

Appendix D: Summary of Soil and Groundwater Supporting Information

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September 9, 2021

Outfront Media
1695 Eastshore Highway
Berkeley, California 94710

Attn: Mr. Jeff McCuen
P: (510) 559-1114
E: jeff.mccuen@outfrontmedia.com

Re: Summary of Soil and Groundwater Sampling Activities
Millbrae Avenue Billboard
400 East Millbrae Avenue
Millbrae, San Mateo County, California
Terracon Project No. ND215024

Dear Mr. McCuen,

Terracon Consultants, Inc. (Terracon) is pleased to submit this Summary of Soil and Groundwater Sampling Activities performed for the proposed billboard to be located at 400 East Millbrae Avenue in Millbrae, San Mateo County, California. The sampling was completed in accordance with our proposal and agreement for services dated April 20, 2021 (Terracon Proposal No. PND215024).

Site Information

The site is located at 400 East Millbrae Avenue in Millbrae, San Mateo County, California and consists of an approximately 2.4-acre tract of land designated as Assessor Parcel Number (APN) 024371010. The project site consists of an asphalt-paved area. The site is currently developed with the City of Millbrae water pollution control plant. The project consists of constructing a single 45-foot-tall single post billboard supported by an approximately 5-foot diameter pier.

Scope of Work

Terracon was engaged by the client, concurrent with Terracon's geotechnical evaluation of the site, to collect and analyze one soil and one groundwater sample for select chemical parameters to evaluate the presence or absence of regulated environmental chemicals that may be encountered during foundation construction of the proposed billboard. According to the Environmental Due Diligence Assessment – Supplemental Regulatory Review prepared by Leader Professional Services, Inc. on April 14, 2021 for the site, nearby leaking underground storage tank (LUST) cases that have been historically recognized due to releases of gasoline or diesel fuel have the potential to impact the project site. These cases have been previously closed by the California Environmental Protection Agency (CalEPA) and/or San Mateo County.

Summary of Soil and Groundwater Sampling Activities

Millbrae Avenue Billboard ■ Millbrae, California

September 9, 2021 ■ Terracon Project No. ND215024



- Case T0608100157 (400 East Millbrae Avenue Millbrae, CA 94030) was opened in September 1989 when a leak of diesel fuel was reported. The case was closed April 1997, however, was reopened in December 2012 as CalEPA required a soil vapor intrusion investigation be conducted at the project site. The investigation was conducted, and the case was closed in August 2016.
- Case T10000002916 (400 East Millbrae Avenue Millbrae, CA 94030) was opened in January 2011 when diesel fuel impacted soil was encountered during the digging of a utility trench at the Property. Remediation was conducted as the case was closed in July 2014.
- Case T0608101089 (400 East Millbrae Avenue Millbrae, CA 94030) was opened and closed in June 1996 when a 10,000-gallon UST that contained gasoline was removed from the Property.

Terracon mobilized to the site on May 13, 2021 to collect one soil and one groundwater sample from the Cone Penetration Test 1 boring (CPT1). One soil sample (CPT1) was collected at a depth of 6 to 7 feet below ground surface (bgs). Groundwater was sampled at a depth of approximately 5 feet bgs (CPT1-GW). Each sample container was labeled with the project number, date, time, and sample number. Sample containers were placed in a chilled cooler immediately after sampling and subsequently transported to Pace Analytical, a California Environmental Laboratory Accreditation (ELAP) certified laboratory under strict chain-of-custody procedures.

The soil sample was submitted for laboratory analysis of total petroleum hydrocarbons as gasoline (TPH-g), diesel (TPH-d), and motor oil (TPH-mo) by EPA Method 8015, volatile organic compounds (VOCs) by EPA Method 8260B, and chromium and lead by EPA Method 6020.

Results

Terracon has prepared this letter report summarizing the results of field work and laboratory analyses including conclusions and recommendations relative to potential points of regulatory compliance including:

- Hazard Communications (HAZCOMM) considerations for future construction workers in accordance with California General Safety Order §5194;
- Regulatory reporting considerations to Alameda County and/or the California Regional Water Quality Control Board; and
- Waste management considerations including obtaining a temporary U.S. EPA Identification number for wastes that may be generated during foundation construction.

Soil

Based on a review of the analytical results, TPH-g and VOCs were not detected in the soil sample above laboratory reported detection limits (RDLs). TPH-d and TPH-mo were detected at concentrations of 7.58 milligrams per kilogram (mg/Kg) and 7.83 mg/Kg, respectively. Chromium and lead were detected at concentrations of 76.0 mg/Kg and 23.8 mg/Kg, respectively.

The California Occupational Safety & Health Administration (CalOSHA) permissible exposure limits (PELs) for chemicals¹ do not specify diesel fuels or motor oil.

The California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), Environmental Screening Levels (ESLs) provide levels for Direct Exposure Human Health Risk for residential, commercial/industrial, and construction worker scenarios. The concentrations of TPH-d, TPH-mo, chromium, and lead detected in the soil sample are below the RWQCB Environmental Screening Levels (ESLs) for Direct Exposure Human Health Risk Levels for residential, commercial/industrial, and construction worker scenarios. While the TPH-d and TPH-mo concentrations in soil do not appear to exceed OSHA or ESL thresholds, the presence of TPH-d and TPH-mo should be communicated to the general contractor (GC) performing the footing installation (i.e. drilling and ancillary tasks) for disclosure to employees and subcontractors in compliance with California General Safety Order §5194 – Hazard Communication.

The presence of TPH-d, TPH-mo, chromium, and lead in soil does not appear to trigger a Hazardous Material Release Reporting requirement per California Code of Regulations, Title 19, Division 2, Article 2, sections 2630-2632. According to California Office of Emergency Services (CalOES) release reporting matrix², oil discharges to land greater than 42 gallons (1 barrel) shall be reported to CalOES. No information is available of the source, volume, or timing of a release that was detected by this soil sample. The land owner should be notified of the presence of TPH-d, TPH-mo, chromium, and lead in soil. The land owner, at the advice of counsel, may choose to disclose the presence of TPH-d, TPH-mo, chromium, and lead in soil to the San Mateo County Certified Unified Program Agency (CUPA).

Solid waste management considerations include reviewing the potential for listed and/or characteristic wastes. California Code of Regulations Title 22 section 66261.24 (22 CCR § 66261.24) does not list TPH-d or TPH-mo. Further, there are no California waste criteria for TPH-d including total threshold limit concentration (TTLC) and soluble threshold limit concentration (STLC). California Code of Regulations Title 22 section 66261.24 (22 CCR § 66261.24) does list chromium and lead values. The threshold for additional analysis for chromium and lead is 50 mg/kg. Based on the reported chromium concentration, the sample was re-analyzed for soluble chromium following the Waste Extraction Test (WET) procedure by EPA Method 6010B. Soluble

¹ https://www.dir.ca.gov/title8/5155table_ac1.html

² <https://www.caloes.ca.gov/FireRescueSite/Documents/Release%20Reporting%20Matrix.pdf>

Summary of Soil and Groundwater Sampling Activities

Millbrae Avenue Billboard ■ Millbrae, California

September 9, 2021 ■ Terracon Project No. ND215024



chromium was reported at a concentration of 0.495 milligrams per liter (mg/L), which is below the STLC screening value of 5.0 for regulated waste.

