

September 18, 2023

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Kinder Morgan - Lakewood, CO

Sample Delivery Group: L1654165
Samples Received: 09/08/2023
Project Number:
Description: Latigo Well 38 PW Spill

Report To: Katharine Howe
1667 Cole Boulevard
Ste 300
Lakewood, CO 80401

Entire Report Reviewed By:



Kelly Mercer
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 National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	6
Sr: Sample Results	7
CIG-LAT-PW SPILL-2023-1 L1654165-01	7
CIG-LAT-PW SPILL-2023-2 L1654165-02	10
CIG-LAT-PW SPILL-2023-3 L1654165-03	13
CIG-LAT-PW SPILL-2023-4 L1654165-04	16
CIG-LAT-PW SPILL-2023-5 L1654165-05	19
CIG-LAT-PW SPILL-2023-6 L1654165-06	22
CIG-LAT-PW SPILL-2023-BACKGROUND-1 L1654165-07	25
CIG-LAT-PW SPILL-2023-BACKGROUND-2 L1654165-08	28
CIG-LAT-PW SPILL-2023-BACKGROUND-3 L1654165-09	31
Qc: Quality Control Summary	34
Wet Chemistry by Method 7199	34
Wet Chemistry by Method 9045D	36
Wet Chemistry by Method 9050AMod	38
Metals (ICP) by Method 6010B-NE493 Ch 2	39
Metals (ICPMS) by Method 6020	40
Volatile Organic Compounds (GC) by Method 8015D/GRO	42
Volatile Organic Compounds (GC/MS) by Method 8260B	44
Semi-Volatile Organic Compounds (GC) by Method 8015M	48
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	50
Gl: Glossary of Terms	54
Al: Accreditations & Locations	55
Sc: Sample Chain of Custody	56

¹ Cp
² Tc
³ Ss
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⁸ Al
⁹ Sc

SAMPLE SUMMARY

CIG-LAT-PW SPILL-2023-1 L1654165-01 Solid

Collected by
Collected date/time
Received date/time

09/06/23 11:45
09/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2130085	1	09/12/23 14:29	09/12/23 14:29	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2130680	1	09/13/23 03:12	09/13/23 11:16	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2131511	1	09/13/23 11:58	09/14/23 08:04	JGM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2131656	1	09/14/23 09:00	09/14/23 12:06	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2130158	1	09/11/23 13:23	09/12/23 11:49	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2131329	5	09/13/23 09:46	09/15/23 15:45	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2132618	1	09/13/23 20:57	09/15/23 04:42	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2131988	1	09/13/23 20:57	09/14/23 06:43	BAM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2132047	1	09/16/23 09:57	09/16/23 21:36	KAP	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2132065	1	09/15/23 06:17	09/16/23 05:51	MBE	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

CIG-LAT-PW SPILL-2023-2 L1654165-02 Solid

Collected by
Collected date/time
Received date/time

09/06/23 12:00
09/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2130085	1	09/12/23 14:38	09/12/23 14:38	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2130680	1	09/13/23 03:12	09/13/23 11:26	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2131713	1	09/14/23 08:59	09/14/23 12:30	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2131656	1	09/14/23 09:00	09/14/23 12:06	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2130158	1	09/11/23 13:23	09/12/23 11:52	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2131329	5	09/13/23 09:46	09/15/23 15:48	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2132618	1	09/13/23 20:57	09/15/23 05:05	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2131988	1	09/13/23 20:57	09/14/23 08:03	BAM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2132047	1	09/16/23 09:57	09/16/23 23:35	KAP	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2132065	1	09/15/23 06:17	09/16/23 07:19	MBE	Mt. Juliet, TN

⁷Gl

⁸Al

⁹Sc

CIG-LAT-PW SPILL-2023-3 L1654165-03 Solid

Collected by
Collected date/time
Received date/time

09/06/23 12:15
09/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2130085	1	09/12/23 14:41	09/12/23 14:41	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2131982	1	09/14/23 15:15	09/15/23 10:01	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2131713	1	09/14/23 08:59	09/14/23 12:30	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2131656	1	09/14/23 09:00	09/14/23 12:06	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2130158	1	09/11/23 13:23	09/12/23 11:55	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2131329	5	09/13/23 09:46	09/15/23 15:52	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2132618	1	09/13/23 20:57	09/15/23 05:28	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2131988	1	09/13/23 20:57	09/14/23 08:22	BAM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2132047	1	09/16/23 09:57	09/16/23 22:16	KAP	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2132065	1	09/15/23 06:17	09/16/23 06:09	MBE	Mt. Juliet, TN

CIG-LAT-PW SPILL-2023-4 L1654165-04 Solid

Collected by
Collected date/time
Received date/time

09/06/23 12:30
09/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2130085	1	09/12/23 14:44	09/12/23 14:44	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2130680	1	09/13/23 03:12	09/13/23 11:31	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2131713	1	09/14/23 08:59	09/14/23 12:30	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2131656	1	09/14/23 09:00	09/14/23 12:06	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2130158	1	09/11/23 13:23	09/12/23 11:58	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2131329	5	09/13/23 09:46	09/15/23 15:55	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2132618	1	09/13/23 20:57	09/15/23 05:51	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2131988	1	09/13/23 20:57	09/14/23 08:41	BAM	Mt. Juliet, TN

ACCOUNT:

Kinder Morgan - Lakewood, CO

PROJECT:

SDG:

L1654165

DATE/TIME:

09/18/23 14:01

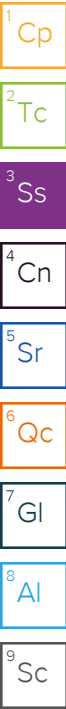
PAGE:

3 of 56

SAMPLE SUMMARY

CIG-LAT-PW SPILL-2023-4 L1654165-04 Solid

				Collected by	Collected date/time	Received date/time
					09/06/23 12:30	09/08/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2132048	1	09/16/23 07:26	09/16/23 13:32	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2132065	1	09/15/23 06:17	09/16/23 06:26	MBE	Mt. Juliet, TN



CIG-LAT-PW SPILL-2023-5 L1654165-05 Solid

				Collected by	Collected date/time	Received date/time
					09/06/23 12:45	09/08/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2130085	1	09/12/23 14:47	09/12/23 14:47	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2130680	1	09/13/23 03:12	09/13/23 11:36	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2131713	1	09/14/23 08:59	09/14/23 12:30	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2131656	1	09/14/23 09:00	09/14/23 12:06	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2130158	1	09/11/23 13:23	09/12/23 12:00	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2131331	5	09/13/23 09:46	09/16/23 14:21	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2132618	1	09/13/23 20:57	09/15/23 06:14	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2131988	1	09/13/23 20:57	09/14/23 09:00	BAM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2132048	2	09/16/23 07:26	09/16/23 15:58	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2132065	1	09/15/23 06:17	09/16/23 06:44	MBE	Mt. Juliet, TN

CIG-LAT-PW SPILL-2023-6 L1654165-06 Solid

				Collected by	Collected date/time	Received date/time
					09/06/23 13:00	09/08/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2130085	1	09/12/23 14:49	09/12/23 14:49	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2130680	1	09/13/23 03:12	09/13/23 11:42	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2131713	1	09/14/23 08:59	09/14/23 12:30	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2131656	1	09/14/23 09:00	09/14/23 12:06	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2130158	1	09/11/23 13:23	09/12/23 12:03	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2131331	5	09/13/23 09:46	09/16/23 15:00	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2132618	1	09/13/23 20:57	09/15/23 06:37	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2131988	1	09/13/23 20:57	09/14/23 09:20	BAM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2132048	1	09/16/23 07:26	09/16/23 13:19	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2132065	1	09/15/23 06:17	09/16/23 07:01	MBE	Mt. Juliet, TN

