	20
Dichlorodifluoromethane	25.0	22.2	21.5	88.6	88.6	86.0	86.0	49.0-155		2.97	2.97	20	20
1,1-Dichloroethane	25.0	30.2	28.2	121	121	113	113	70.0-126		6.70	6.70	20	20
1,2-Dichloroethane	25.0	28.8	27.9	115	115	111	111	67.0-126		3.27	3.27	20	20
1,1-Dichloroethene	25.0	25.2	24.2	101	101	96.9	96.9	64.0-129		3.99	3.99	20	20
cis-1,2-Dichloroethene	25.0	25.4	25.1	101	101	100	100	73.0-120		1.09	1.09	20	20
trans-1,2-Dichloroethene	25.0	26.5	24.7	106	106	98.7	98.7	71.0-121		7.26	7.26	20	20
1,2-Dichloropropane	25.0	26.4	25.7	106	106	103	103	75.0-125		2.52	2.52	20	20
1,1-Dichloropropene	25.0	29.9	28.4	120	120	114	114	71.0-129		5.24	5.24	20	20
1,3-Dichloropropane	25.0	24.9	24.3	99.6	99.6	97.2	97.2	80.0-121		2.44	2.44	20	20
cis-1,3-Dichloropropene	25.0	24.4	23.4	97.4	97.4	93.4	93.4	79.0-123		4.20	4.20	20	20
trans-1,3-Dichloropropene	25.0	23.9	23.1	95.7	95.7	92.6	92.6	74.0-127		3.36	3.36	20	20
2,2-Dichloropropane	25.0	28.4	25.4	114	114	101	101	60.0-125		11.3	11.3	20	20
Di-isopropyl ether	25.0	29.8	28.1	119	119	112	112	59.0-133		5.94	5.94	20	20
Ethylbenzene	25.0	22.2	21.4	88.7	88.7	85.7	85.7	77.0-120		3.50	3.50	20	20
Hexachloro-1,3-butadiene	25.0	16.3	17.2	65.3	65.3	69.0	69.0	64.0-131		5.44	5.44	20	20
Isopropylbenzene	25.0	22.8	22.3	91.2	91.2	89.3	89.3	75.0-120		2.17	2.17	20	20
p-Isopropyltoluene	25.0	20.9	20.6	83.6	83.6	82.2	82.2	74.0-126		1.59	1.59	20	20
2-Butanone (MEK)	125	157	156	126	126	125	125	37.0-158		0.456	0.456	20	20
Methylene Chloride	25.0	26.0	24.7	104	104	98.8	98.8	66.0-121		4.97	4.97	20	20

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

(LCS) R3306751-1 04/28/18 19:23 • (LCSD) R3306751-2 04/28/18 19:44

Analyte	Spike Amount ug/l	LCS Result		LCSD Result		LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
		ug/l	ug/l	ug/l	ug/l							
4-Methyl-2-pentanone (MIBK)	125	131	127	105	102	105	102	59.0-143		2.80	2.80	20
Methyl tert-butyl ether	25.0	27.6	26.0	110	104	110	104	64.0-123		6.10	6.10	20
Naphthalene	25.0	19.2	20.1	76.7	80.5	76.7	80.5	62.0-128		4.88	4.88	20
n-Propylbenzene	25.0	22.7	22.6	91.0	90.2	91.0	90.2	79.0-120		0.798	0.798	20
Styrene	25.0	20.1	20.6	80.5	82.2	80.5	82.2	78.0-124		2.14	2.14	20
1,1,1,2-Tetrachloroethane	25.0	22.9	21.1	91.5	84.4	91.5	84.4	75.0-122		8.11	8.11	20
1,1,2,2-Tetrachloroethane	25.0	20.9	20.5	83.5	82.0	83.5	82.0	71.0-122		1.77	1.77	20
Tetrachloroethene	25.0	22.5	21.4	90.0	85.7	90.0	85.7	70.0-127		4.86	4.86	20
Toluene	25.0	23.5	22.3	93.9	89.0	93.9	89.0	77.0-120		5.30	5.30	20
1,1,2-Trichlorotrifluoroethane	25.0	32.2	30.0	129	120	129	120	61.0-136		6.83	6.83	20
1,2,3-Trichlorobenzene	25.0	17.8	18.1	71.4	72.4	71.4	72.4	61.0-133		1.47	1.47	20
1,2,4-Trichlorobenzene	25.0	18.0	18.5	72.2	73.8	72.2	73.8	69.0-129		2.26	2.26	20
1,1,1-Trichloroethane	25.0	27.3	25.6	109	102	109	102	68.0-122		6.53	6.53	20
1,1,2-Trichloroethane	25.0	22.2	20.9	88.8	83.6	88.8	83.6	78.0-120		6.00	6.00	20
Trichloroethene	25.0	25.5	24.4	102	97.4	102	97.4	78.0-120		4.56	4.56	20
Trichlorofluoromethane	25.0	31.9	30.3	128	121	128	121	56.0-137		5.13	5.13	20
1,2,3-Trichloropropane	25.0	22.1	22.6	88.2	90.3	88.2	90.3	72.0-124		2.26	2.26	20
1,2,3-Trimethylbenzene	25.0	24.8	24.4	99.3	97.4	99.3	97.4	75.0-120		1.95	1.95	20
1,2,4-Trimethylbenzene	25.0	21.5	21.3	85.9	85.1	85.9	85.1	75.0-120		1.02	1.02	20
1,3,5-Trimethylbenzene	25.0	22.7	21.8	90.9	87.1	90.9	87.1	75.0-120		4.31	4.31	20
Vinyl chloride	25.0	28.6	26.6	114	107	114	107	64.0-133		7.00	7.00	20
Xylenes, Total	75.0	68.8	64.9	91.7	86.5	91.7	86.5	77.0-120		5.83	5.83	20
(S) Toluene-d8				93.4	92.3	93.4	92.3	80.0-120				
(S) Dibromofluoromethane				111	110	111	110	76.0-123				
(S) 4-Bromofluorobenzene				88.3	89.7	88.3	89.7	80.0-120				

Method Blank (MB)