The acceptance criteria and requirement for any additional soil testing will be defined by the licensed receiving facility accepting this soil. A U.S. EPA facility Identification number may be required for off-site disposal of solid wastes that may generated during foundation construction.

Groundwater

The groundwater sample was submitted for laboratory analysis of analysis of TPH-g, TPH-d, and TPH-mo by EPA Method 8015 and VOCs by EPA Method 8260B. Based on a review of the analytical results, TPH-g and VOCs were not detected in the groundwater sample above laboratory RDLs. TPH-d and TPH-mo were detected at concentrations of 253 micrograms per liter (µg/L) and 315 µg/L, respectively.

The CalOSHA PELs are not applicable for chemicals³ in groundwater. The relevant conservative ESLs may include Direct Exposure Human Health Risk for drinking groundwater and groundwater vapor intrusion. The concentration of TPH-d in groundwater exceeds the California drinking water Maximum Contaminant Level (MCL) for TPH-d (200 µg/L). A drinking water MCL has not been established for TPH-mo and groundwater vapor intrusion ESLs have not been established for TPH-d or TPH-mo.

Shallow groundwater from the site is not the source of drinking water and there are no applicable groundwater ESLs for construction workers; however, the GC performing the footing installation (i.e. drilling and ancillary tasks) should be notified of the presence of TPH in groundwater for disclosure to employees and subcontractors in compliance with California General Safety Order §5194 – Hazard Communication.

The presence of TPH in groundwater may trigger a Hazardous Material Release Reporting requirement² per California Water Code CWC 13272 (a); California Government Code (CGC) 8670.25.5; 8670.26; and, the California State Oil Spill Contingency Plan. The land owner at the advice of counsel may choose to disclose the presence of VOCs in groundwater to CalOES and or RWQCB.

The detected TPH concentrations are not listed wastes. Although the groundwater does not appear to be regulated as a hazardous liquid, discharges of these liquid wastes and requirements for any additional testing will be defined by the licensed receiving facility accepting these liquids. Waste management considerations may include obtaining a temporary publicly-owned treatment works (POTW) discharge permit or management as a liquid waste through a licensed treatment facility. A U.S. EPA facility Identification number may be required for off-site treatment of liquid for wastes that may generated during foundation construction.

³ https://www.dir.ca.gov/title8/5155table_ac1.html

Summary of Soil and Groundwater Sampling Activities

Millbrae Avenue Billboard ■ Millbrae, California

September 9, 2021 ■ Terracon Project No. ND215024



In summary, impacts to soil and groundwater may require various hazard communication, regulatory reporting, and waste management considerations.

Compound Class	Impacts		Hazard Communication	Reporting to Agencies	Waste Characteristics
	Soil	Groundwater			
TPH-g	No	No	Not Applicable	Not Applicable	Not Applicable
TPH-d	Yes	Yes	Yes	Up to Landowner	Exempt; but profile is up to the licensed receiving facility
TPH-mo	Yes	Yes	Yes	Up to Landowner	Not Applicable
VOCs	No	No	No	Not Applicable	Not Applicable

Discussion

Construction of the billboard foundation is expected to generate excess soils and groundwater that may require special handling. Based on a deepest foundation design scenario, approximately 65 loose cubic yards of soil may be generated, and approximately 125 gallons of static groundwater (assuming an effective porosity of 0.3) may be displaced by foundation materials.

While chemical data provided in this report may not be precisely indicative of impacts to soils that will be generated during construction of the billboard, we recommend placing exhumed soils into roll-off bins and performing additional sampling of these soils (at a rate of one composite sample per 250 cubic yards) to develop a waste profile for special handling and disposal, unless a licensed receiving facility has accepted the solid waste without further testing. Based on Terracon's analysis, the soil should be classified as non-hazardous waste; however, a disposal contractor may require additional sampling and analysis at the time of disposal.

Static groundwater that may be displaced by foundation materials should be captured at the surface and contained as a potentially regulated material for waste profiling, special handling and disposal. Terracon understands that the contractor, Sunset Signs, is proposing to contain the water in two 10,000-gallon aboveground storage tanks (ASTs) for disposal at an off-site location. Terracon recommends developing a waste profile for special handling and disposal. Based on Terracon's analysis, the water should be classified as non-hazardous waste; however, a disposal contractor may require additional sampling and analysis at the time of disposal.



AERIAL PHOTOGRAPHY PROVIDED BY
MICROSOFT BING MAPS

DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION
PURPOSES

Project Manager: KAS
Drawn by: HGKG
Checked by: SEG
Approved by: SEG

Project No. ND215024
Scale: AS SHOWN
File Name: NA
Date: SEPT 2021

Terracon

5075 Commercial Cir Ste E
Concord, CA 94520-8531

SITE DIAGRAM

MILLBRAE AVENUE BILLBOARD
400 EAST MILLBRAE AVENUE
MILLBRAE, SAN MATEO COUNTY, CALIFORNIA

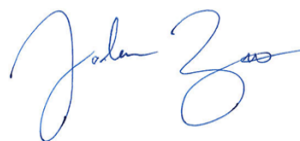
Exhibit

1

Terracon - Sacramento, CA

Sample Delivery Group: L1353303
Samples Received: 05/14/2021
Project Number: ND215024
Description: Millbrae Billboard
Site: 400 E MILLBRAE AVE MILLBRAE CA
Report To: Kristin Stout
50 Goldenland Ct
Suite 100
Sacramento, CA 95834

Entire Report Reviewed By:



Jordan N Zito
Project Manager

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 Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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

SAMPLE SUMMARY

CPT1 L1353303-01 Solid

Collected by
Marshall Carter

Collected date/time
05/13/21 09:30

Received date/time
05/14/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1673412	1	05/20/21 09:40	05/20/21 09:49	KDW	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1672654	5	05/18/21 17:16	05/19/21 19:06	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1672353	28.5	05/13/21 09:30	05/18/21 04:15	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1674605	1.14	05/13/21 09:30	05/21/21 11:14	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1672098	1	05/18/21 16:10	05/19/21 21:53	CAG	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

CPT1-GW L1353303-02 GW

Collected by
Marshall Carter

Collected date/time
05/13/21 10:40

Received date/time
05/14/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015	WG1672516	5	05/19/21 00:58	05/19/21 00:58	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1675575	1	05/22/21 13:37	05/22/21 13:37	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1673604	1.05	05/19/21 15:18	05/20/21 06:48	DMG	Mt. Juliet, TN

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

CPT1 L1353303-03 GW

Collected by
Marshall Carter

Collected date/time
05/13/21 09:30

Received date/time
05/14/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 22CCRA2	WG1674013	1	05/21/21 16:50	05/21/21 16:50	TM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1680866	9	06/01/21 21:24	06/02/21 09:25	EL	Mt. Juliet, TN

⁹ Sc

CASE NARRATIVE

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



Jordan N Zito
Project Manager

Report Revision History

Level II Report - Version 1: 06/03/21 11:11



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	73.4		1	05/20/2021 09:49	WG1673412

Metals (ICPMS) by Method 6020

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chromium	76.0		6.81	5	05/19/2021 19:06	WG1672654
Lead	23.8		2.72	5	05/19/2021 19:06	WG1672654