CIG-LAT-PW SPILL-2023-BACKGROUND-1 L1654165-07 Solid

				Collected by	Collected date/time	Received date/time
					09/06/23 11:00	09/08/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2130085	1	09/12/23 14:52	09/12/23 14:52	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2130680	1	09/13/23 03:12	09/13/23 11:47	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2131713	1	09/14/23 08:59	09/14/23 12:30	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2131656	1	09/14/23 09:00	09/14/23 12:06	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2130158	1	09/11/23 13:23	09/12/23 12:06	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2131331	5	09/13/23 09:46	09/16/23 15:04	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2132618	1	09/13/23 20:57	09/15/23 07:01	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2131988	1	09/13/23 20:57	09/14/23 09:38	BAM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2132048	1	09/16/23 07:26	09/16/23 13:32	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2132066	1	09/15/23 15:47	09/16/23 11:56	JCH	Mt. Juliet, TN

SAMPLE SUMMARY

CIG-LAT-PW SPILL-2023-BACKGROUND-2 L1654165-08 Solid

Collected by

Collected date/time

Received date/time

09/06/23 11:15

09/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2130085	1	09/12/23 14:55	09/12/23 14:55	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2130680	1	09/13/23 03:12	09/13/23 12:02	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2131713	1	09/14/23 08:59	09/14/23 12:30	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2131656	1	09/14/23 09:00	09/14/23 12:06	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2130158	1	09/11/23 13:23	09/12/23 12:09	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2131329	5	09/13/23 09:46	09/15/23 15:58	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2132618	1	09/13/23 20:57	09/15/23 07:24	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2131988	1	09/13/23 20:57	09/14/23 09:57	BAM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2132048	1	09/16/23 07:26	09/16/23 13:07	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2132066	1	09/15/23 15:47	09/16/23 12:14	JCH	Mt. Juliet, TN

¹Cp

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CIG-LAT-PW SPILL-2023-BACKGROUND-3 L1654165-09 Solid

Collected by

Collected date/time

Received date/time

09/06/23 11:30

09/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2130085	1	09/12/23 14:58	09/12/23 14:58	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2130680	1	09/13/23 03:12	09/13/23 12:07	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2131713	1	09/14/23 08:59	09/14/23 12:30	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2131656	1	09/14/23 09:00	09/14/23 12:06	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2130158	1	09/11/23 13:23	09/12/23 12:12	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2131329	5	09/13/23 09:46	09/15/23 16:02	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2132620	1	09/13/23 20:57	09/15/23 00:00	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2131988	1	09/13/23 20:57	09/14/23 10:16	BAM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2132048	2	09/16/23 07:26	09/16/23 15:58	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2132066	1	09/15/23 15:47	09/16/23 12:31	JCH	Mt. Juliet, TN

⁷Gl

⁸Al

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ACCOUNT:

Kinder Morgan - Lakewood, CO

PROJECT:

SDG:

L1654165

DATE/TIME:

09/18/23 14:01

PAGE:

5 of 56

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.



Kelly Mercer
Project Manager

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

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.445		1	09/12/2023 14:29	WG2130085

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		1.00	1	09/13/2023 11:16	WG2130680

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	RDL	Dilution	Analysis date / time	Batch
pH	8.05	T8		1	09/14/2023 08:04	WG2131511

Sample Narrative:

L1654165-01 WG2131511: 8.05 at 21.6C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	244		10.0	1	09/14/2023 12:06	WG2131656

Sample Narrative:

L1654165-01 WG2131656: at 25C

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		0.200	1	09/12/2023 11:49	WG2130158

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.38		1.00	5	09/15/2023 15:45	WG2131329
Barium	93.3		2.50	5	09/15/2023 15:45	WG2131329
Cadmium	ND		1.00	5	09/15/2023 15:45	WG2131329
Copper	6.65		5.00	5	09/15/2023 15:45	WG2131329
Lead	6.34		2.00	5	09/15/2023 15:45	WG2131329
Nickel	7.23		2.50	5	09/15/2023 15:45	WG2131329
Selenium	ND		2.50	5	09/15/2023 15:45	WG2131329
Silver	ND		0.500	5	09/15/2023 15:45	WG2131329
Zinc	27.0		25.0	5	09/15/2023 15:45	WG2131329

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	09/15/2023 04:42	WG2132618
(S) a,a,a-Trifluorotoluene(FID)	87.1		77.0-120		09/15/2023 04:42	WG2132618



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND	J3	0.0500	1	09/14/2023 06:43	WG2131988
Acrylonitrile	ND		0.0125	1	09/14/2023 06:43	WG2131988
Benzene	ND		0.00100	1	09/14/2023 06:43	WG2131988
Bromobenzene	ND		0.0125	1	09/14/2023 06:43	WG2131988
Bromodichloromethane	ND	J3	0.00250	1	09/14/2023 06:43	WG2131988
Bromoform	ND		0.0250	1	09/14/2023 06:43	WG2131988
Bromomethane	ND	J3	0.0125	1	09/14/2023 06:43	WG2131988
n-Butylbenzene	ND		0.0125	1	09/14/2023 06:43	WG2131988
sec-Butylbenzene	ND		0.0125	1	09/14/2023 06:43	WG2131988
tert-Butylbenzene	ND		0.00500	1	09/14/2023 06:43	WG2131988
Carbon tetrachloride	ND		0.00500	1	09/14/2023 06:43	WG2131988
Chlorobenzene	ND		0.00250	1	09/14/2023 06:43	WG2131988
Chlorodibromomethane	ND		0.00250	1	09/14/2023 06:43	WG2131988
Chloroethane	ND		0.00500	1	09/14/2023 06:43	WG2131988
Chloroform	ND		0.00250	1	09/14/2023 06:43	WG2131988
Chloromethane	ND	J3	0.0125	1	09/14/2023 06:43	WG2131988
2-Chlorotoluene	ND		0.00250	1	09/14/2023 06:43	WG2131988
4-Chlorotoluene	ND		0.00500	1	09/14/2023 06:43	WG2131988
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	09/14/2023 06:43	WG2131988
1,2-Dibromoethane	ND		0.00250	1	09/14/2023 06:43	WG2131988
Dibromomethane	ND	J3	0.00500	1	09/14/2023 06:43	WG2131988
1,2-Dichlorobenzene	ND		0.00500	1	09/14/2023 06:43	WG2131988
1,3-Dichlorobenzene	ND		0.00500	1	09/14/2023 06:43	WG2131988
1,4-Dichlorobenzene	ND		0.00500	1	09/14/2023 06:43	WG2131988
Dichlorodifluoromethane	ND	J3	0.00250	1	09/14/2023 06:43	WG2131988
1,1-Dichloroethane	ND		0.00250	1	09/14/2023 06:43	WG2131988
1,2-Dichloroethane	ND		0.00250	1	09/14/2023 06:43	WG2131988
1,1-Dichloroethene	ND		0.00250	1	09/14/2023 06:43	WG2131988
cis-1,2-Dichloroethene	ND		0.00250	1	09/14/2023 06:43	WG2131988
trans-1,2-Dichloroethene	ND		0.00500	1	09/14/2023 06:43	WG2131988
1,2-Dichloropropane	ND		0.00500	1	09/14/2023 06:43	WG2131988
1,1-Dichloropropene	ND		0.00250	1	09/14/2023 06:43	WG2131988
1,3-Dichloropropane	ND	J4	0.00500	1	09/14/2023 06:43	WG2131988
cis-1,3-Dichloropropene	ND	J3	0.00250	1	09/14/2023 06:43	WG2131988
trans-1,3-Dichloropropene	ND		0.00500	1	09/14/2023 06:43	WG2131988
2,2-Dichloropropane	ND		0.00250	1	09/14/2023 06:43	WG2131988
Di-isopropyl ether	ND		0.00100	1	09/14/2023 06:43	WG2131988
Ethylbenzene	ND		0.00250	1	09/14/2023 06:43	WG2131988
Hexachloro-1,3-butadiene	ND		0.0250	1	09/14/2023 06:43	WG2131988
Isopropylbenzene	ND		0.00250	1	09/14/2023 06:43	WG2131988
p-Isopropyltoluene	ND		0.00500	1	09/14/2023 06:43	WG2131988
2-Butanone (MEK)	ND		0.100	1	09/14/2023 06:43	WG2131988
Methylene Chloride	ND		0.0250	1	09/14/2023 06:43	WG2131988
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	09/14/2023 06:43	WG2131988
Methyl tert-butyl ether	ND		0.00100	1	09/14/2023 06:43	WG2131988
Naphthalene	ND		0.0125	1	09/14/2023 06:43	WG2131988
n-Propylbenzene	ND		0.00500	1	09/14/2023 06:43	WG2131988
Styrene	ND		0.0125	1	09/14/2023 06:43	WG2131988
1,1,1,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 06:43	WG2131988
1,1,2,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 06:43	WG2131988
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	09/14/2023 06:43	WG2131988
Tetrachloroethene	ND		0.00250	1	09/14/2023 06:43	WG2131988
Toluene	ND	J3	0.00500	1	09/14/2023 06:43	WG2131988
1,2,3-Trichlorobenzene	ND		0.0125	1	09/14/2023 06:43	WG2131988
1,2,4-Trichlorobenzene	ND		0.0125	1	09/14/2023 06:43	WG2131988
1,1,1-Trichloroethane	ND		0.00250	1	09/14/2023 06:43	WG2131988