(MB) R3306908-3 05/02/18 23:40

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0137	0.0250
Acrylonitrile	U		0.00190	0.0125
Benzene	U		0.000400	0.0100
Bromobenzene	U		0.00105	0.0125
Bromodichloromethane	U		0.000788	0.00250
Bromoform	U		0.00598	0.0250
Bromomethane	U		0.00370	0.0125
n-Butylbenzene	U		0.00384	0.0125
sec-Butylbenzene	U		0.00253	0.0125
tet-Butylbenzene	U		0.00155	0.00500
Carbon tetrachloride	U		0.00108	0.00500
Chlorobenzene	U		0.000573	0.00250
Chlorodibromomethane	U		0.000450	0.00250
Chloroethane	U		0.00108	0.00500
Chloroform	U		0.000415	0.00250
Chloromethane	U		0.00139	0.0125
2-Chlorotoluene	U		0.000920	0.00250
4-Chlorotoluene	U		0.00113	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00510	0.0250
1,2-Dibromoethane	U		0.000525	0.00250
Dibromomethane	U		0.00100	0.00500
1,2-Dichlorobenzene	U		0.00145	0.00500
1,3-Dichlorobenzene	U		0.00170	0.00500
1,4-Dichlorobenzene	U		0.00197	0.00500
Dichlorodifluoromethane	U		0.000818	0.00250
1,1-Dichloroethane	U		0.000575	0.00250
1,2-Dichloroethane	U		0.000475	0.00250
1,1-Dichloroethene	U		0.000500	0.00250
cis-1,2-Dichloroethene	U		0.000690	0.00250
trans-1,2-Dichloroethene	U		0.00143	0.00500
1,2-Dichloropropane	U		0.00127	0.00500
1,1-Dichloropropene	U		0.000700	0.00250
1,3-Dichloropropane	U		0.00175	0.00500
cis-1,3-Dichloropropene	U		0.000678	0.00250
trans-1,3-Dichloropropene	U		0.00153	0.00500
2,2-Dichloropropane	U		0.000793	0.00250
Di-isopropyl ether	U		0.000350	0.0100
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

Method Blank (MB)

(MB) R3306908-3 05/02/18 23:40

Analyte	MB Result		MB Qualifier		MB MDL		MB RDL	
	mg/kg	U	mg/kg	U	mg/kg	U	mg/kg	U
p-Isopropyltoluene	U		0.00233	U	0.00233	U	0.00500	U
2-Butanone (MEK)	U		0.0125	U	0.0125	U	0.0250	U
Methylene Chloride	U		0.00664	U	0.00664	U	0.0250	U
4-Methyl-2-pentanone (MIBK)	U		0.0100	U	0.0100	U	0.0250	U
Methyl tert-butyl ether	U		0.000295	U	0.000295	U	0.00100	U
Naphthalene	U		0.00312	U	0.00312	U	0.0125	U
n-Propylbenzene	U		0.00118	U	0.00118	U	0.00500	U
Styrene	U		0.00273	U	0.00273	U	0.0125	U
1,1,1,2-Tetrachloroethane	U		0.000500	U	0.000500	U	0.00250	U
1,1,2,2-Tetrachloroethane	U		0.000390	U	0.000390	U	0.00250	U
Tetrachloroethene	U		0.000700	U	0.000700	U	0.00250	U
Toluene	U		0.00125	U	0.00125	U	0.00500	U
1,1,2-Trichlorotrifluoroethane	U		0.000675	U	0.000675	U	0.00250	U
1,2,3-Trichlorobenzene	U		0.000625	U	0.000625	U	0.00250	U
1,2,4-Trichlorobenzene	U		0.00482	U	0.00482	U	0.0125	U
1,1,1-Trichloroethane	U		0.000275	U	0.000275	U	0.00250	U
1,1,2-Trichloroethane	U		0.000883	U	0.000883	U	0.00250	U
Trichloroethene	U		0.000400	U	0.000400	U	0.00100	U
Trichlorofluoromethane	U		0.000500	U	0.000500	U	0.00250	U
1,2,3-Trichloropropane	U		0.00510	U	0.00510	U	0.0125	U
1,2,3-Trimethylbenzene	U		0.00115	U	0.00115	U	0.00500	U
1,2,4-Trimethylbenzene	U		0.00116	U	0.00116	U	0.00500	U
1,3,5-Trimethylbenzene	U		0.00108	U	0.00108	U	0.00500	U
Vinyl chloride	U		0.000683	U	0.000683	U	0.00250	U
Xylenes, Total	U		0.00478	U	0.00478	U	0.00650	U
(S) Toluene-d8	107						80.0-120	
(S) Dibromofluoromethane	96.5						74.0-131	
(S) 4-Bromofluorobenzene	109						64.0-132	

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

(LCS) R3306908-1 05/02/18 22:08 • (LCSD) R3306908-2 05/02/18 22:28

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD Limits	
	mg/kg	U	mg/kg	U	mg/kg	U	%	%	%	%	%	%	%	%	%	%	%	%
Acetone	0.625	U	0.625	U	0.693	U	100	111	11.0-160	10.3	23	11.0-160	10.3	23	11.0-160	10.3	23	
Acrylonitrile	0.625	U	0.652	U	0.702	U	104	112	61.0-143	7.52	20	61.0-143	7.52	20	61.0-143	7.52	20	
Benzene	0.125	U	0.122	U	0.128	U	97.3	102	71.0-124	5.12	20	71.0-124	5.12	20	71.0-124	5.12	20	
Bromobenzene	0.125	U	0.122	U	0.131	U	97.6	105	78.0-120	7.29	20	78.0-120	7.29	20	78.0-120	7.29	20	
Bromodichloromethane	0.125	U	0.128	U	0.128	U	103	103	75.0-120	0.0577	20	75.0-120	0.0577	20	75.0-120	0.0577	20	