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		4.79	28.5	05/18/2021 04:15	WG1672353
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		05/18/2021 04:15	WG1672353

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		0.0957	1.14	05/21/2021 11:14	WG1674605
Acrylonitrile	ND		0.0240	1.14	05/21/2021 11:14	WG1674605
Benzene	ND		0.00191	1.14	05/21/2021 11:14	WG1674605
Bromobenzene	ND		0.0240	1.14	05/21/2021 11:14	WG1674605
Bromochloromethane	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
Bromodichloromethane	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
Bromoform	ND		0.0479	1.14	05/21/2021 11:14	WG1674605
Bromomethane	ND		0.0240	1.14	05/21/2021 11:14	WG1674605
n-Butylbenzene	ND		0.0240	1.14	05/21/2021 11:14	WG1674605
sec-Butylbenzene	ND		0.0240	1.14	05/21/2021 11:14	WG1674605
tert-Butylbenzene	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
Carbon tetrachloride	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
Chlorobenzene	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
Chlorodibromomethane	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
Chloroethane	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
Chloroform	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
Chloromethane	ND		0.0240	1.14	05/21/2021 11:14	WG1674605
2-Chlorotoluene	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
4-Chlorotoluene	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
1,2-Dibromo-3-Chloropropane	ND		0.0479	1.14	05/21/2021 11:14	WG1674605
1,2-Dibromoethane	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
Dibromomethane	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
1,2-Dichlorobenzene	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
1,3-Dichlorobenzene	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
1,4-Dichlorobenzene	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
Dichlorodifluoromethane	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
1,1-Dichloroethane	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
1,2-Dichloroethane	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
1,1-Dichloroethene	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
cis-1,2-Dichloroethene	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
trans-1,2-Dichloroethene	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
1,2-Dichloropropane	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
1,1-Dichloropropene	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
1,3-Dichloropropane	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
cis-1,3-Dichloropropene	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
trans-1,3-Dichloropropene	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
2,2-Dichloropropane	ND		0.00479	1.14	05/21/2021 11:14	WG1674605

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Di-isopropyl ether	ND		0.00191	1.14	05/21/2021 11:14	WG1674605
Ethylbenzene	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
2-Hexanone	ND		0.0479	1.14	05/21/2021 11:14	WG1674605
Hexachloro-1,3-butadiene	ND		0.0479	1.14	05/21/2021 11:14	WG1674605
Isopropylbenzene	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
p-Isopropyltoluene	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
2-Butanone (MEK)	ND		0.191	1.14	05/21/2021 11:14	WG1674605
Methylene Chloride	ND		0.0479	1.14	05/21/2021 11:14	WG1674605
4-Methyl-2-pentanone (MIBK)	ND		0.0479	1.14	05/21/2021 11:14	WG1674605
Methyl tert-butyl ether	ND		0.00191	1.14	05/21/2021 11:14	WG1674605
Naphthalene	ND		0.0240	1.14	05/21/2021 11:14	WG1674605
n-Propylbenzene	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
Styrene	ND		0.0240	1.14	05/21/2021 11:14	WG1674605
1,1,1,2-Tetrachloroethane	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
1,1,2,2-Tetrachloroethane	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
1,1,2-Trichlorotrifluoroethane	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
Tetrachloroethene	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
Toluene	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
1,2,3-Trichlorobenzene	ND	J4	0.0240	1.14	05/21/2021 11:14	WG1674605
1,2,4-Trichlorobenzene	ND		0.0240	1.14	05/21/2021 11:14	WG1674605
1,1,1-Trichloroethane	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
1,1,2-Trichloroethane	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
Trichloroethene	ND		0.00191	1.14	05/21/2021 11:14	WG1674605
Tetrahydrofuran	ND		0.0240	1.14	05/21/2021 11:14	WG1674605
Trichlorofluoromethane	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
1,2,3-Trichloropropane	ND		0.0240	1.14	05/21/2021 11:14	WG1674605
1,2,4-Trimethylbenzene	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
1,3,5-Trimethylbenzene	ND		0.00957	1.14	05/21/2021 11:14	WG1674605
Vinyl chloride	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
o-Xylene	ND		0.00479	1.14	05/21/2021 11:14	WG1674605
m&p-Xylene	ND		0.00766	1.14	05/21/2021 11:14	WG1674605
Xylenes, Total	ND		0.0124	1.14	05/21/2021 11:14	WG1674605
(S) Toluene-d8	108		75.0-131		05/21/2021 11:14	WG1674605
(S) 4-Bromofluorobenzene	86.4		67.0-138		05/21/2021 11:14	WG1674605
(S) 1,2-Dichloroethane-d4	76.1		70.0-130		05/21/2021 11:14	WG1674605

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	7.58		5.45	1	05/19/2021 21:53	WG1672098
C22-C32 Hydrocarbons	7.83		5.45	1	05/19/2021 21:53	WG1672098
(S) o-Terphenyl	38.6		18.0-148		05/19/2021 21:53	WG1672098

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPHG C5 - C12	ND		500	5	05/19/2021 00:58	WG1672516
(S) a,a,a-Trifluorotoluene(FID)	105		78.0-120		05/19/2021 00:58	WG1672516

Sample Narrative:

L1353303-02 WG1672516: Dilution due to foam.