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

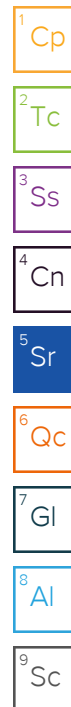
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	ND	<u>J3</u>	0.00250	1	09/14/2023 06:43	WG2131988
Trichloroethene	ND		0.00100	1	09/14/2023 06:43	WG2131988
Trichlorofluoromethane	ND		0.00250	1	09/14/2023 06:43	WG2131988
1,2,3-Trichloropropane	ND		0.0125	1	09/14/2023 06:43	WG2131988
1,2,4-Trimethylbenzene	ND		0.00500	1	09/14/2023 06:43	WG2131988
1,2,3-Trimethylbenzene	ND		0.00500	1	09/14/2023 06:43	WG2131988
1,3,5-Trimethylbenzene	ND		0.00500	1	09/14/2023 06:43	WG2131988
Vinyl chloride	ND	<u>J3</u>	0.00250	1	09/14/2023 06:43	WG2131988
Xylenes, Total	ND		0.00650	1	09/14/2023 06:43	WG2131988
(S) Toluene-d8	105		75.0-131		09/14/2023 06:43	WG2131988
(S) 4-Bromofluorobenzene	101		67.0-138		09/14/2023 06:43	WG2131988
(S) 1,2-Dichloroethane-d4	82.3		70.0-130		09/14/2023 06:43	WG2131988

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	09/16/2023 21:36	WG2132047
C28-C36 Motor Oil Range	ND		4.00	1	09/16/2023 21:36	WG2132047
(S) o-Terphenyl	59.7		18.0-148		09/16/2023 21:36	WG2132047

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/16/2023 05:51	WG2132065
Acenaphthene	ND		0.00600	1	09/16/2023 05:51	WG2132065
Acenaphthylene	ND		0.00600	1	09/16/2023 05:51	WG2132065
Benzo(a)anthracene	ND		0.00600	1	09/16/2023 05:51	WG2132065
Benzo(a)pyrene	ND		0.00600	1	09/16/2023 05:51	WG2132065
Benzo(b)fluoranthene	ND		0.00600	1	09/16/2023 05:51	WG2132065
Benzo(g,h,i)perylene	ND		0.00600	1	09/16/2023 05:51	WG2132065
Benzo(k)fluoranthene	ND		0.00600	1	09/16/2023 05:51	WG2132065
Chrysene	ND		0.00600	1	09/16/2023 05:51	WG2132065
Dibenz(a,h)anthracene	ND		0.00600	1	09/16/2023 05:51	WG2132065
Fluoranthene	ND		0.00600	1	09/16/2023 05:51	WG2132065
Fluorene	ND		0.00600	1	09/16/2023 05:51	WG2132065
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/16/2023 05:51	WG2132065
Naphthalene	ND		0.0200	1	09/16/2023 05:51	WG2132065
Phenanthrene	ND		0.00600	1	09/16/2023 05:51	WG2132065
Pyrene	ND		0.00600	1	09/16/2023 05:51	WG2132065
1-Methylnaphthalene	ND		0.0200	1	09/16/2023 05:51	WG2132065
2-Methylnaphthalene	ND		0.0200	1	09/16/2023 05:51	WG2132065
2-Chloronaphthalene	ND		0.0200	1	09/16/2023 05:51	WG2132065
(S) p-Terphenyl-d14	82.9		23.0-120		09/16/2023 05:51	WG2132065
(S) Nitrobenzene-d5	72.3		14.0-149		09/16/2023 05:51	WG2132065
(S) 2-Fluorobiphenyl	69.7		34.0-125		09/16/2023 05:51	WG2132065



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.153		1	09/12/2023 14:38	WG2130085

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		1.00	1	09/13/2023 11:26	WG2130680

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.10	T8	1	09/14/2023 12:30	WG2131713

Sample Narrative:

L1654165-02 WG2131713: 8.1 at 21.4C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	284		10.0	1	09/14/2023 12:06	WG2131656

Sample Narrative:

L1654165-02 WG2131656: at 25C

Metals (ICP) by Method 6010B-NE493 Ch 2

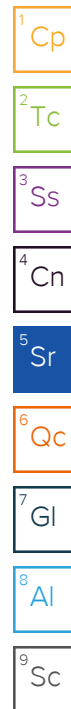
Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.211		0.200	1	09/12/2023 11:52	WG2130158

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.63		1.00	5	09/15/2023 15:48	WG2131329
Barium	151		2.50	5	09/15/2023 15:48	WG2131329
Cadmium	ND		1.00	5	09/15/2023 15:48	WG2131329
Copper	12.7		5.00	5	09/15/2023 15:48	WG2131329
Lead	37.7		2.00	5	09/15/2023 15:48	WG2131329
Nickel	11.5		2.50	5	09/15/2023 15:48	WG2131329
Selenium	ND		2.50	5	09/15/2023 15:48	WG2131329
Silver	ND		0.500	5	09/15/2023 15:48	WG2131329
Zinc	52.2		25.0	5	09/15/2023 15:48	WG2131329

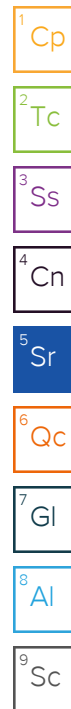
Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	09/15/2023 05:05	WG2132618
(S) a,a,a-Trifluorotoluene(FID)	86.8		77.0-120		09/15/2023 05:05	WG2132618