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

(LCS) R3306908-1 05/02/18 22:08 • (LCSD) R3306908-2 05/02/18 22:28

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec.		LCSD Rec.		Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits	
				%	%	%	%					%	%
Bromoform	0.125	0.116	0.124	92.8	99.4	65.0-133	6.90	20					
Bromomethane	0.125	0.133	0.123	107	98.4	26.0-160	7.97	20					
n-Butylbenzene	0.125	0.129	0.140	103	112	73.0-126	7.77	20					
sec-Butylbenzene	0.125	0.124	0.138	99.3	110	75.0-121	10.4	20					
tet-Butylbenzene	0.125	0.130	0.134	104	107	74.0-122	3.00	20					
Carbon tetrachloride	0.125	0.136	0.137	109	109	66.0-123	0.401	20					
Chlorobenzene	0.125	0.124	0.126	99.4	101	79.0-121	1.55	20					
Chlorodibromomethane	0.125	0.124	0.124	98.9	99.3	74.0-128	0.341	20					
Chloroethane	0.125	0.114	0.128	91.3	102	51.0-147	11.5	20					
Chloroform	0.125	0.121	0.124	96.8	98.8	73.0-123	2.02	20					
Chloromethane	0.125	0.0995	0.105	79.6	84.3	51.0-138	5.64	20					
2-Chlorotoluene	0.125	0.120	0.124	96.0	99.5	72.0-124	3.56	20					
4-Chlorotoluene	0.125	0.120	0.132	96.2	105	78.0-120	9.05	20					
1,2-Dibromo-3-Chloropropane	0.125	0.157	0.142	126	113	65.0-126	10.1	20					
1,2-Dibromoethane	0.125	0.130	0.127	104	102	78.0-122	2.08	20					
Dibromomethane	0.125	0.131	0.120	104	96.4	79.0-120	8.07	20					
1,2-Dichlorobenzene	0.125	0.116	0.124	93.2	99.4	80.0-120	6.46	20					
1,3-Dichlorobenzene	0.125	0.115	0.123	91.6	98.7	72.0-123	7.44	20					
1,4-Dichlorobenzene	0.125	0.111	0.120	88.5	96.3	77.0-120	8.41	20					
Dichlorodifluoromethane	0.125	0.111	0.110	89.1	87.7	49.0-155	1.57	20					
1,1-Dichloroethane	0.125	0.130	0.138	104	111	70.0-128	6.29	20					
1,2-Dichloroethane	0.125	0.129	0.139	104	111	69.0-128	7.11	20					
1,1-Dichloroethene	0.125	0.124	0.137	99.5	110	63.0-131	9.84	20					
cis-1,2-Dichloroethene	0.125	0.114	0.124	91.2	99.6	74.0-123	8.85	20					
trans-1,2-Dichloroethene	0.125	0.116	0.119	92.6	95.6	72.0-122	3.16	20					
1,2-Dichloropropane	0.125	0.132	0.135	105	108	75.0-126	2.52	20					
1,1-Dichloropropene	0.125	0.134	0.138	107	110	72.0-130	3.05	20					
1,3-Dichloropropene	0.125	0.137	0.136	110	109	80.0-121	0.761	20					
cis-1,3-Dichloropropene	0.125	0.113	0.118	90.6	94.4	80.0-125	4.11	20					
trans-1,3-Dichloropropene	0.125	0.112	0.119	89.3	95.2	75.0-129	6.37	20					
2,2-Dichloropropane	0.125	0.125	0.128	100	102	60.0-129	2.37	20					
Di-isopropyl ether	0.125	0.127	0.137	102	109	62.0-133	7.20	20					
Ethylbenzene	0.125	0.131	0.133	105	106	77.0-120	1.08	20					
Hexachloro-1,3-butadiene	0.125	0.126	0.146	101	117	68.0-128	14.5	20					
Isopropylbenzene	0.125	0.124	0.131	99.5	105	75.0-120	5.10	20					
p-Isopropyltoluene	0.125	0.129	0.140	103	112	74.0-125	8.43	20					
2-Butanone (MEK)	0.625	0.629	0.633	101	101	37.0-159	0.612	21.3					
Methylene Chloride	0.125	0.109	0.127	87.2	101	67.0-123	15.0	20					
4-Methyl-2-pentanone (MIBK)	0.625	0.725	0.721	116	115	60.0-144	0.548	20					
Methyl tert-butyl ether	0.125	0.125	0.130	99.9	104	66.0-125	4.12	20					

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

(LCS) R3306908-1 05/02/18 22:08 • (LCSD) R3306908-2 05/02/18 22:28

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD		RPD Limits		
	mg/kg	mg/kg	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	
Naphthalene	0.125	0.129	0.140	103	0.129	103	0.140	112	64.0-125	64.0-125	8.32	8.32	20	20	8.32	8.32	20	20	8.32	8.32	
n-Propylbenzene	0.125	0.124	0.130	99.0	0.124	99.0	0.130	104	78.0-120	78.0-120	5.27	5.27	20	20	5.27	5.27	20	20	5.27	5.27	
Styrene	0.125	0.112	0.119	89.9	0.112	89.9	0.119	95.3	78.0-124	78.0-124	5.90	5.90	20	20	5.90	5.90	20	20	5.90	5.90	
1,1,1,2-Tetrachloroethane	0.125	0.113	0.126	90.7	0.113	90.7	0.126	101	74.0-124	74.0-124	10.7	10.7	20	20	10.7	10.7	20	20	10.7	10.7	
1,1,2,2-Tetrachloroethane	0.125	0.119	0.131	94.8	0.119	94.8	0.131	105	73.0-120	73.0-120	9.96	9.96	20	20	9.96	9.96	20	20	9.96	9.96	
Tetrachloroethane	0.125	0.131	0.130	105	0.131	105	0.130	104	70.0-127	70.0-127	0.836	0.836	20	20	0.836	0.836	20	20	0.836	0.836	
Toluene	0.125	0.125	0.126	100	0.125	100	0.126	101	70.0-120	70.0-120	0.487	0.487	20	20	0.487	0.487	20	20	0.487	0.487	
1,1,2-Trichlorotrifluoroethane	0.125	0.112	0.114	89.5	0.112	89.5	0.114	91.1	64.0-135	64.0-135	1.69	1.69	20	20	1.69	1.69	20	20	1.69	1.69	
1,2,3-Trichlorobenzene	0.125	0.121	0.136	96.7	0.121	96.7	0.136	108	68.0-126	68.0-126	11.4	11.4	20	20	11.4	11.4	20	20	11.4	11.4	
1,2,4-Trichlorobenzene	0.125	0.122	0.132	97.8	0.122	97.8	0.132	106	70.0-127	70.0-127	7.98	7.98	20	20	7.98	7.98	20	20	7.98	7.98	
1,1,1-Trichloroethane	0.125	0.129	0.147	103	0.129	103	0.147	117	69.0-125	69.0-125	13.0	13.0	20	20	13.0	13.0	20	20	13.0	13.0	
1,1,2-Trichloroethane	0.125	0.134	0.135	107	0.134	107	0.135	108	78.0-120	78.0-120	0.976	0.976	20	20	0.976	0.976	20	20	0.976	0.976	
Trichloroethene	0.125	0.138	0.137	110	0.138	110	0.137	110	79.0-120	79.0-120	0.716	0.716	20	20	0.716	0.716	20	20	0.716	0.716	
Trichlorofluoromethane	0.125	0.122	0.137	97.3	0.122	97.3	0.137	110	59.0-136	59.0-136	11.8	11.8	20	20	11.8	11.8	20	20	11.8	11.8	
1,2,3-Trichloropropane	0.125	0.125	0.133	100	0.125	100	0.133	107	73.0-124	73.0-124	6.14	6.14	20	20	6.14	6.14	20	20	6.14	6.14	
1,2,3-Trimethylbenzene	0.125	0.127	0.137	102	0.127	102	0.137	110	76.0-120	76.0-120	7.85	7.85	20	20	7.85	7.85	20	20	7.85	7.85	
1,2,4-Trimethylbenzene	0.125	0.124	0.135	99.6	0.124	99.6	0.135	108	75.0-120	75.0-120	7.75	7.75	20	20	7.75	7.75	20	20	7.75	7.75	
1,3,5-Trimethylbenzene	0.125	0.123	0.135	98.4	0.123	98.4	0.135	108	75.0-120	75.0-120	9.59	9.59	20	20	9.59	9.59	20	20	9.59	9.59	
Vinyl chloride	0.125	0.124	0.130	99.4	0.124	99.4	0.130	104	63.0-134	63.0-134	4.17	4.17	20	20	4.17	4.17	20	20	4.17	4.17	
Xylenes, Total	0.375	0.377	0.376	101	0.377	101	0.376	100	77.0-120	77.0-120	0.266	0.266	20	20	0.266	0.266	20	20	0.266	0.266	
(S) Toluene-d8				108		108		106	80.0-120	80.0-120											
(S) Dibromofluoromethane				95.3		95.3		104	74.0-131	74.0-131											
(S) 4-Bromofluorobenzene				101		101		105	64.0-132	64.0-132											