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		25.0	1	05/22/2021 13:37	WG1675575
Acrylonitrile	ND		5.00	1	05/22/2021 13:37	WG1675575
Benzene	ND		0.500	1	05/22/2021 13:37	WG1675575
Bromobenzene	ND		0.500	1	05/22/2021 13:37	WG1675575
Bromodichloromethane	ND		0.500	1	05/22/2021 13:37	WG1675575
Bromochloromethane	ND		0.500	1	05/22/2021 13:37	WG1675575
Bromoform	ND		0.500	1	05/22/2021 13:37	WG1675575
Bromomethane	ND		2.50	1	05/22/2021 13:37	WG1675575
n-Butylbenzene	ND		0.500	1	05/22/2021 13:37	WG1675575
sec-Butylbenzene	ND		0.500	1	05/22/2021 13:37	WG1675575
tert-Butylbenzene	ND		0.500	1	05/22/2021 13:37	WG1675575
Carbon disulfide	ND		0.500	1	05/22/2021 13:37	WG1675575
Carbon tetrachloride	ND		0.500	1	05/22/2021 13:37	WG1675575
Chlorobenzene	ND		0.500	1	05/22/2021 13:37	WG1675575
Chlorodibromomethane	ND		0.500	1	05/22/2021 13:37	WG1675575
Chloroethane	ND		2.50	1	05/22/2021 13:37	WG1675575
Chloroform	ND		0.500	1	05/22/2021 13:37	WG1675575
Chloromethane	ND		1.25	1	05/22/2021 13:37	WG1675575
2-Chlorotoluene	ND		0.500	1	05/22/2021 13:37	WG1675575
4-Chlorotoluene	ND		0.500	1	05/22/2021 13:37	WG1675575
1,2-Dibromo-3-Chloropropane	ND		2.50	1	05/22/2021 13:37	WG1675575
1,2-Dibromoethane	ND		0.500	1	05/22/2021 13:37	WG1675575
Dibromomethane	ND		0.500	1	05/22/2021 13:37	WG1675575
1,2-Dichlorobenzene	ND		0.500	1	05/22/2021 13:37	WG1675575
1,3-Dichlorobenzene	ND		0.500	1	05/22/2021 13:37	WG1675575
1,4-Dichlorobenzene	ND		0.500	1	05/22/2021 13:37	WG1675575
Dichlorodifluoromethane	ND		2.50	1	05/22/2021 13:37	WG1675575
1,1-Dichloroethane	ND		0.500	1	05/22/2021 13:37	WG1675575
1,2-Dichloroethane	ND		0.500	1	05/22/2021 13:37	WG1675575
1,1-Dichloroethene	ND		0.500	1	05/22/2021 13:37	WG1675575
cis-1,2-Dichloroethene	ND		0.500	1	05/22/2021 13:37	WG1675575
trans-1,2-Dichloroethene	ND		0.500	1	05/22/2021 13:37	WG1675575
1,2-Dichloropropane	ND		0.500	1	05/22/2021 13:37	WG1675575
1,1-Dichloropropene	ND		0.500	1	05/22/2021 13:37	WG1675575
1,3-Dichloropropane	ND		1.00	1	05/22/2021 13:37	WG1675575
cis-1,3-Dichloropropene	ND		0.500	1	05/22/2021 13:37	WG1675575
trans-1,3-Dichloropropene	ND		0.500	1	05/22/2021 13:37	WG1675575
trans-1,4-Dichloro-2-butene	ND		5.00	1	05/22/2021 13:37	WG1675575
2,2-Dichloropropane	ND		0.500	1	05/22/2021 13:37	WG1675575
Di-isopropyl ether	ND		0.500	1	05/22/2021 13:37	WG1675575
Ethylbenzene	ND		0.500	1	05/22/2021 13:37	WG1675575
Hexachloro-1,3-butadiene	ND		1.00	1	05/22/2021 13:37	WG1675575
2-Hexanone	ND		5.00	1	05/22/2021 13:37	WG1675575
Isopropylbenzene	ND		0.500	1	05/22/2021 13:37	WG1675575
p-Isopropyltoluene	ND		0.500	1	05/22/2021 13:37	WG1675575
2-Butanone (MEK)	ND		5.00	1	05/22/2021 13:37	WG1675575



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	ND		2.50	1	05/22/2021 13:37	WG1675575
4-Methyl-2-pentanone (MIBK)	ND		5.00	1	05/22/2021 13:37	WG1675575
Methyl tert-butyl ether	ND		0.500	1	05/22/2021 13:37	WG1675575
Naphthalene	ND		2.50	1	05/22/2021 13:37	WG1675575
n-Propylbenzene	ND		0.500	1	05/22/2021 13:37	WG1675575
Styrene	ND		0.500	1	05/22/2021 13:37	WG1675575
1,1,1,2-Tetrachloroethane	ND		0.500	1	05/22/2021 13:37	WG1675575
1,1,2,2-Tetrachloroethane	ND		0.500	1	05/22/2021 13:37	WG1675575
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	05/22/2021 13:37	WG1675575
Tetrachloroethene	ND	J4	0.500	1	05/22/2021 13:37	WG1675575
Tetrahydrofuran	ND		5.00	1	05/22/2021 13:37	WG1675575
Toluene	ND	J4	0.500	1	05/22/2021 13:37	WG1675575
1,2,3-Trichlorobenzene	ND		0.500	1	05/22/2021 13:37	WG1675575
1,2,4-Trichlorobenzene	ND		1.00	1	05/22/2021 13:37	WG1675575
1,1,1-Trichloroethane	ND		0.500	1	05/22/2021 13:37	WG1675575
1,1,2-Trichloroethane	ND		0.500	1	05/22/2021 13:37	WG1675575
Trichloroethene	ND		0.500	1	05/22/2021 13:37	WG1675575
Trichlorofluoromethane	ND		2.50	1	05/22/2021 13:37	WG1675575
1,2,3-Trichloropropane	ND		2.50	1	05/22/2021 13:37	WG1675575
1,2,4-Trimethylbenzene	ND		0.500	1	05/22/2021 13:37	WG1675575
1,3,5-Trimethylbenzene	ND		0.500	1	05/22/2021 13:37	WG1675575
Vinyl chloride	ND		0.500	1	05/22/2021 13:37	WG1675575
m&p-Xylenes	ND		1.00	1	05/22/2021 13:37	WG1675575
o-Xylene	ND		0.500	1	05/22/2021 13:37	WG1675575
Xylenes, Total	ND		1.50	1	05/22/2021 13:37	WG1675575
(S) Toluene-d8	105		80.0-120		05/22/2021 13:37	WG1675575
(S) 4-Bromofluorobenzene	98.1		77.0-126		05/22/2021 13:37	WG1675575
(S) 1,2-Dichloroethane-d4	113		70.0-130		05/22/2021 13:37	WG1675575

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	253		105	1.05	05/20/2021 06:48	WG1673604
C22-C32 Hydrocarbons	315		105	1.05	05/20/2021 06:48	WG1673604
(S) o-Terphenyl	48.6	J2	52.0-156		05/20/2021 06:48	WG1673604

Sample Narrative:

L1353303-02 WG1673604: Sample produced medium emulsion during Extraction process, low surr/spike recoveries due to matrix

Preparation by Method 22CCRA2

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
STLC Extraction	-			1	05/21/2021 16:50	WG1674013
Final pH	5.22			1	05/21/2021 16:50	WG1674013

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Chromium	0.495		0.0900	9	06/02/2021 09:25	WG1680866

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3657337-1 05/20/21 09:49

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00200			

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

L1353302-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1353302-03 05/20/21 09:49 • (DUP) R3657337-3 05/20/21 09:49

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	83.0	83.0	1	0.00591		10

Laboratory Control Sample (LCS)

(LCS) R3657337-2 05/20/21 09:49

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

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3662238-1 06/02/21 09:08

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Chromium	U		0.0126	0.0900

Laboratory Control Sample (LCS)

(LCS) R3662238-2 06/02/21 09:11

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Chromium	1.00	1.02	102	80.0-120	

L1357165-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1357165-02 06/02/21 09:14 • (MS) R3662238-4 06/02/21 09:19 • (MSD) R3662238-5 06/02/21 09:22

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Chromium	9.00	0.0979	9.33	9.25	103	102	9	75.0-125			0.912	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3656692-7 05/19/21 20:32

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Chromium	U		0.297	5.00
Lead	U		0.0990	2.00

Laboratory Control Sample (LCS)

(LCS) R3656692-8 05/19/21 20:36

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chromium	100	93.2	93.2	80.0-120	
Lead	100	96.6	96.6	80.0-120	

L1353017-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1353017-01 05/19/21 20:39 • (MS) R3656692-11 05/19/21 20:49 • (MSD) R3656692-12 05/19/21 20:52

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chromium	115	6.98	103	110	83.5	89.3	5	75.0-125			6.26	20
Lead	115	2.94	102	105	85.7	88.3	5	75.0-125			2.82	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3659017-2 05/17/21 22:49