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND	J3	0.0500	1	09/14/2023 08:03	WG2131988
Acrylonitrile	ND		0.0125	1	09/14/2023 08:03	WG2131988
Benzene	ND		0.00100	1	09/14/2023 08:03	WG2131988
Bromobenzene	ND		0.0125	1	09/14/2023 08:03	WG2131988
Bromodichloromethane	ND	J3	0.00250	1	09/14/2023 08:03	WG2131988
Bromoform	ND		0.0250	1	09/14/2023 08:03	WG2131988
Bromomethane	ND	J3	0.0125	1	09/14/2023 08:03	WG2131988
n-Butylbenzene	ND		0.0125	1	09/14/2023 08:03	WG2131988
sec-Butylbenzene	ND		0.0125	1	09/14/2023 08:03	WG2131988
tert-Butylbenzene	ND		0.00500	1	09/14/2023 08:03	WG2131988
Carbon tetrachloride	ND		0.00500	1	09/14/2023 08:03	WG2131988
Chlorobenzene	ND		0.00250	1	09/14/2023 08:03	WG2131988
Chlorodibromomethane	ND		0.00250	1	09/14/2023 08:03	WG2131988
Chloroethane	ND		0.00500	1	09/14/2023 08:03	WG2131988
Chloroform	ND		0.00250	1	09/14/2023 08:03	WG2131988
Chloromethane	ND	J3	0.0125	1	09/14/2023 08:03	WG2131988
2-Chlorotoluene	ND		0.00250	1	09/14/2023 08:03	WG2131988
4-Chlorotoluene	ND		0.00500	1	09/14/2023 08:03	WG2131988
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	09/14/2023 08:03	WG2131988
1,2-Dibromoethane	ND		0.00250	1	09/14/2023 08:03	WG2131988
Dibromomethane	ND	J3	0.00500	1	09/14/2023 08:03	WG2131988
1,2-Dichlorobenzene	ND		0.00500	1	09/14/2023 08:03	WG2131988
1,3-Dichlorobenzene	ND		0.00500	1	09/14/2023 08:03	WG2131988
1,4-Dichlorobenzene	ND		0.00500	1	09/14/2023 08:03	WG2131988
Dichlorodifluoromethane	ND	J3	0.00250	1	09/14/2023 08:03	WG2131988
1,1-Dichloroethane	ND		0.00250	1	09/14/2023 08:03	WG2131988
1,2-Dichloroethane	ND		0.00250	1	09/14/2023 08:03	WG2131988
1,1-Dichloroethene	ND		0.00250	1	09/14/2023 08:03	WG2131988
cis-1,2-Dichloroethene	ND		0.00250	1	09/14/2023 08:03	WG2131988
trans-1,2-Dichloroethene	ND		0.00500	1	09/14/2023 08:03	WG2131988
1,2-Dichloropropane	ND		0.00500	1	09/14/2023 08:03	WG2131988
1,1-Dichloropropene	ND		0.00250	1	09/14/2023 08:03	WG2131988
1,3-Dichloropropane	ND	J4	0.00500	1	09/14/2023 08:03	WG2131988
cis-1,3-Dichloropropene	ND	J3	0.00250	1	09/14/2023 08:03	WG2131988
trans-1,3-Dichloropropene	ND		0.00500	1	09/14/2023 08:03	WG2131988
2,2-Dichloropropane	ND		0.00250	1	09/14/2023 08:03	WG2131988
Di-isopropyl ether	ND		0.00100	1	09/14/2023 08:03	WG2131988
Ethylbenzene	ND		0.00250	1	09/14/2023 08:03	WG2131988
Hexachloro-1,3-butadiene	ND		0.0250	1	09/14/2023 08:03	WG2131988
Isopropylbenzene	ND		0.00250	1	09/14/2023 08:03	WG2131988
p-Isopropyltoluene	ND		0.00500	1	09/14/2023 08:03	WG2131988
2-Butanone (MEK)	ND		0.100	1	09/14/2023 08:03	WG2131988
Methylene Chloride	ND		0.0250	1	09/14/2023 08:03	WG2131988
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	09/14/2023 08:03	WG2131988
Methyl tert-butyl ether	ND		0.00100	1	09/14/2023 08:03	WG2131988
Naphthalene	ND		0.0125	1	09/14/2023 08:03	WG2131988
n-Propylbenzene	ND		0.00500	1	09/14/2023 08:03	WG2131988
Styrene	ND		0.0125	1	09/14/2023 08:03	WG2131988
1,1,1,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 08:03	WG2131988
1,1,2,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 08:03	WG2131988
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	09/14/2023 08:03	WG2131988
Tetrachloroethene	ND		0.00250	1	09/14/2023 08:03	WG2131988
Toluene	ND	J3	0.00500	1	09/14/2023 08:03	WG2131988
1,2,3-Trichlorobenzene	ND		0.0125	1	09/14/2023 08:03	WG2131988
1,2,4-Trichlorobenzene	ND		0.0125	1	09/14/2023 08:03	WG2131988
1,1,1-Trichloroethane	ND		0.00250	1	09/14/2023 08:03	WG2131988



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	ND	<u>J3</u>	0.00250	1	09/14/2023 08:03	WG2131988
Trichloroethene	ND		0.00100	1	09/14/2023 08:03	WG2131988
Trichlorofluoromethane	ND		0.00250	1	09/14/2023 08:03	WG2131988
1,2,3-Trichloropropane	ND		0.0125	1	09/14/2023 08:03	WG2131988
1,2,4-Trimethylbenzene	ND		0.00500	1	09/14/2023 08:03	WG2131988
1,2,3-Trimethylbenzene	ND		0.00500	1	09/14/2023 08:03	WG2131988
1,3,5-Trimethylbenzene	ND		0.00500	1	09/14/2023 08:03	WG2131988
Vinyl chloride	ND	<u>J3</u>	0.00250	1	09/14/2023 08:03	WG2131988
Xylenes, Total	ND		0.00650	1	09/14/2023 08:03	WG2131988
(S) Toluene-d8	104		75.0-131		09/14/2023 08:03	WG2131988
(S) 4-Bromofluorobenzene	104		67.0-138		09/14/2023 08:03	WG2131988
(S) 1,2-Dichloroethane-d4	94.1		70.0-130		09/14/2023 08:03	WG2131988

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 8015M

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	11.8		4.00	1	09/16/2023 23:35	WG2132047
C28-C36 Motor Oil Range	58.5		4.00	1	09/16/2023 23:35	WG2132047
(S) o-Terphenyl	36.9		18.0-148		09/16/2023 23:35	WG2132047

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/16/2023 07:19	WG2132065
Acenaphthene	ND		0.00600	1	09/16/2023 07:19	WG2132065
Acenaphthylene	ND		0.00600	1	09/16/2023 07:19	WG2132065
Benzo(a)anthracene	ND		0.00600	1	09/16/2023 07:19	WG2132065
Benzo(a)pyrene	ND		0.00600	1	09/16/2023 07:19	WG2132065
Benzo(b)fluoranthene	ND		0.00600	1	09/16/2023 07:19	WG2132065
Benzo(g,h,i)perylene	ND		0.00600	1	09/16/2023 07:19	WG2132065
Benzo(k)fluoranthene	ND		0.00600	1	09/16/2023 07:19	WG2132065
Chrysene	ND		0.00600	1	09/16/2023 07:19	WG2132065
Dibenz(a,h)anthracene	ND		0.00600	1	09/16/2023 07:19	WG2132065
Fluoranthene	ND		0.00600	1	09/16/2023 07:19	WG2132065
Fluorene	ND		0.00600	1	09/16/2023 07:19	WG2132065
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/16/2023 07:19	WG2132065
Naphthalene	ND		0.0200	1	09/16/2023 07:19	WG2132065
Phenanthrene	ND		0.00600	1	09/16/2023 07:19	WG2132065
Pyrene	ND		0.00600	1	09/16/2023 07:19	WG2132065
1-Methylnaphthalene	ND		0.0200	1	09/16/2023 07:19	WG2132065
2-Methylnaphthalene	ND		0.0200	1	09/16/2023 07:19	WG2132065
2-Chloronaphthalene	ND		0.0200	1	09/16/2023 07:19	WG2132065
(S) p-Terphenyl-d14	90.6		23.0-120		09/16/2023 07:19	WG2132065
(S) Nitrobenzene-d5	83.8		14.0-149		09/16/2023 07:19	WG2132065
(S) 2-Fluorobiphenyl	79.2		34.0-125		09/16/2023 07:19	WG2132065

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.15		1	09/12/2023 14:41	WG2130085

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		1.00	1	09/15/2023 10:01	WG2131982

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.29	T8	1	09/14/2023 12:30	WG2131713

Sample Narrative:

L1654165-03 WG2131713: 8.29 at 21.2C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	374		10.0	1	09/14/2023 12:06	WG2131656

Sample Narrative:

L1654165-03 WG2131656: at 25C

Metals (ICP) by Method 6010B-NE493 Ch 2

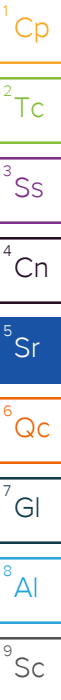
Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.439		0.200	1	09/12/2023 11:55	WG2130158

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.84		1.00	5	09/15/2023 15:52	WG2131329
Barium	163		2.50	5	09/15/2023 15:52	WG2131329
Cadmium	ND		1.00	5	09/15/2023 15:52	WG2131329
Copper	12.8		5.00	5	09/15/2023 15:52	WG2131329
Lead	15.7		2.00	5	09/15/2023 15:52	WG2131329
Nickel	17.2		2.50	5	09/15/2023 15:52	WG2131329
Selenium	ND		2.50	5	09/15/2023 15:52	WG2131329
Silver	ND		0.500	5	09/15/2023 15:52	WG2131329
Zinc	58.5		25.0	5	09/15/2023 15:52	WG2131329

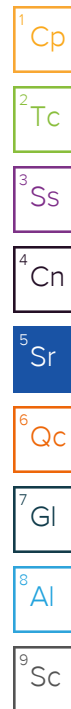
Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	09/15/2023 05:28	WG2132618
(S) a,a,a-Trifluorotoluene(FID)	86.8		77.0-120		09/15/2023 05:28	WG2132618



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND	J3	0.0500	1	09/14/2023 08:22	WG2131988
Acrylonitrile	ND		0.0125	1	09/14/2023 08:22	WG2131988
Benzene	ND		0.00100	1	09/14/2023 08:22	WG2131988
Bromobenzene	ND		0.0125	1	09/14/2023 08:22	WG2131988
Bromodichloromethane	ND	J3	0.00250	1	09/14/2023 08:22	WG2131988
Bromoform	ND		0.0250	1	09/14/2023 08:22	WG2131988
Bromomethane	ND	J3	0.0125	1	09/14/2023 08:22	WG2131988
n-Butylbenzene	ND		0.0125	1	09/14/2023 08:22	WG2131988
sec-Butylbenzene	ND		0.0125	1	09/14/2023 08:22	WG2131988
tert-Butylbenzene	ND		0.00500	1	09/14/2023 08:22	WG2131988
Carbon tetrachloride	ND		0.00500	1	09/14/2023 08:22	WG2131988
Chlorobenzene	ND		0.00250	1	09/14/2023 08:22	WG2131988
Chlorodibromomethane	ND		0.00250	1	09/14/2023 08:22	WG2131988
Chloroethane	ND		0.00500	1	09/14/2023 08:22	WG2131988
Chloroform	ND		0.00250	1	09/14/2023 08:22	WG2131988
Chloromethane	ND	J3	0.0125	1	09/14/2023 08:22	WG2131988
2-Chlorotoluene	ND		0.00250	1	09/14/2023 08:22	WG2131988
4-Chlorotoluene	ND		0.00500	1	09/14/2023 08:22	WG2131988
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	09/14/2023 08:22	WG2131988
1,2-Dibromoethane	ND		0.00250	1	09/14/2023 08:22	WG2131988
Dibromomethane	ND	J3	0.00500	1	09/14/2023 08:22	WG2131988
1,2-Dichlorobenzene	ND		0.00500	1	09/14/2023 08:22	WG2131988
1,3-Dichlorobenzene	ND		0.00500	1	09/14/2023 08:22	WG2131988
1,4-Dichlorobenzene	ND		0.00500	1	09/14/2023 08:22	WG2131988
Dichlorodifluoromethane	ND	J3	0.00250	1	09/14/2023 08:22	WG2131988
1,1-Dichloroethane	ND		0.00250	1	09/14/2023 08:22	WG2131988
1,2-Dichloroethane	ND		0.00250	1	09/14/2023 08:22	WG2131988
1,1-Dichloroethene	ND		0.00250	1	09/14/2023 08:22	WG2131988
cis-1,2-Dichloroethene	ND		0.00250	1	09/14/2023 08:22	WG2131988
trans-1,2-Dichloroethene	ND		0.00500	1	09/14/2023 08:22	WG2131988
1,2-Dichloropropane	ND		0.00500	1	09/14/2023 08:22	WG2131988
1,1-Dichloropropene	ND		0.00250	1	09/14/2023 08:22	WG2131988
1,3-Dichloropropane	ND	J4	0.00500	1	09/14/2023 08:22	WG2131988
cis-1,3-Dichloropropene	ND	J3	0.00250	1	09/14/2023 08:22	WG2131988
trans-1,3-Dichloropropene	ND		0.00500	1	09/14/2023 08:22	WG2131988
2,2-Dichloropropane	ND		0.00250	1	09/14/2023 08:22	WG2131988
Di-isopropyl ether	ND		0.00100	1	09/14/2023 08:22	WG2131988
Ethylbenzene	ND		0.00250	1	09/14/2023 08:22	WG2131988
Hexachloro-1,3-butadiene	ND		0.0250	1	09/14/2023 08:22	WG2131988
Isopropylbenzene	ND		0.00250	1	09/14/2023 08:22	WG2131988
p-Isopropyltoluene	ND		0.00500	1	09/14/2023 08:22	WG2131988
2-Butanone (MEK)	ND		0.100	1	09/14/2023 08:22	WG2131988
Methylene Chloride	ND		0.0250	1	09/14/2023 08:22	WG2131988
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	09/14/2023 08:22	WG2131988
Methyl tert-butyl ether	ND		0.00100	1	09/14/2023 08:22	WG2131988
Naphthalene	ND		0.0125	1	09/14/2023 08:22	WG2131988
n-Propylbenzene	ND		0.00500	1	09/14/2023 08:22	WG2131988
Styrene	ND		0.0125	1	09/14/2023 08:22	WG2131988
1,1,1,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 08:22	WG2131988
1,1,2,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 08:22	WG2131988
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	09/14/2023 08:22	WG2131988
Tetrachloroethene	ND		0.00250	1	09/14/2023 08:22	WG2131988
Toluene	ND	J3	0.00500	1	09/14/2023 08:22	WG2131988
1,2,3-Trichlorobenzene	ND		0.0125	1	09/14/2023 08:22	WG2131988
1,2,4-Trichlorobenzene	ND		0.0125	1	09/14/2023 08:22	WG2131988
1,1,1-Trichloroethane	ND		0.00250	1	09/14/2023 08:22	WG2131988



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

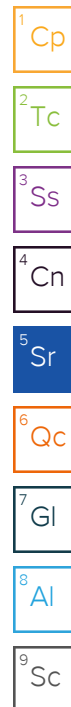
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	ND	<u>J3</u>	0.00250	1	09/14/2023 08:22	WG2131988
Trichloroethene	ND		0.00100	1	09/14/2023 08:22	WG2131988
Trichlorofluoromethane	ND		0.00250	1	09/14/2023 08:22	WG2131988
1,2,3-Trichloropropane	ND		0.0125	1	09/14/2023 08:22	WG2131988
1,2,4-Trimethylbenzene	ND		0.00500	1	09/14/2023 08:22	WG2131988
1,2,3-Trimethylbenzene	ND		0.00500	1	09/14/2023 08:22	WG2131988
1,3,5-Trimethylbenzene	ND		0.00500	1	09/14/2023 08:22	WG2131988
Vinyl chloride	ND	<u>J3</u>	0.00250	1	09/14/2023 08:22	WG2131988
Xylenes, Total	ND		0.00650	1	09/14/2023 08:22	WG2131988
(S) Toluene-d8	106		75.0-131		09/14/2023 08:22	WG2131988
(S) 4-Bromofluorobenzene	101		67.0-138		09/14/2023 08:22	WG2131988
(S) 1,2-Dichloroethane-d4	88.9		70.0-130		09/14/2023 08:22	WG2131988