L989443-34 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L989443-34 05/03/18 05:03 • (MS) R3306908-4 05/03/18 08:53 • (MSD) R3306908-5 05/03/18 09:13

Analyte	Spike Amount		Original Result		MS Result		MSD Result		MS Rec.		MSD Rec.		Dilution		Rec. Limits		MS Qualifier		RPD		RPD Limits	
	mg/kg	mg/kg	mg/kg	(dry)	mg/kg	(dry)	mg/kg	(dry)	mg/kg	(dry)	mg/kg	(dry)	mg/kg	(dry)	mg/kg	(dry)	mg/kg	(dry)	mg/kg	(dry)	mg/kg	(dry)
Acetone	0.759	ND	0.796	ND	0.759	0.589	0.796	85.8	62.8	62.8	62.8	119	10.0-160	29.9	29.9	36	36	29.9	29.9	36	36	
Acrylonitrile	0.759	ND	0.652	ND	0.759	0.764	0.652	72.2	84.6	84.6	84.6	119	14.0-160	15.7	15.7	33	33	15.7	15.7	33	33	
Benzene	0.152	ND	0.170	ND	0.152	0.182	0.170	94.2	101	101	101	119	13.0-146	6.50	6.50	27	27	6.50	6.50	27	27	
Bromobenzene	0.152	ND	0.200	ND	0.152	0.204	0.200	111	113	113	113	119	10.0-149	1.91	1.91	33	33	1.91	1.91	33	33	
Bromodichloromethane	0.152	ND	0.189	ND	0.152	0.202	0.189	105	112	112	112	119	15.0-142	6.67	6.67	28	28	6.67	6.67	28	28	
Bromoform	0.152	ND	0.189	ND	0.152	0.182	0.189	105	101	101	101	119	10.0-147	3.90	3.90	31	31	3.90	3.90	31	31	
Bromomethane	0.152	ND	0.128	ND	0.152	0.150	0.128	70.8	83.0	83.0	83.0	119	10.0-160	15.8	15.8	32	32	15.8	15.8	32	32	
n-Butylbenzene	0.152	ND	0.230	ND	0.152	0.244	0.230	127	135	135	135	119	10.0-154	5.98	5.98	37	37	5.98	5.98	37	37	
sec-Butylbenzene	0.152	ND	0.217	ND	0.152	0.241	0.217	120	133	133	133	119	10.0-151	10.3	10.3	36	36	10.3	10.3	36	36	
tet-Butylbenzene	0.152	ND	0.223	ND	0.152	0.246	0.223	124	136	136	136	119	10.0-152	9.60	9.60	35	35	9.60	9.60	35	35	

L989443-34 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L989443-34 05/03/18 05:03 • (MS) R3306908-4 05/03/18 08:53 • (MSD) R3306908-5 05/03/18 09:13

Analyte	Spike Amount		Original Result		MS Result (dry)		MSD Result (dry)		MS Rec.		MSD Rec.		Dilution		Rec. Limits		MS Qualifier		MSD Qualifier		RPD Limits	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%		%		%		%		%		%
Carbon tetrachloride	0.152	ND	0.211	0.209	0.116	117	0.209	116	116	119	13.0-140	0.761	30									
Chlorobenzene	0.152	ND	0.183	0.197	101	109	0.197	109	109	1.19	10.0-149	7.54	31									
Chlorodibromomethane	0.152	ND	0.184	0.202	102	112	0.202	112	112	1.19	12.0-147	9.02	29									
Chloroethane	0.152	ND	0.146	0.157	80.6	87.1	0.157	87.1	87.1	1.19	10.0-159	7.79	33									
Chloroform	0.152	ND	0.176	0.187	96.8	103	0.187	103	103	1.19	18.0-148	6.06	28									
Chloromethane	0.152	ND	0.141	0.150	77.8	83.3	0.150	83.3	83.3	1.19	10.0-146	6.76	29									
2-Chlorotoluene	0.152	ND	0.208	0.219	115	121	0.219	121	121	1.19	10.0-151	5.17	35									
4-Chlorotoluene	0.152	ND	0.202	0.210	112	117	0.210	117	117	1.19	10.0-150	4.03	35									
1,2-Dibromo-3-Chloropropane	0.152	ND	0.154	0.162	85.3	89.5	0.162	89.5	89.5	1.19	10.0-149	4.76	34									
1,2-Dibromoethane	0.152	ND	0.186	0.195	103	108	0.195	108	108	1.19	14.0-145	5.01	28									
Dibromomethane	0.152	ND	0.184	0.195	102	108	0.195	108	108	1.19	18.0-144	5.94	27									
1,2-Dichlorobenzene	0.152	ND	0.194	0.195	107	108	0.195	108	108	1.19	10.0-153	0.690	34									
1,3-Dichlorobenzene	0.152	ND	0.198	0.204	109	113	0.204	113	113	1.19	10.0-150	3.05	35									
1,4-Dichlorobenzene	0.152	ND	0.188	0.199	104	110	0.199	110	110	1.19	10.0-148	5.62	34									
Dichlorodifluoromethane	0.152	ND	0.195	0.200	108	111	0.200	111	111	1.19	10.0-162	2.57	30									
1,1-Dichloroethane	0.152	ND	0.181	0.190	100	105	0.190	105	105	1.19	19.0-148	4.52	28									
1,2-Dichloroethane	0.152	ND	0.169	0.192	93.6	107	0.192	107	107	1.19	17.0-147	12.9	27									
1,1-Dichloroethene	0.152	ND	0.179	0.186	99.0	103	0.186	103	103	1.19	10.0-150	4.17	31									
cis-1,2-Dichloroethene	0.152	ND	0.180	0.183	99.5	101	0.183	101	101	1.19	16.0-145	1.58	28									
trans-1,2-Dichloroethene	0.152	ND	0.157	0.161	86.9	89.1	0.161	89.1	89.1	1.19	11.0-142	2.55	29									
1,2-Dichloropropane	0.152	ND	0.183	0.203	101	112	0.203	112	112	1.19	17.0-148	10.5	28									
1,1-Dichloropropene	0.152	ND	0.175	0.194	96.8	107	0.194	107	107	1.19	10.0-150	10.2	30									
1,3-Dichloropropane	0.152	ND	0.201	0.204	111	113	0.204	113	113	1.19	16.0-148	1.37	27									
cis-1,3-Dichloropropene	0.152	ND	0.182	0.193	101	107	0.193	107	107	1.19	13.0-150	5.49	28									
trans-1,3-Dichloropropene	0.152	ND	0.176	0.193	97.5	107	0.193	107	107	1.19	10.0-152	8.98	29									
2,2-Dichloropropane	0.152	ND	0.184	0.197	102	109	0.197	109	109	1.19	16.0-143	7.16	30									
Di-Isopropyl ether	0.152	ND	0.183	0.189	101	105	0.189	105	105	1.19	16.0-149	2.98	28									
Ethylbenzene	0.152	ND	0.208	0.226	115	125	0.226	125	125	1.19	10.0-147	8.12	31									
Hexachloro-1,3-butadiene	0.152	ND	0.233	0.235	129	130	0.235	130	130	1.19	10.0-154	0.573	40									
Isopropylbenzene	0.152	ND	0.218	0.224	121	124	0.224	124	124	1.19	10.0-147	2.65	33									
p-Isopropyltoluene	0.152	ND	0.215	0.232	119	129	0.232	129	129	1.19	10.0-156	7.69	37									
2-Butanone (MEK)	0.759	ND	0.573	0.643	63.4	71.2	0.643	71.2	71.2	1.19	10.0-160	11.5	33									
Methylene Chloride	0.152	ND	0.160	0.172	88.5	95.3	0.172	95.3	95.3	1.19	16.0-139	7.37	29									
4-Methyl-2-pentanone (MIBK)	0.759	ND	0.882	0.981	97.6	109	0.981	109	109	1.19	12.0-160	10.6	32									
Methyl tert-butyl ether	0.152	ND	0.167	0.173	92.1	95.4	0.173	95.4	95.4	1.19	21.0-145	3.50	29									
Naphthalene	0.152	ND	0.177	0.182	97.9	101	0.182	101	101	1.19	10.0-153	2.74	36									
n-Propylbenzene	0.152	ND	0.206	0.214	114	119	0.214	119	119	1.19	10.0-151	4.13	34									
Styrene	0.152	ND	0.204	0.219	113	121	0.219	121	121	1.19	10.0-155	6.72	34									
1,1,1,2-Tetrachloroethane	0.152	ND	0.179	0.187	99.1	104	0.187	104	104	1.19	10.0-147	4.55	30									