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C5 - C12	U		0.0332	0.100
(S) a,a,a-Trifluorotoluene(FID)	98.4			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3659017-1 05/17/21 22:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C5 - C12	5.50	5.74	104	72.0-125	
(S) a,a,a-Trifluorotoluene(FID)			113	77.0-120	

L1352770-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1352770-02 05/18/21 03:51 • (MS) R3659017-3 05/18/21 09:02 • (MSD) R3659017-4 05/18/21 09:25

Analyte	Spike Amount (dry) mg/kg	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPHG C5 - C12	103	193	349	363	80.6	87.4	25	10.0-141			3.69	29
(S) a,a,a-Trifluorotoluene(FID)					95.8	95.8		77.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3657440-2 05/18/21 22:56

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TPHG C5 - C12	U		30.4	100
(S) a,a,a-Trifluorotoluene(FID)	103			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3657440-1 05/18/21 22:12

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C5 - C12	5500	5590	102	71.0-127	
(S) a,a,a-Trifluorotoluene(FID)			114	78.0-120	

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3659387-2 05/21/21 07:44

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromochloromethane	U		0.000564	0.00500
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	0.00125	U	0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Di-isopropyl ether	U		0.000410	0.00100
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3659387-2 05/21/21 07:44

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
2-Hexanone	U		0.00336	0.0250
Isopropylbenzene	U		0.000425	0.00250
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	0.000250	U	0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Tetrahydrofuran	U		0.00352	0.0125
Toluene	U		0.00130	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
o-Xylene	U		0.000880	0.00250
m&p-Xylenes	U		0.00190	0.00400
(S) Toluene-d8	106			75.0-131
(S) 4-Bromofluorobenzene	86.1			67.0-138
(S) 1,2-Dichloroethane-d4	71.6			70.0-130

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3659387-1 05/21/21 06:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Acetone	0.625	0.762	122	10.0-160	
Acrylonitrile	0.625	0.633	101	45.0-153	
Benzene	0.125	0.110	88.0	70.0-123	
Bromobenzene	0.125	0.114	91.2	73.0-121	
Bromodichloromethane	0.125	0.107	85.6	73.0-121	
Bromochloromethane	0.125	0.102	81.6	77.0-128	
Bromoform	0.125	0.102	81.6	64.0-132	
Bromomethane	0.125	0.128	102	56.0-147	
n-Butylbenzene	0.125	0.117	93.6	68.0-135	
sec-Butylbenzene	0.125	0.119	95.2	74.0-130	
tert-Butylbenzene	0.125	0.111	88.8	75.0-127	
Carbon tetrachloride	0.125	0.0974	77.9	66.0-128	
Chlorobenzene	0.125	0.113	90.4	76.0-128	
Chlorodibromomethane	0.125	0.110	88.0	74.0-127	
Chloroethane	0.125	0.112	89.6	61.0-134	
Chloroform	0.125	0.0959	76.7	72.0-123	
Chloromethane	0.125	0.121	96.8	51.0-138	
2-Chlorotoluene	0.125	0.117	93.6	75.0-124	
4-Chlorotoluene	0.125	0.123	98.4	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.106	84.8	59.0-130	
1,2-Dibromoethane	0.125	0.115	92.0	74.0-128	
Dibromomethane	0.125	0.108	86.4	75.0-122	
1,2-Dichlorobenzene	0.125	0.113	90.4	76.0-124	
1,3-Dichlorobenzene	0.125	0.115	92.0	76.0-125	
1,4-Dichlorobenzene	0.125	0.115	92.0	77.0-121	
Dichlorodifluoromethane	0.125	0.132	106	43.0-156	
1,1-Dichloroethane	0.125	0.108	86.4	70.0-127	
1,2-Dichloroethane	0.125	0.0966	77.3	65.0-131	
1,1-Dichloroethene	0.125	0.0986	78.9	65.0-131	
cis-1,2-Dichloroethene	0.125	0.0979	78.3	73.0-125	
trans-1,2-Dichloroethene	0.125	0.0943	75.4	71.0-125	
1,2-Dichloropropane	0.125	0.125	100	74.0-125	
1,1-Dichloropropene	0.125	0.102	81.6	73.0-125	
1,3-Dichloropropane	0.125	0.121	96.8	80.0-125	
cis-1,3-Dichloropropene	0.125	0.103	82.4	76.0-127	
trans-1,3-Dichloropropene	0.125	0.110	88.0	73.0-127	
2,2-Dichloropropane	0.125	0.107	85.6	59.0-135	
Di-isopropyl ether	0.125	0.114	91.2	60.0-136	
Ethylbenzene	0.125	0.113	90.4	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.0858	68.6	57.0-150	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3659387-1 05/21/21 06:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Hexanone	0.625	0.641	103	54.0-147	
Isopropylbenzene	0.125	0.107	85.6	72.0-127	
p-Isopropyltoluene	0.125	0.109	87.2	72.0-133	
2-Butanone (MEK)	0.625	0.711	114	30.0-160	
Methylene Chloride	0.125	0.102	81.6	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.672	108	56.0-143	
Methyl tert-butyl ether	0.125	0.112	89.6	66.0-132	
Naphthalene	0.125	0.0867	69.4	59.0-130	
n-Propylbenzene	0.125	0.129	103	74.0-126	
Styrene	0.125	0.107	85.6	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.100	80.0	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.123	98.4	68.0-128	
Tetrachloroethene	0.125	0.118	94.4	70.0-136	
Tetrahydrofuran	0.125	0.135	108	37.0-146	
Toluene	0.125	0.115	92.0	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.106	84.8	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.0651	52.1	59.0-139	J4
1,2,4-Trichlorobenzene	0.125	0.0843	67.4	62.0-137	
1,1,1-Trichloroethane	0.125	0.0960	76.8	69.0-126	
1,1,2-Trichloroethane	0.125	0.106	84.8	78.0-123	
Trichloroethene	0.125	0.110	88.0	76.0-126	
Trichlorofluoromethane	0.125	0.100	80.0	61.0-142	
1,2,3-Trichloropropane	0.125	0.117	93.6	67.0-129	
1,2,4-Trimethylbenzene	0.125	0.113	90.4	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.108	86.4	73.0-127	
Vinyl chloride	0.125	0.114	91.2	63.0-134	
Xylenes, Total	0.375	0.334	89.1	72.0-127	
o-Xylene	0.125	0.111	88.8	79.0-124	
m&p-Xylenes	0.250	0.223	89.2	76.0-126	
(S) Toluene-d8			103	75.0-131	
(S) 4-Bromofluorobenzene			93.6	67.0-138	
(S) 1,2-Dichloroethane-d4			86.5	70.0-130	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1353207-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1353207-01 05/21/21 14:06 • (MS) R3659387-3 05/21/21 14:25 • (MSD) R3659387-4 05/21/21 14:44