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.85		4.00	1	09/16/2023 22:16	WG2132047
C28-C36 Motor Oil Range	22.7		4.00	1	09/16/2023 22:16	WG2132047
(S) o-Terphenyl	61.3		18.0-148		09/16/2023 22:16	WG2132047

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/16/2023 06:09	WG2132065
Acenaphthene	ND		0.00600	1	09/16/2023 06:09	WG2132065
Acenaphthylene	ND		0.00600	1	09/16/2023 06:09	WG2132065
Benzo(a)anthracene	ND		0.00600	1	09/16/2023 06:09	WG2132065
Benzo(a)pyrene	ND		0.00600	1	09/16/2023 06:09	WG2132065
Benzo(b)fluoranthene	ND		0.00600	1	09/16/2023 06:09	WG2132065
Benzo(g,h,i)perylene	ND		0.00600	1	09/16/2023 06:09	WG2132065
Benzo(k)fluoranthene	ND		0.00600	1	09/16/2023 06:09	WG2132065
Chrysene	ND		0.00600	1	09/16/2023 06:09	WG2132065
Dibenz(a,h)anthracene	ND		0.00600	1	09/16/2023 06:09	WG2132065
Fluoranthene	ND		0.00600	1	09/16/2023 06:09	WG2132065
Fluorene	ND		0.00600	1	09/16/2023 06:09	WG2132065
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/16/2023 06:09	WG2132065
Naphthalene	ND		0.0200	1	09/16/2023 06:09	WG2132065
Phenanthrene	ND		0.00600	1	09/16/2023 06:09	WG2132065
Pyrene	ND		0.00600	1	09/16/2023 06:09	WG2132065
1-Methylnaphthalene	ND		0.0200	1	09/16/2023 06:09	WG2132065
2-Methylnaphthalene	ND		0.0200	1	09/16/2023 06:09	WG2132065
2-Chloronaphthalene	ND		0.0200	1	09/16/2023 06:09	WG2132065
(S) p-Terphenyl-d14	79.7		23.0-120		09/16/2023 06:09	WG2132065
(S) Nitrobenzene-d5	79.0		14.0-149		09/16/2023 06:09	WG2132065
(S) 2-Fluorobiphenyl	72.9		34.0-125		09/16/2023 06:09	WG2132065



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	2.27		1	09/12/2023 14:44	WG2130085

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		1.00	1	09/13/2023 11:31	WG2130680

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.49	T8	1	09/14/2023 12:30	WG2131713

Sample Narrative:

L1654165-04 WG2131713: 8.49 at 20.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	330		10.0	1	09/14/2023 12:06	WG2131656

Sample Narrative:

L1654165-04 WG2131656: at 25C

Metals (ICP) by Method 6010B-NE493 Ch 2

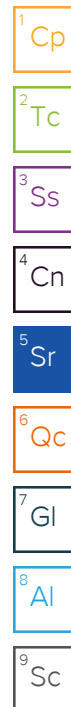
Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.543		0.200	1	09/12/2023 11:58	WG2130158

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.25		1.00	5	09/15/2023 15:55	WG2131329
Barium	150		2.50	5	09/15/2023 15:55	WG2131329
Cadmium	ND		1.00	5	09/15/2023 15:55	WG2131329
Copper	11.9		5.00	5	09/15/2023 15:55	WG2131329
Lead	12.9		2.00	5	09/15/2023 15:55	WG2131329
Nickel	15.4		2.50	5	09/15/2023 15:55	WG2131329
Selenium	ND		2.50	5	09/15/2023 15:55	WG2131329
Silver	ND		0.500	5	09/15/2023 15:55	WG2131329
Zinc	52.1		25.0	5	09/15/2023 15:55	WG2131329

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	09/15/2023 05:51	WG2132618
(S) a,a,a-Trifluorotoluene(FID)	86.8		77.0-120		09/15/2023 05:51	WG2132618



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND	J3	0.0500	1	09/14/2023 08:41	WG2131988
Acrylonitrile	ND		0.0125	1	09/14/2023 08:41	WG2131988
Benzene	ND		0.00100	1	09/14/2023 08:41	WG2131988
Bromobenzene	ND		0.0125	1	09/14/2023 08:41	WG2131988
Bromodichloromethane	ND	J3	0.00250	1	09/14/2023 08:41	WG2131988
Bromoform	ND		0.0250	1	09/14/2023 08:41	WG2131988
Bromomethane	ND	J3	0.0125	1	09/14/2023 08:41	WG2131988
n-Butylbenzene	ND		0.0125	1	09/14/2023 08:41	WG2131988
sec-Butylbenzene	ND		0.0125	1	09/14/2023 08:41	WG2131988
tert-Butylbenzene	ND		0.00500	1	09/14/2023 08:41	WG2131988
Carbon tetrachloride	ND		0.00500	1	09/14/2023 08:41	WG2131988
Chlorobenzene	ND		0.00250	1	09/14/2023 08:41	WG2131988
Chlorodibromomethane	ND		0.00250	1	09/14/2023 08:41	WG2131988
Chloroethane	ND		0.00500	1	09/14/2023 08:41	WG2131988
Chloroform	ND		0.00250	1	09/14/2023 08:41	WG2131988
Chloromethane	ND	J3	0.0125	1	09/14/2023 08:41	WG2131988
2-Chlorotoluene	ND		0.00250	1	09/14/2023 08:41	WG2131988
4-Chlorotoluene	ND		0.00500	1	09/14/2023 08:41	WG2131988
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	09/14/2023 08:41	WG2131988
1,2-Dibromoethane	ND		0.00250	1	09/14/2023 08:41	WG2131988
Dibromomethane	ND	J3	0.00500	1	09/14/2023 08:41	WG2131988
1,2-Dichlorobenzene	ND		0.00500	1	09/14/2023 08:41	WG2131988
1,3-Dichlorobenzene	ND		0.00500	1	09/14/2023 08:41	WG2131988
1,4-Dichlorobenzene	ND		0.00500	1	09/14/2023 08:41	WG2131988
Dichlorodifluoromethane	ND	J3	0.00250	1	09/14/2023 08:41	WG2131988
1,1-Dichloroethane	ND		0.00250	1	09/14/2023 08:41	WG2131988
1,2-Dichloroethane	ND		0.00250	1	09/14/2023 08:41	WG2131988
1,1-Dichloroethene	ND		0.00250	1	09/14/2023 08:41	WG2131988
cis-1,2-Dichloroethene	ND		0.00250	1	09/14/2023 08:41	WG2131988
trans-1,2-Dichloroethene	ND		0.00500	1	09/14/2023 08:41	WG2131988
1,2-Dichloropropane	ND		0.00500	1	09/14/2023 08:41	WG2131988
1,1-Dichloropropene	ND		0.00250	1	09/14/2023 08:41	WG2131988
1,3-Dichloropropane	ND	J4	0.00500	1	09/14/2023 08:41	WG2131988
cis-1,3-Dichloropropene	ND	J3	0.00250	1	09/14/2023 08:41	WG2131988
trans-1,3-Dichloropropene	ND		0.00500	1	09/14/2023 08:41	WG2131988
2,2-Dichloropropane	ND		0.00250	1	09/14/2023 08:41	WG2131988
Di-isopropyl ether	ND		0.00100	1	09/14/2023 08:41	WG2131988
Ethylbenzene	ND		0.00250	1	09/14/2023 08:41	WG2131988
Hexachloro-1,3-butadiene	ND		0.0250	1	09/14/2023 08:41	WG2131988
Isopropylbenzene	ND		0.00250	1	09/14/2023 08:41	WG2131988
p-Isopropyltoluene	ND		0.00500	1	09/14/2023 08:41	WG2131988
2-Butanone (MEK)	ND		0.100	1	09/14/2023 08:41	WG2131988
Methylene Chloride	ND		0.0250	1	09/14/2023 08:41	WG2131988
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	09/14/2023 08:41	WG2131988
Methyl tert-butyl ether	ND		0.00100	1	09/14/2023 08:41	WG2131988
Naphthalene	ND		0.0125	1	09/14/2023 08:41	WG2131988
n-Propylbenzene	ND		0.00500	1	09/14/2023 08:41	WG2131988
Styrene	ND		0.0125	1	09/14/2023 08:41	WG2131988
1,1,1,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 08:41	WG2131988
1,1,2,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 08:41	WG2131988
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	09/14/2023 08:41	WG2131988
Tetrachloroethene	ND		0.00250	1	09/14/2023 08:41	WG2131988
Toluene	ND	J3	0.00500	1	09/14/2023 08:41	WG2131988
1,2,3-Trichlorobenzene	ND		0.0125	1	09/14/2023 08:41	WG2131988
1,2,4-Trichlorobenzene	ND		0.0125	1	09/14/2023 08:41	WG2131988
1,1,1-Trichloroethane	ND		0.00250	1	09/14/2023 08:41	WG2131988