L989443-34 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L989443-34 05/03/18 05:03 • (MS) R3306908-4 05/03/18 08:53 • (MSD) R3306908-5 05/03/18 09:13

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %	Cp
													1
1,1,2,2-Tetrachloroethane	0.152	ND	0.193	0.217	107	120	1.19	10.0-155			11.7	31	2
Tetrachloroethene	0.152	ND	0.188	0.195	104	108	1.19	10.0-144			3.67	32	3
Toluene	0.152	ND	0.194	0.200	107	111	1.19	10.0-144			3.33	28	4
1,1,2-Trichlorotrifluoroethane	0.152	ND	0.163	0.178	90.3	98.8	1.19	10.0-153			9.01	33	5
1,2,3-Trichlorobenzene	0.152	ND	0.188	0.193	104	107	1.19	10.0-153			2.69	40	6
1,2,4-Trichlorobenzene	0.152	ND	0.188	0.196	104	108	1.19	10.0-156			4.00	40	7
1,1,1-Trichloroethane	0.152	ND	0.203	0.207	112	115	1.19	18.0-145			2.02	29	8
1,1,2-Trichloroethane	0.152	ND	0.208	0.222	115	123	1.19	12.0-151			6.60	28	9
Trichloroethene	0.152	ND	0.181	0.200	100	111	1.19	11.0-148			9.58	29	
Trichlorofluoromethane	0.152	ND	0.202	0.212	112	117	1.19	10.0-157			4.81	34	
1,2,3-Trichloropropane	0.152	ND	0.168	0.185	92.7	102	1.19	10.0-154			9.82	32	
1,2,3-Trimethylbenzene	0.152	ND	0.216	0.217	120	120	1.19	10.0-150			0.248	33	
1,2,4-Trimethylbenzene	0.152	ND	0.199	0.218	110	121	1.19	10.0-151			9.21	34	
1,3,5-Trimethylbenzene	0.152	ND	0.204	0.215	113	119	1.19	10.0-150			5.39	33	
Vinyl chloride	0.152	ND	0.138	0.135	76.3	74.7	1.19	10.0-150			2.07	29	
Xylenes, Total	0.455	ND	0.564	0.615	104	113	1.19	10.0-150			8.66	31	
(S) Toluene-d8					107	110		80.0-120					
(S) Dibromofluoromethane					89.6	95.3		74.0-131					
(S) 4-Bromofluorobenzene					110	106		64.0-132					

Method Blank (MB)

(MB) R3306635-3 05/02/18 20:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0137	0.0250
Acrylonitrile	U		0.00190	0.0125
Benzene	U		0.000400	0.0100
Bromobenzene	U		0.00105	0.0125
Bromodichloromethane	U		0.000788	0.00250
Bromoform	U		0.00598	0.0250
Bromomethane	U		0.00370	0.0125
n-Butylbenzene	U		0.00384	0.0125
sec-Butylbenzene	U		0.00253	0.0125
tet-Butylbenzene	U		0.00155	0.00500
Carbon tetrachloride	U		0.00108	0.00500
Chlorobenzene	U		0.000573	0.00250
Chlorodibromomethane	U		0.000450	0.00250
Chloroethane	U		0.00108	0.00500
Chloroform	U		0.000415	0.00250
Chloromethane	U		0.00139	0.0125
2-Chlorotoluene	U		0.000920	0.00250
4-Chlorotoluene	U		0.00113	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00510	0.0250
1,2-Dibromoethane	U		0.000525	0.00250
Dibromomethane	U		0.00100	0.00500
1,2-Dichlorobenzene	U		0.00145	0.00500
1,3-Dichlorobenzene	U		0.00170	0.00500
1,4-Dichlorobenzene	U		0.00197	0.00500
Dichlorodifluoromethane	U		0.000818	0.00250
1,1-Dichloroethane	U		0.000575	0.00250
1,2-Dichloroethane	U		0.000475	0.00250
1,1-Dichloroethene	U		0.000500	0.00250
cis-1,2-Dichloroethene	U		0.000690	0.00250
trans-1,2-Dichloroethene	U		0.00143	0.00500
1,2-Dichloropropane	U		0.00127	0.00500
1,1-Dichloropropene	U		0.000700	0.00250
1,3-Dichloropropane	U		0.00175	0.00500
cis-1,3-Dichloropropene	U		0.000678	0.00250
trans-1,3-Dichloropropene	U		0.00153	0.00500
2,2-Dichloropropane	U		0.000793	0.00250
Di-isopropyl ether	U		0.000350	0.0100
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