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 %
Acetone	50.0	27.4	66.7	59.4	78.6	64.0	80	10.0-160			11.6	40
Acrylonitrile	50.0	ND	44.9	35.8	89.8	71.6	80	10.0-160			22.6	40
Benzene	10.0	ND	8.74	5.38	87.4	53.8	80	10.0-149		J3	47.6	37
Bromobenzene	10.0	ND	9.22	8.27	92.2	82.7	80	10.0-156			10.9	38
Bromodichloromethane	10.0	ND	8.78	6.29	87.8	62.9	80	10.0-143			33.0	37
Bromochloromethane	10.0	ND	7.65	5.35	76.5	53.5	80	10.0-155		J3	35.4	33
Bromoform	10.0	ND	7.88	7.17	78.8	71.7	80	10.0-146			9.44	36
Bromomethane	10.0	ND	7.96	4.93	79.6	49.3	80	10.0-149		J3	47.0	38
n-Butylbenzene	10.0	ND	10.1	8.32	101	83.2	80	10.0-160			19.3	40
sec-Butylbenzene	10.0	ND	9.79	7.33	97.9	73.3	80	10.0-159			28.7	39
tert-Butylbenzene	10.0	ND	9.15	6.71	91.5	67.1	80	10.0-156			30.8	39
Carbon tetrachloride	10.0	ND	7.82	5.04	78.2	50.4	80	10.0-145		J3	43.2	37
Chlorobenzene	10.0	ND	9.09	7.45	90.9	74.5	80	10.0-152			19.8	39
Chlorodibromomethane	10.0	ND	9.50	7.13	95.0	71.3	80	10.0-146			28.5	37
Chloroethane	10.0	ND	8.01	4.73	80.1	47.3	80	10.0-146		J3	51.5	40
Chloroform	10.0	ND	7.70	4.91	77.0	49.1	80	10.0-146		J3	44.3	37
Chloromethane	10.0	ND	7.92	4.78	79.2	47.8	80	10.0-159		J3	49.4	37
2-Chlorotoluene	10.0	ND	9.53	7.21	95.3	72.1	80	10.0-159			27.7	38
4-Chlorotoluene	10.0	ND	9.78	7.72	97.8	77.2	80	10.0-155			23.5	39
1,2-Dibromo-3-Chloropropane	10.0	ND	9.15	9.89	91.5	98.9	80	10.0-151			7.77	39
1,2-Dibromoethane	10.0	ND	9.04	7.41	90.4	74.1	80	10.0-148			19.8	34
Dibromomethane	10.0	ND	8.85	6.79	88.5	67.9	80	10.0-147			26.3	35
1,2-Dichlorobenzene	10.0	ND	9.05	8.07	90.5	80.7	80	10.0-155			11.4	37
1,3-Dichlorobenzene	10.0	ND	8.81	7.37	88.1	73.7	80	10.0-153			17.8	38
1,4-Dichlorobenzene	10.0	ND	9.10	7.71	91.0	77.1	80	10.0-151			16.5	38
Dichlorodifluoromethane	10.0	ND	10.7	5.74	107	57.4	80	10.0-160		J3	60.3	35
1,1-Dichloroethane	10.0	ND	8.85	5.24	88.5	52.4	80	10.0-147		J3	51.2	37
1,2-Dichloroethane	10.0	ND	7.45	5.24	74.5	52.4	80	10.0-148			34.8	35
1,1-Dichloroethene	10.0	ND	6.89	3.85	68.9	38.5	80	10.0-155		J3	56.6	37
cis-1,2-Dichloroethene	10.0	ND	8.08	5.00	80.8	50.0	80	10.0-149		J3	47.1	37
trans-1,2-Dichloroethene	10.0	ND	6.31	3.64	63.1	36.4	80	10.0-150		J3	53.7	37
1,2-Dichloropropane	10.0	ND	9.45	6.57	94.5	65.7	80	10.0-148			36.0	37
1,1-Dichloropropene	10.0	ND	7.41	4.79	74.1	47.9	80	10.0-153		J3	43.0	35
1,3-Dichloropropane	10.0	ND	10.3	8.07	103	80.7	80	10.0-154			24.3	35
cis-1,3-Dichloropropene	10.0	ND	8.39	6.26	83.9	62.6	80	10.0-151			29.1	37
trans-1,3-Dichloropropene	10.0	ND	9.40	7.21	94.0	72.1	80	10.0-148			26.4	37
2,2-Dichloropropane	10.0	ND	8.22	5.06	82.2	50.6	80	10.0-138		J3	47.6	36
Di-isopropyl ether	10.0	ND	9.79	6.79	97.9	67.9	80	10.0-147		J3	36.2	36
Ethylbenzene	10.0	ND	8.83	6.94	88.3	69.4	80	10.0-160			24.0	38
Hexachloro-1,3-butadiene	10.0	ND	11.2	2.16	112	21.6	80	10.0-160		J3	135	40

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

L1353207-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1353207-01 05/21/21 14:06 • (MS) R3659387-3 05/21/21 14:25 • (MSD) R3659387-4 05/21/21 14:44

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 %
2-Hexanone	50.0	2.28	56.4	50.6	108	96.6	80	10.0-160			10.8	36
Isopropylbenzene	10.0	ND	8.18	6.32	81.8	63.2	80	10.0-155			25.7	38
p-Isopropyltoluene	10.0	ND	8.91	6.68	89.1	66.8	80	10.0-160			28.6	40
2-Butanone (MEK)	50.0	ND	53.4	55.1	107	110	80	10.0-160			3.13	40
Methylene Chloride	10.0	ND	7.45	4.98	74.5	49.8	80	10.0-141		J3	39.7	37
4-Methyl-2-pentanone (MIBK)	50.0	ND	56.6	46.3	113	92.6	80	10.0-160			20.0	35
Methyl tert-butyl ether	10.0	ND	9.36	7.32	93.6	73.2	80	11.0-147			24.5	35
Naphthalene	10.0	ND	10.7	3.17	107	31.7	80	10.0-160		J3	109	36
n-Propylbenzene	10.0	ND	10.4	7.63	104	76.3	80	10.0-158			30.7	38
Styrene	10.0	ND	8.62	7.35	86.2	73.5	80	10.0-160			15.9	40
1,1,1,2-Tetrachloroethane	10.0	ND	8.48	7.08	84.8	70.8	80	10.0-149			18.0	39
1,1,2,2-Tetrachloroethane	10.0	ND	13.5	24.2	135	242	80	10.0-160		J3 J5	56.8	35
Tetrachloroethene	10.0	ND	8.78	6.35	87.8	63.5	80	10.0-156			32.1	39
Tetrahydrofuran	10.0	ND	9.56	8.29	95.6	82.9	80	10.0-158			14.2	33
Toluene	10.0	ND	10.9	7.94	109	79.4	80	10.0-156			31.4	38
1,1,2-Trichlorotrifluoroethane	10.0	ND	9.26	6.06	92.6	60.6	80	10.0-160		J3	41.8	36
1,2,3-Trichlorobenzene	10.0	ND	7.76	ND	77.6	9.26	80	10.0-160		J3 J6	157	40
1,2,4-Trichlorobenzene	10.0	ND	8.72	2.44	87.2	24.4	80	10.0-160		J3	113	40
1,1,1-Trichloroethane	10.0	ND	7.78	4.89	77.8	48.9	80	10.0-144		J3	45.6	35
1,1,2-Trichloroethane	10.0	ND	10.3	7.50	103	75.0	80	10.0-160			31.5	35
Trichloroethene	10.0	ND	7.96	5.25	79.6	52.5	80	10.0-156		J3	41.0	38
Trichlorofluoromethane	10.0	ND	8.77	4.69	87.7	46.9	80	10.0-160		J3	60.6	40
1,2,3-Trichloropropane	10.0	ND	8.81	9.59	88.1	95.9	80	10.0-156			8.48	35
1,2,4-Trimethylbenzene	10.0	ND	9.16	6.99	91.6	69.9	80	10.0-160			26.9	36
1,3,5-Trimethylbenzene	10.0	ND	8.47	6.43	84.7	64.3	80	10.0-160			27.4	38
Vinyl chloride	10.0	ND	8.01	4.61	80.1	46.1	80	10.0-160		J3	53.9	37
Xylenes, Total	30.0	ND	26.6	21.2	88.7	70.7	80	10.0-160			22.6	38
o-Xylene	10.0	ND	8.67	7.11	86.7	71.1	80	10.0-156			19.8	40
m&p-Xylenes	20.0	ND	17.9	14.1	89.5	70.5	80	10.0-156			23.7	40
(S) Toluene-d8					108	104	75.0-131					
(S) 4-Bromofluorobenzene					90.8	95.5	67.0-138					
(S) 1,2-Dichloroethane-d4					85.4	83.2	70.0-130					