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 mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	ND	<u>J3</u>	0.00250	1	09/14/2023 08:41	WG2131988
Trichloroethene	ND		0.00100	1	09/14/2023 08:41	WG2131988
Trichlorofluoromethane	ND		0.00250	1	09/14/2023 08:41	WG2131988
1,2,3-Trichloropropane	ND		0.0125	1	09/14/2023 08:41	WG2131988
1,2,4-Trimethylbenzene	ND		0.00500	1	09/14/2023 08:41	WG2131988
1,2,3-Trimethylbenzene	ND		0.00500	1	09/14/2023 08:41	WG2131988
1,3,5-Trimethylbenzene	ND		0.00500	1	09/14/2023 08:41	WG2131988
Vinyl chloride	ND	<u>J3</u>	0.00250	1	09/14/2023 08:41	WG2131988
Xylenes, Total	ND		0.00650	1	09/14/2023 08:41	WG2131988
(S) Toluene-d8	103		75.0-131		09/14/2023 08:41	WG2131988
(S) 4-Bromofluorobenzene	106		67.0-138		09/14/2023 08:41	WG2131988
(S) 1,2-Dichloroethane-d4	102		70.0-130		09/14/2023 08:41	WG2131988

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	09/16/2023 13:32	WG2132048
C28-C36 Motor Oil Range	7.57		4.00	1	09/16/2023 13:32	WG2132048
(S) o-Terphenyl	45.3		18.0-148		09/16/2023 13:32	WG2132048

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/16/2023 06:26	WG2132065
Acenaphthene	ND		0.00600	1	09/16/2023 06:26	WG2132065
Acenaphthylene	ND		0.00600	1	09/16/2023 06:26	WG2132065
Benzo(a)anthracene	ND		0.00600	1	09/16/2023 06:26	WG2132065
Benzo(a)pyrene	ND		0.00600	1	09/16/2023 06:26	WG2132065
Benzo(b)fluoranthene	ND		0.00600	1	09/16/2023 06:26	WG2132065
Benzo(g,h,i)perylene	ND		0.00600	1	09/16/2023 06:26	WG2132065
Benzo(k)fluoranthene	ND		0.00600	1	09/16/2023 06:26	WG2132065
Chrysene	ND		0.00600	1	09/16/2023 06:26	WG2132065
Dibenz(a,h)anthracene	ND		0.00600	1	09/16/2023 06:26	WG2132065
Fluoranthene	ND		0.00600	1	09/16/2023 06:26	WG2132065
Fluorene	ND		0.00600	1	09/16/2023 06:26	WG2132065
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/16/2023 06:26	WG2132065
Naphthalene	ND		0.0200	1	09/16/2023 06:26	WG2132065
Phenanthrene	ND		0.00600	1	09/16/2023 06:26	WG2132065
Pyrene	ND		0.00600	1	09/16/2023 06:26	WG2132065
1-Methylnaphthalene	ND		0.0200	1	09/16/2023 06:26	WG2132065
2-Methylnaphthalene	ND		0.0200	1	09/16/2023 06:26	WG2132065
2-Chloronaphthalene	ND		0.0200	1	09/16/2023 06:26	WG2132065
(S) p-Terphenyl-d14	93.5		23.0-120		09/16/2023 06:26	WG2132065
(S) Nitrobenzene-d5	84.9		14.0-149		09/16/2023 06:26	WG2132065
(S) 2-Fluorobiphenyl	81.1		34.0-125		09/16/2023 06:26	WG2132065

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.632		1	09/12/2023 14:47	WG2130085

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		1.00	1	09/13/2023 11:36	WG2130680

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.19	T8	1	09/14/2023 12:30	WG2131713

Sample Narrative:

L1654165-05 WG2131713: 8.19 at 20.9C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	356		10.0	1	09/14/2023 12:06	WG2131656

Sample Narrative:

L1654165-05 WG2131656: at 25C

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.505		0.200	1	09/12/2023 12:00	WG2130158

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.64	O1	1.00	5	09/16/2023 14:21	WG2131331
Barium	170	O1	2.50	5	09/16/2023 14:21	WG2131331
Cadmium	ND	O1	1.00	5	09/16/2023 14:21	WG2131331
Copper	17.3	O1	5.00	5	09/16/2023 14:21	WG2131331
Lead	10.1	O1	2.00	5	09/16/2023 14:21	WG2131331
Nickel	11.8	O1	2.50	5	09/16/2023 14:21	WG2131331
Selenium	ND	O1	2.50	5	09/16/2023 14:21	WG2131331
Silver	ND		0.500	5	09/16/2023 14:21	WG2131331
Zinc	44.7	O1	25.0	5	09/16/2023 14:21	WG2131331

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	09/15/2023 06:14	WG2132618
(S) a,a,a-Trifluorotoluene(FID)	85.3		77.0-120		09/15/2023 06:14	WG2132618