Method Blank (MB)

(MB) R3306635-3 05/02/18 20:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	U		0.0125	0.0250
Methylene Chloride	0.0103	J	0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.0100	0.0250
Methyl tert-butyl ether	U		0.000295	0.00100
Naphthalene	U		0.00312	0.0125
n-Propylbenzene	U		0.00118	0.00500
Styrene	U		0.00273	0.0125
1,1,1,2-Tetrachloroethane	U		0.000500	0.00250
1,1,2,2-Tetrachloroethane	U		0.000390	0.00250
Tetrachloroethene	U		0.000700	0.00250
Toluene	U		0.00125	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000675	0.00250
1,2,3-Trichlorobenzene	U		0.000625	0.00250
1,2,4-Trichlorobenzene	U		0.00482	0.0125
1,1,1-Trichloroethane	U		0.000275	0.00250
1,1,2-Trichloroethane	U		0.000883	0.00250
Trichloroethene	U		0.000400	0.00100
Trichlorofluoromethane	U		0.000500	0.00250
1,2,3-Trichloropropane	U		0.00510	0.0125
1,2,3-Trimethylbenzene	U		0.00115	0.00500
1,2,4-Trimethylbenzene	U		0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	111			80.0-120
(S) Dibromofluoromethane	107			74.0-131
(S) 4-Bromofluorobenzene	110			64.0-132

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

(LCS) R3306635-1 05/02/18 19:19 • (LCSD) R3306635-2 05/02/18 19:38

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.723	0.724	116	116	11.0-160		0.176	0.176	23
Acrylonitrile	0.625	0.540	0.569	86.4	91.0	61.0-143		5.23	5.23	20
Benzene	0.125	0.123	0.115	98.2	92.1	71.0-124		6.46	6.46	20
Bromobenzene	0.125	0.132	0.131	105	105	78.0-120		0.216	0.216	20
Bromodichloromethane	0.125	0.115	0.120	92.3	96.0	75.0-120		3.93	3.93	20

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

(LCS) R3306635-1 05/02/18 19:19 • (LCSD) R3306635-2 05/02/18 19:38

Analyte	Spike Amount mg/kg	LCS Result		LCSD Result		LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
		mg/kg	mg/kg	mg/kg	mg/kg							
Bromoform	0.125	0.109	0.111	86.9	88.7	86.9	88.7	65.0-133	2.04	2.04	2.04	20
Bromomethane	0.125	0.128	0.119	102	95.2	102	95.2	26.0-160	7.11	7.11	7.11	20
n-Butylbenzene	0.125	0.116	0.115	92.5	92.1	92.5	92.1	73.0-126	0.486	0.486	0.486	20
sec-Butylbenzene	0.125	0.119	0.115	95.5	92.2	95.5	92.2	75.0-121	3.50	3.50	3.50	20
tet-Butylbenzene	0.125	0.121	0.122	96.5	97.8	96.5	97.8	74.0-122	1.35	1.35	1.35	20
Carbon tetrachloride	0.125	0.118	0.115	94.7	91.8	94.7	91.8	66.0-123	3.10	3.10	3.10	20
Chlorobenzene	0.125	0.116	0.119	93.0	95.4	93.0	95.4	79.0-121	2.60	2.60	2.60	20
Chlorodibromomethane	0.125	0.119	0.118	95.2	94.8	95.2	94.8	74.0-128	0.396	0.396	0.396	20
Chloroethane	0.125	0.138	0.118	111	94.1	111	94.1	51.0-147	16.1	16.1	16.1	20
Chloroform	0.125	0.120	0.113	95.7	90.0	95.7	90.0	73.0-123	6.14	6.14	6.14	20
Chloromethane	0.125	0.130	0.121	104	96.5	104	96.5	51.0-138	7.43	7.43	7.43	20
2-Chlorotoluene	0.125	0.122	0.124	97.8	99.6	97.8	99.6	72.0-124	1.83	1.83	1.83	20
4-Chlorotoluene	0.125	0.118	0.118	94.7	94.7	94.7	94.7	78.0-120	0.0482	0.0482	0.0482	20
1,2-Dibromo-3-Chloropropane	0.125	0.114	0.110	91.0	88.3	91.0	88.3	65.0-126	2.99	2.99	2.99	20
1,2-Dibromoethane	0.125	0.113	0.116	90.7	92.8	90.7	92.8	78.0-122	2.30	2.30	2.30	20
Dibromomethane	0.125	0.124	0.125	98.8	99.7	98.8	99.7	79.0-120	0.842	0.842	0.842	20
1,2-Dichlorobenzene	0.125	0.121	0.118	97.1	94.6	97.1	94.6	80.0-120	2.60	2.60	2.60	20
1,3-Dichlorobenzene	0.125	0.120	0.120	96.3	96.2	96.3	96.2	72.0-123	0.0623	0.0623	0.0623	20
1,4-Dichlorobenzene	0.125	0.112	0.114	89.9	91.4	89.9	91.4	77.0-120	1.58	1.58	1.58	20
Dichlorodifluoromethane	0.125	0.111	0.105	88.8	83.9	88.8	83.9	49.0-155	5.72	5.72	5.72	20
1,1-Dichloroethane	0.125	0.124	0.121	99.3	96.6	99.3	96.6	70.0-128	2.77	2.77	2.77	20
1,2-Dichloroethane	0.125	0.116	0.111	92.6	89.1	92.6	89.1	69.0-128	3.80	3.80	3.80	20
1,1-Dichloroethene	0.125	0.119	0.120	95.2	96.0	95.2	96.0	63.0-131	0.821	0.821	0.821	20
cis-1,2-Dichloroethene	0.125	0.129	0.126	103	101	103	101	74.0-123	2.27	2.27	2.27	20
trans-1,2-Dichloroethene	0.125	0.116	0.119	93.2	95.1	93.2	95.1	72.0-122	2.03	2.03	2.03	20
1,2-Dichloropropane	0.125	0.130	0.126	104	101	104	101	75.0-126	3.50	3.50	3.50	20
1,1-Dichloropropene	0.125	0.125	0.120	99.7	96.0	99.7	96.0	72.0-130	3.82	3.82	3.82	20
1,3-Dichloropropane	0.125	0.118	0.118	94.5	94.4	94.5	94.4	80.0-121	0.0838	0.0838	0.0838	20
cis-1,3-Dichloropropene	0.125	0.130	0.131	104	105	104	105	80.0-125	0.360	0.360	0.360	20
trans-1,3-Dichloropropene	0.125	0.121	0.124	97.1	99.0	97.1	99.0	75.0-129	1.97	1.97	1.97	20
2,2-Dichloropropane	0.125	0.128	0.118	103	94.1	103	94.1	60.0-129	8.65	8.65	8.65	20
Di-isopropyl ether	0.125	0.131	0.125	105	100	105	100	62.0-133	4.29	4.29	4.29	20
Ethylbenzene	0.125	0.121	0.121	96.5	96.9	96.5	96.9	77.0-120	0.462	0.462	0.462	20
Hexachloro-1,3-butadiene	0.125	0.116	0.113	92.7	90.3	92.7	90.3	68.0-128	2.60	2.60	2.60	20
Isopropylbenzene	0.125	0.114	0.112	91.5	89.7	91.5	89.7	75.0-120	1.94	1.94	1.94	20
p-Isopropyltoluene	0.125	0.111	0.112	88.4	89.7	88.4	89.7	74.0-125	1.36	1.36	1.36	20
2-Butanone (MEK)	0.625	0.572	0.630	91.5	101	91.5	101	37.0-159	9.64	9.64	9.64	21.3
Methylene Chloride	0.125	0.127	0.120	101	96.0	101	96.0	67.0-123	5.42	5.42	5.42	20
4-Methyl-2-pentanone (MIBK)	0.625	0.577	0.585	92.3	93.6	92.3	93.6	60.0-144	1.40	1.40	1.40	20
Methyl tert-butyl ether	0.125	0.127	0.117	101	93.5	101	93.5	66.0-125	7.99	7.99	7.99	20