Sample Narrative:

OS: Non-target compounds too high to run at a lower dilution.

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3658516-3 05/22/21 10:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	25.0
Acrylonitrile	U		0.671	5.00
Benzene	U		0.0941	0.500
Bromobenzene	U		0.118	0.500
Bromodichloromethane	U		0.136	0.500
Bromochloromethane	U		0.128	0.500
Bromoform	U		0.129	0.500
Bromomethane	U		0.605	2.50
n-Butylbenzene	U		0.157	0.500
sec-Butylbenzene	U		0.125	0.500
tert-Butylbenzene	U		0.127	0.500
Carbon disulfide	U		0.0962	0.500
Carbon tetrachloride	U		0.128	0.500
Chlorobenzene	U		0.117	0.500
Chlorodibromomethane	U		0.140	0.500
Chloroethane	U		0.192	2.50
Chloroform	U		0.111	0.500
Chloromethane	U		0.960	1.25
2-Chlorotoluene	U		0.106	0.500
4-Chlorotoluene	U		0.114	0.500
1,2-Dibromo-3-Chloropropane	U		0.276	2.50
1,2-Dibromoethane	U		0.126	0.500
Dibromomethane	U		0.122	0.500
1,2-Dichlorobenzene	U		0.107	0.500
1,3-Dichlorobenzene	U		0.299	0.500
1,4-Dichlorobenzene	U		0.120	0.500
trans-1,4-Dichloro-2-butene	U		0.467	5.00
Dichlorodifluoromethane	U		0.374	2.50
1,1-Dichloroethane	U		0.100	0.500
1,2-Dichloroethane	U		0.0819	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.126	0.500
trans-1,2-Dichloroethene	U		0.149	0.500
1,2-Dichloropropane	U		0.149	0.500
1,1-Dichloropropene	U		0.142	0.500
1,3-Dichloropropane	U		0.109	1.00
cis-1,3-Dichloropropene	U		0.111	0.500
trans-1,3-Dichloropropene	U		0.118	0.500
2,2-Dichloropropane	U		0.161	0.500
Di-isopropyl ether	U		0.105	0.500

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3658516-3 05/22/21 10:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.137	0.500
Hexachloro-1,3-butadiene	U		0.337	1.00
2-Hexanone	U		0.787	5.00
Isopropylbenzene	U		0.105	0.500
p-Isopropyltoluene	U		0.120	0.500
2-Butanone (MEK)	U		1.19	5.00
Methylene Chloride	U		0.430	2.50
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00
Methyl tert-butyl ether	U		0.101	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.0993	0.500
Styrene	U		0.118	0.500
1,1,1,2-Tetrachloroethane	U		0.147	0.500
1,1,2,2-Tetrachloroethane	U		0.133	0.500
Tetrachloroethene	U		0.300	0.500
Tetrahydrofuran	U		0.929	5.00
Toluene	U		0.278	0.500
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	0.500
1,1,2-Trichloroethane	U		0.158	0.500
Trichloroethene	U		0.190	0.500
Trichlorofluoromethane	U		0.160	2.50
1,2,3-Trichloropropane	U		0.237	2.50
1,2,4-Trimethylbenzene	U		0.322	0.500
1,3,5-Trimethylbenzene	U		0.104	0.500
Vinyl chloride	U		0.234	0.500
Xylenes, Total	U		0.174	1.50
o-Xylene	U		0.174	0.500
m&p-Xylenes	U		0.430	1.00
(S) Toluene-d8	103			80.0-120
(S) 4-Bromofluorobenzene	98.3			77.0-126
(S) 1,2-Dichloroethane-d4	115			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3658516-1 05/22/21 08:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Acetone	25.0	37.8	151	19.0-160	
Acrylonitrile	25.0	27.9	112	55.0-149	
Benzene	5.00	4.69	93.8	70.0-123	
Bromobenzene	5.00	4.77	95.4	73.0-121	
Bromodichloromethane	5.00	4.52	90.4	75.0-120	
Bromochloromethane	5.00	4.10	82.0	76.0-122	
Bromoform	5.00	4.10	82.0	68.0-132	
Bromomethane	5.00	4.23	84.6	10.0-160	
n-Butylbenzene	5.00	4.78	95.6	73.0-125	
sec-Butylbenzene	5.00	4.87	97.4	75.0-125	
tert-Butylbenzene	5.00	4.63	92.6	76.0-124	
Carbon disulfide	5.00	3.98	79.6	61.0-128	
Carbon tetrachloride	5.00	4.22	84.4	68.0-126	
Chlorobenzene	5.00	4.16	83.2	80.0-121	
Chlorodibromomethane	5.00	4.04	80.8	77.0-125	
Chloroethane	5.00	4.47	89.4	47.0-150	
Chloroform	5.00	4.38	87.6	73.0-120	
Chloromethane	5.00	4.91	98.2	41.0-142	
2-Chlorotoluene	5.00	4.86	97.2	76.0-123	
4-Chlorotoluene	5.00	4.88	97.6	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	4.28	85.6	58.0-134	
1,2-Dibromoethane	5.00	4.23	84.6	80.0-122	
Dibromomethane	5.00	4.49	89.8	80.0-120	
1,2-Dichlorobenzene	5.00	4.38	87.6	79.0-121	
1,3-Dichlorobenzene	5.00	4.40	88.0	79.0-120	
1,4-Dichlorobenzene	5.00	4.16	83.2	79.0-120	
trans-1,4-Dichloro-2-butene	5.00	4.10	82.0	33.0-144	
Dichlorodifluoromethane	5.00	5.01	100	51.0-149	
1,1-Dichloroethane	5.00	4.77	95.4	70.0-126	
1,2-Dichloroethane	5.00	4.58	91.6	70.0-128	
1,1-Dichloroethene	5.00	3.93	78.6	71.0-124	
cis-1,2-Dichloroethene	5.00	4.32	86.4	73.0-120	
trans-1,2-Dichloroethene	5.00	4.08	81.6	73.0-120	
1,2-Dichloropropane	5.00	4.72	94.4	77.0-125	
1,1-Dichloropropene	5.00	4.48	89.6	74.0-126	
1,3-Dichloropropane	5.00	4.52	90.4	80.0-120	
cis-1,3-Dichloropropene	5.00	4.69	93.8	80.0-123	
trans-1,3-Dichloropropene	5.00	4.59	91.8	78.0-124	
2,2-Dichloropropane	5.00	4.37	87.4	58.0-130	
Di-isopropyl ether	5.00	5.24	105	58.0-138	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3658516-1 05/22/21 08:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Ethylbenzene	5.00	4.24	84.8	79.0-123	
Hexachloro-1,3-butadiene	5.00	3.57	71.4	54.0-138	
2-Hexanone	25.0	26.1	104	67.0-149	
Isopropylbenzene	5.00	4.40	88.0	76.0-127	
p-Isopropyltoluene	5.00	4.87	97.4	76.0-125	
2-Butanone (MEK)	25.0	31.5	126	44.0-160	
Methylene Chloride	5.00	4.00	80.0	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	27.0	108	68.0-142	
Methyl tert-butyl ether	5.00	5.34	107	68.0-125	
Naphthalene	5.00	4.28	85.6	54.0-135	
n-Propylbenzene	5.00	5.16	103	77.0-124	
Styrene	5.00	4.43	88.6	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	4.19	83.8	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	5.07	101	65.0-130	
Tetrachloroethene	5.00	3.59	71.8	72.0-132	J4
Tetrahydrofuran	5.00	5.19	104	41.0-146	
Toluene	5.00	3.84	76.8	79.0-120	J4
1,1,2-Trichlorotrifluoroethane	5.00	4.07	81.4	69.0-132	
1,2,3-Trichlorobenzene	5.00	3.17	63.4	50.0-138	
1,2,4-Trichlorobenzene	5.00	3.59	71.8	57.0-137	
1,1,1-Trichloroethane	5.00	4.34	86.8	73.0-124	
1,1,2-Trichloroethane	5.00	4.13	82.6	80.0-120	
Trichloroethene	5.00	3.95	79.0	78.0-124	
Trichlorofluoromethane	5.00	4.39	87.8	59.0-147	
1,2,3-Trichloropropane	5.00	4.26	85.2	73.0-130	
1,2,4-Trimethylbenzene	5.00	4.83	96.6	76.0-121	
1,3,5-Trimethylbenzene	5.00	4.73	94.6	76.0-122	
Vinyl chloride	5.00	4.51	90.2	67.0-131	
Xylenes, Total	15.0	12.8	85.3	79.0-123	
o-Xylene	5.00	4.33	86.6	80.0-122	
m&p-Xylenes	10.0	8.46	84.6	80.0-122	
(S) Toluene-d8			100	80.0-120	
(S) 4-Bromofluorobenzene			101	77.0-126	
(S) 1,2-Dichloroethane-d4			113	70.0-130	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3656817-1 05/20/21 00:19