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

(LCS) R3306635-1 05/02/18 19:19 • (LCSD) R3306635-2 05/02/18 19:38

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %	Control Chart	
											Cp	Tc
Naphthalene	0.125	0.114	0.116	91.6	92.5	64.0-125	1.00	1.00	1.00	20		
n-Propylbenzene	0.125	0.114	0.115	91.1	92.1	78.0-120	1.15	1.15	1.15	20		
Styrene	0.125	0.113	0.114	90.3	90.9	78.0-124	0.645	0.645	0.645	20		
1,1,1,2-Tetrachloroethane	0.125	0.123	0.124	98.4	99.2	74.0-124	0.839	0.839	0.839	20		
1,1,2,2-Tetrachloroethane	0.125	0.118	0.116	94.2	92.5	73.0-120	1.84	1.84	1.84	20		
Tetrachloroethene	0.125	0.112	0.116	89.3	93.2	70.0-127	4.31	4.31	4.31	20		
Toluene	0.125	0.112	0.117	89.9	93.4	70.0-120	3.81	3.81	3.81	20		
1,1,2-Trichlorotrifluoroethane	0.125	0.127	0.131	102	105	64.0-135	3.25	3.25	3.25	20		
1,2,3-Trichlorobenzene	0.125	0.118	0.115	94.7	91.9	68.0-126	3.00	3.00	3.00	20		
1,2,4-Trichlorobenzene	0.125	0.114	0.116	91.3	93.1	70.0-127	1.91	1.91	1.91	20		
1,1,1-Trichloroethane	0.125	0.118	0.109	94.0	87.4	69.0-125	7.30	7.30	7.30	20		
1,1,2-Trichloroethane	0.125	0.116	0.120	92.5	96.1	78.0-120	3.75	3.75	3.75	20		
Trichloroethene	0.125	0.121	0.116	97.2	92.4	79.0-120	5.00	5.00	5.00	20		
Trichlorofluoromethane	0.125	0.125	0.121	100	96.8	59.0-136	3.37	3.37	3.37	20		
1,2,3-Trichloropropane	0.125	0.123	0.123	98.2	98.3	73.0-124	0.133	0.133	0.133	20		
1,2,3-Trimethylbenzene	0.125	0.117	0.116	93.3	92.4	76.0-120	0.919	0.919	0.919	20		
1,2,4-Trimethylbenzene	0.125	0.117	0.114	93.6	91.2	75.0-120	2.58	2.58	2.58	20		
1,3,5-Trimethylbenzene	0.125	0.118	0.114	94.4	91.6	75.0-120	3.05	3.05	3.05	20		
Vinyl chloride	0.125	0.129	0.128	104	102	63.0-134	1.20	1.20	1.20	20		
Xylenes, Total	0.375	0.345	0.341	92.0	90.9	77.0-120	1.17	1.17	1.17	20		
(S) Toluene-d8				109	114	80.0-120						
(S) Dibromofluoromethane				106	107	74.0-131						
(S) 4-Bromofluorobenzene				110	113	64.0-132						



Method Blank (MB)

(MB) R3306012-1 04/30/18 18:39

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
C12-C22 Hydrocarbons	U		33.0	100
C22-C32 Hydrocarbons	U		33.0	100
C32-C40 Hydrocarbons	U		33.0	100
(S) o-Terphenyl	111			52.0-156

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

(LCS) R3306012-2 04/30/18 18:55 • (LCSD) R3306012-3 04/30/18 19:11

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 %
C22-C32 Hydrocarbons	750	717	746	95.5	99.5	50.0-150			4.08	20
C12-C22 Hydrocarbons	750	693	726	92.4	96.9	50.0-150			4.72	20
(S) o-Terphenyl				91.0	93.4	52.0-156				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc



Method Blank (MB)

(MB) R3306814-1 05/03/18 12:52

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C12-C22 Hydrocarbons	U		0.733	4.00
C22-C32 Hydrocarbons	U		1.33	4.00
C32-C40 Hydrocarbons	U		1.33	4.00
(S) o-Terphenyl	84.5			18.0-148

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

(LCS) R3306814-2 05/03/18 13:07 • (LCSD) R3306814-3 05/03/18 13:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
C22-C32 Hydrocarbons	25.0	24.9	23.6	99.5	94.3	50.0-150			5.33	20
C12-C22 Hydrocarbons	25.0	21.4	20.8	85.6	83.1	50.0-150			2.98	20
(S) o-Terphenyl				77.8	78.6	18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc



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

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
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.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

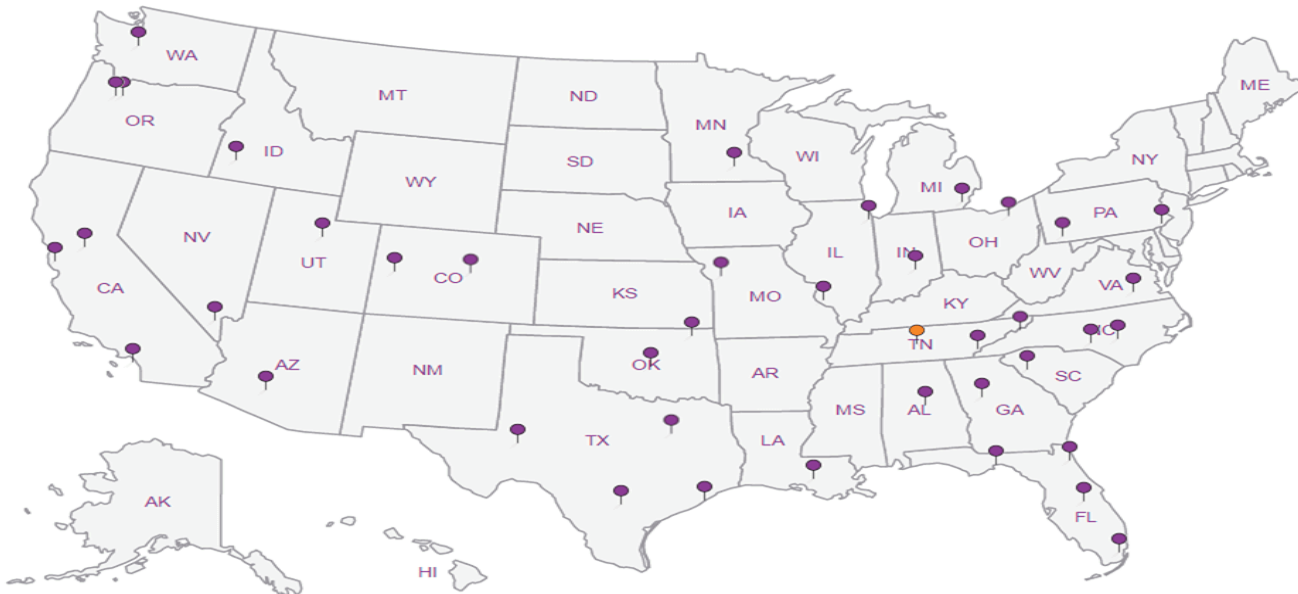
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

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

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.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc


AWR Environmental
2363 Mariner Square Dr, Suite 245
Alameda, CA 94501

Report to:
Yola Bayram

Project Description:
The Home of Truth

Phone: **510-671-2088**
 Fax: **510-227-5495**

Collected by (print):
Cheryl Cary / TRF

Collected by (signature):


Immediately Packed on ice N ___ Y

Sample ID

Client Project #

THOT

Site/Facility ID #

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

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

Billing Information:

AWR Environmental
2363 Mariner Square Dr, Suite 245
Alameda, CA 94501

Email To:
ybayram@awrcorp.net,

City/State Collected:
Alameda / CA

Lab Project #

P.O. #

Quote #

Date Results Needed

Analysis / Container / Preservative

TPPH by EPA 8015
 VOC Full Scan by 8260 + Naphthalene
 TEPH by EPA 8015

Chain of Custody Page ___ of ___



L-A-B S-T-E-I-N-C-E-I-S

12005 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859

L # **98745A**

G020

Account: **APPOINTMENT**

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Remarks: Sample # (lab only)

01
02
03
04
05
06
07
08
09

Sample Receipt Checklist
 Coc Seal Present/Intact: 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 Headpace: Y N
 Preservation Correct/Checked: Y N

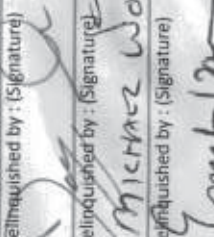
If preservation required by LogIn: Date/Time

4-193

Condition: NCF / OX

Remarks:
 Limited Sample Volume, SB1-9.5, SB1-11, SB1-13, SB1-GW, SB3-9, SB3-13 and SB3-GW high expected concentrations. Provide chromatograms for 8015.

Samples returned via:
 ___ UPS ___ FedEx ___ Courier

Relinquished by: (Signature) 	Date: 4/26/18	Time: 12:05
Relinquished by: (Signature) Michael Woody	Date: 4/26/18	Time: 12:35
Relinquished by: (Signature) Michael Woody	Date: 4/26/18	Time: 1800

Tracking # **4196 3258 3349**

Trip Blank Received: Yes / No

HCLYMeOH
 TBR

Bottles Received:

Temp: **4.2°C**

Date: **04/26/18 08:45**

Received for lab by: (Signature)



AWR Environmental
 2363 Mariner Square Dr, Suite 245
 Alameda, CA 94501

Report to:
Yola Bayram

Project Description:
The Home of Truth

Phone: **510-671-2088**
 Fax: **510-227-5495**

Collected by (print):
Cheryl Cary

Collected by (signature):


Immediately Packed on ice: N Y

Billing Information:
AWR Environmental
 2363 Mariner Square Dr, Suite 245
 Alameda, CA 94501

Email To:
ybayram@awrcorp.net

City/State Collected:
Alameda / CA

Lab Project #

P.O. #

Quote #

Date Results Needed




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

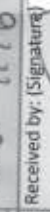

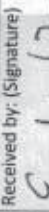
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative		
							TPPH by EPA 8015	VOC Full Scan by 8260 + Naphthalene	TEPH by EPA 8015
SB3-9	Grab	SS	9	04/25/2018	1330	5	X	X	X
SB3-13	Grab	SS	13	04/25/2018	1345	5	X	X	X
SB4-GW	Grab	GW	10	04/25/2018	1615	5	X	X	X
SB4-4	Grab	SS	4	04/25/2018	1505	5	X	X	X
SB4-9	Grab	SS	9	04/25/2018	1515	5	X	X	X
SB5-GW5	Grab	GW	7	04/25/2018	1019	5	X	X	X
SB5-GW10	Grab	GW	10	04/25/2018	1630	5	X	X	X
SB6-GW5	Grab	GW	5	04/25/2018	1123	5	X	X	X
SB6-GW10	Grab	GW	10	04/25/2018	1645	5	X	X	X

Remarks:

Limited Sample Volume, SB1-9.5, SB1-11, SB1-13, SB1-GW, SB3-9, SB3-13 and SB3-GW high expected concentrations. Provide chromatograms for 8015.

Samples returned via: UPS FedEx Courier

Relinquished by: (Signature)  Date: 4/26/18 12:05
 Relinquished by: (Signature)  Date: 4/26/18 12:35
 Relinquished by: (Signature)  Date: 4/26/18 1800

Tracking # 4196 3258 3398
 Received by: (Signature) 
 Received by: (Signature) 
 Received for lab by: (Signature) 

Trip Blank Received: Yes/No
 HCL/MeOH TBR
 Temp: 4.7 °C Bottles Received: 95
 Date: 04/27/18

Chain of Custody Page ___ of ___



L.A.B. S.C.I.E.N.C.E.S.

YOUR LAB OF CHOICE



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

L #

Table #

Acctnum: APPWATWCD

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Remarks

Sample # (lab only)

11
 12
 13
 14
 15
 16

Sample Receipt Checklist

COC Seal Present/Intact: Y N

COC Signed/Accurate: Y N

Bottles arrive intact: Y N

Correct bottles used: Y N

Sufficient volume sent: Y N

If Applicable

VOR Zero Headpace: Y N

Preservation Correct/Checked: Y N

If preservation required by LogIn: Date/Time

Hold:

Condition: NCF / 108