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
(S) o-Terphenyl	101			52.0-156

Laboratory Control Sample (LCS)

(LCS) R3656817-2 05/20/21 00:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
C22-C32 Hydrocarbons	750	772	103	50.0-150	
C12-C22 Hydrocarbons	750	870	116	50.0-150	
(S) o-Terphenyl			100	52.0-156	

L1352832-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1352832-02 05/20/21 03:46 • (MS) R3656817-3 05/20/21 04:12 • (MSD) R3656817-4 05/20/21 04:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C22-C32 Hydrocarbons	714	108	760	890	91.3	110	1	50.0-150			15.8	20
C12-C22 Hydrocarbons	714	705	1360	1560	91.7	120	1	50.0-150			13.7	20
(S) o-Terphenyl					85.8	99.5		52.0-156				

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3656222-1 05/18/21 22:03

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
(S) o-Terphenyl	77.0			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3656222-2 05/18/21 22:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C22-C32 Hydrocarbons	25.0	17.3	69.2	50.0-150	
C12-C22 Hydrocarbons	25.0	18.4	73.6	50.0-150	
(S) o-Terphenyl			70.1	18.0-148	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

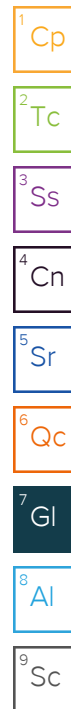
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

Abbreviations and Definitions

(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.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.



ACCREDITATIONS & LOCATIONS

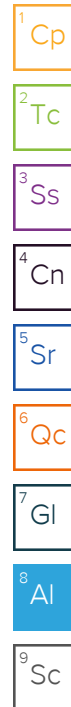
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

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

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

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



B013

CHAIN OF CUSTODY RECORD

[illegible]

Matrix	WW-Wastewater	W - Water	S - Soil	L - Liquid	A - Air Bag	C - Charcoal tube	SL - Sludge
Container	VOA - 40 ml vial	A/G - Amber Glass 1L	250 ml = Glass wide mouth		P/O - Plastic or other _____		

Sacramento Office ■ 50 Goldenland Ct. ■ Sacramento, CA 95834 ■ Office: 916-928-4690 ■ Fax: 916-928-4697

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Pace Analytical National Center for Testing & Innovation

Cooler Receipt Form

Client: <i>TERPSA</i>		11353303	
Cooler Received/Opened On: 5 / 14 / 21		Temperature:	0.5
Received By: Gisely Quiles			
Signature: <i>Gisely Quiles</i>			
Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	/		
COC Signed / Accurate?		/	
Bottles arrive intact?		/	
Correct bottles used?		/	
Sufficient volume sent?		/	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			

Brian Ford

From: Stout, Kristin A <Kristin.Stout@terracon.com>
Sent: Wednesday, May 26, 2021 2:00 PM
To: Brian Ford; Carey, Brian P; Claar, Steven N
Subject: RE: Proj NB215024 Prelim Report L1353303

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Yes, please analyze the Cr – thank you.

Kristin Stout
Department Manager | Environmental

Terracon

50 Goldenland Court, Suite 100 | Sacramento, California 95834
D (916) 246 5098 | F (916) 928 4697 | M (949) 280 3301
kristin.stout@terracon.com | terracon.com

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From: Brian Ford <Brian.Ford@pacelabs.com>
Sent: Wednesday, May 26, 2021 11:51 AM
To: Stout, Kristin A <Kristin.Stout@terracon.com>; Carey, Brian P <Brian.Carey@terracon.com>; Claar, Steven N <Steven.Claar@terracon.com>
Subject: Proj NB215024 Prelim Report L1353303

All initial analyses are now complete and included in the attached prelim report. Would you like Cr analyzed on the STLC extract, or would you like the report finalized as is?

Thanks,



Brian Ford

Project Manager 2 / Pace National
12065 Lebanon Road | Mt. Juliet, TN 37122
Office: 615.773.9772
brian.ford@pacelabs.com

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Summary of Soil and Groundwater Sampling Activities

Millbrae Avenue Billboard ■ Millbrae, California

September 9, 2021 ■ Terracon Project No. ND215024



Terracon appreciates this opportunity to provide you with our environmental services. Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,

Terracon Consultants, Inc.

DRAFT

Kristin Stout
Department Manager

DRAFT

Scott Gable, P.G. 6366
Regional Services Specialist

Attachments: Exhibit 1 – Site Diagram
Laboratory Analytical Report, dated June 4, 2021

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