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

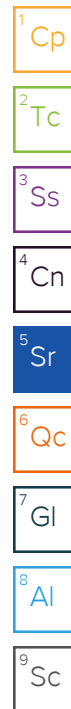
7Gl

8Al

9Sc

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND	J3	0.0500	1	09/14/2023 09:00	WG2131988
Acrylonitrile	ND		0.0125	1	09/14/2023 09:00	WG2131988
Benzene	ND		0.00100	1	09/14/2023 09:00	WG2131988
Bromobenzene	ND		0.0125	1	09/14/2023 09:00	WG2131988
Bromodichloromethane	ND	J3	0.00250	1	09/14/2023 09:00	WG2131988
Bromoform	ND		0.0250	1	09/14/2023 09:00	WG2131988
Bromomethane	ND	J3	0.0125	1	09/14/2023 09:00	WG2131988
n-Butylbenzene	ND		0.0125	1	09/14/2023 09:00	WG2131988
sec-Butylbenzene	ND		0.0125	1	09/14/2023 09:00	WG2131988
tert-Butylbenzene	ND		0.00500	1	09/14/2023 09:00	WG2131988
Carbon tetrachloride	ND		0.00500	1	09/14/2023 09:00	WG2131988
Chlorobenzene	ND		0.00250	1	09/14/2023 09:00	WG2131988
Chlorodibromomethane	ND		0.00250	1	09/14/2023 09:00	WG2131988
Chloroethane	ND		0.00500	1	09/14/2023 09:00	WG2131988
Chloroform	ND		0.00250	1	09/14/2023 09:00	WG2131988
Chloromethane	ND	J3	0.0125	1	09/14/2023 09:00	WG2131988
2-Chlorotoluene	ND		0.00250	1	09/14/2023 09:00	WG2131988
4-Chlorotoluene	ND		0.00500	1	09/14/2023 09:00	WG2131988
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	09/14/2023 09:00	WG2131988
1,2-Dibromoethane	ND		0.00250	1	09/14/2023 09:00	WG2131988
Dibromomethane	ND	J3	0.00500	1	09/14/2023 09:00	WG2131988
1,2-Dichlorobenzene	ND		0.00500	1	09/14/2023 09:00	WG2131988
1,3-Dichlorobenzene	ND		0.00500	1	09/14/2023 09:00	WG2131988
1,4-Dichlorobenzene	ND		0.00500	1	09/14/2023 09:00	WG2131988
Dichlorodifluoromethane	ND	J3	0.00250	1	09/14/2023 09:00	WG2131988
1,1-Dichloroethane	ND		0.00250	1	09/14/2023 09:00	WG2131988
1,2-Dichloroethane	ND		0.00250	1	09/14/2023 09:00	WG2131988
1,1-Dichloroethene	ND		0.00250	1	09/14/2023 09:00	WG2131988
cis-1,2-Dichloroethene	ND		0.00250	1	09/14/2023 09:00	WG2131988
trans-1,2-Dichloroethene	ND		0.00500	1	09/14/2023 09:00	WG2131988
1,2-Dichloropropane	ND		0.00500	1	09/14/2023 09:00	WG2131988
1,1-Dichloropropene	ND		0.00250	1	09/14/2023 09:00	WG2131988
1,3-Dichloropropane	ND	J4	0.00500	1	09/14/2023 09:00	WG2131988
cis-1,3-Dichloropropene	ND	J3	0.00250	1	09/14/2023 09:00	WG2131988
trans-1,3-Dichloropropene	ND		0.00500	1	09/14/2023 09:00	WG2131988
2,2-Dichloropropane	ND		0.00250	1	09/14/2023 09:00	WG2131988
Di-isopropyl ether	ND		0.00100	1	09/14/2023 09:00	WG2131988
Ethylbenzene	ND		0.00250	1	09/14/2023 09:00	WG2131988
Hexachloro-1,3-butadiene	ND		0.0250	1	09/14/2023 09:00	WG2131988
Isopropylbenzene	ND		0.00250	1	09/14/2023 09:00	WG2131988
p-Isopropyltoluene	ND		0.00500	1	09/14/2023 09:00	WG2131988
2-Butanone (MEK)	ND		0.100	1	09/14/2023 09:00	WG2131988
Methylene Chloride	ND		0.0250	1	09/14/2023 09:00	WG2131988
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	09/14/2023 09:00	WG2131988
Methyl tert-butyl ether	ND		0.00100	1	09/14/2023 09:00	WG2131988
Naphthalene	ND		0.0125	1	09/14/2023 09:00	WG2131988
n-Propylbenzene	ND		0.00500	1	09/14/2023 09:00	WG2131988
Styrene	ND		0.0125	1	09/14/2023 09:00	WG2131988
1,1,1,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 09:00	WG2131988
1,1,2,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 09:00	WG2131988
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	09/14/2023 09:00	WG2131988
Tetrachloroethene	ND		0.00250	1	09/14/2023 09:00	WG2131988
Toluene	ND	J3	0.00500	1	09/14/2023 09:00	WG2131988
1,2,3-Trichlorobenzene	ND		0.0125	1	09/14/2023 09:00	WG2131988
1,2,4-Trichlorobenzene	ND		0.0125	1	09/14/2023 09:00	WG2131988
1,1,1-Trichloroethane	ND		0.00250	1	09/14/2023 09:00	WG2131988



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

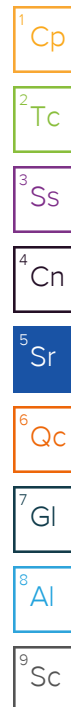
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	ND	<u>J3</u>	0.00250	1	09/14/2023 09:00	WG2131988
Trichloroethene	ND		0.00100	1	09/14/2023 09:00	WG2131988
Trichlorofluoromethane	ND		0.00250	1	09/14/2023 09:00	WG2131988
1,2,3-Trichloropropane	ND		0.0125	1	09/14/2023 09:00	WG2131988
1,2,4-Trimethylbenzene	ND		0.00500	1	09/14/2023 09:00	WG2131988
1,2,3-Trimethylbenzene	ND		0.00500	1	09/14/2023 09:00	WG2131988
1,3,5-Trimethylbenzene	ND		0.00500	1	09/14/2023 09:00	WG2131988
Vinyl chloride	ND	<u>J3</u>	0.00250	1	09/14/2023 09:00	WG2131988
Xylenes, Total	ND		0.00650	1	09/14/2023 09:00	WG2131988
(S) Toluene-d8	97.1		75.0-131		09/14/2023 09:00	WG2131988
(S) 4-Bromofluorobenzene	102		67.0-138		09/14/2023 09:00	WG2131988
(S) 1,2-Dichloroethane-d4	97.4		70.0-130		09/14/2023 09:00	WG2131988

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	12.6		8.00	2	09/16/2023 15:58	WG2132048
C28-C36 Motor Oil Range	39.7		8.00	2	09/16/2023 15:58	WG2132048
(S) o-Terphenyl	49.8		18.0-148		09/16/2023 15:58	WG2132048

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/16/2023 06:44	WG2132065
Acenaphthene	ND		0.00600	1	09/16/2023 06:44	WG2132065
Acenaphthylene	ND		0.00600	1	09/16/2023 06:44	WG2132065
Benzo(a)anthracene	ND		0.00600	1	09/16/2023 06:44	WG2132065
Benzo(a)pyrene	ND		0.00600	1	09/16/2023 06:44	WG2132065
Benzo(b)fluoranthene	ND		0.00600	1	09/16/2023 06:44	WG2132065
Benzo(g,h,i)perylene	ND		0.00600	1	09/16/2023 06:44	WG2132065
Benzo(k)fluoranthene	ND		0.00600	1	09/16/2023 06:44	WG2132065
Chrysene	ND		0.00600	1	09/16/2023 06:44	WG2132065
Dibenz(a,h)anthracene	ND		0.00600	1	09/16/2023 06:44	WG2132065
Fluoranthene	ND		0.00600	1	09/16/2023 06:44	WG2132065
Fluorene	ND		0.00600	1	09/16/2023 06:44	WG2132065
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/16/2023 06:44	WG2132065
Naphthalene	ND		0.0200	1	09/16/2023 06:44	WG2132065
Phenanthrene	ND		0.00600	1	09/16/2023 06:44	WG2132065
Pyrene	ND		0.00600	1	09/16/2023 06:44	WG2132065
1-Methylnaphthalene	ND		0.0200	1	09/16/2023 06:44	WG2132065
2-Methylnaphthalene	ND		0.0200	1	09/16/2023 06:44	WG2132065
2-Chloronaphthalene	ND		0.0200	1	09/16/2023 06:44	WG2132065
(S) p-Terphenyl-d14	83.4		23.0-120		09/16/2023 06:44	WG2132065
(S) Nitrobenzene-d5	87.3		14.0-149		09/16/2023 06:44	WG2132065
(S) 2-Fluorobiphenyl	78.6		34.0-125		09/16/2023 06:44	WG2132065



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.237		1	09/12/2023 14:49	WG2130085

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		1.00	1	09/13/2023 11:42	WG2130680

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.22	T8	1	09/14/2023 12:30	WG2131713

Sample Narrative:

L1654165-06 WG2131713: 8.22 at 20.6C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	258		10.0	1	09/14/2023 12:06	WG2131656

Sample Narrative:

L1654165-06 WG2131656: at 25C

Metals (ICP) by Method 6010B-NE493 Ch 2

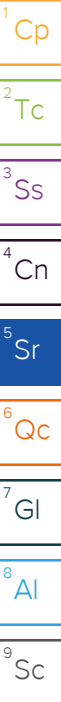
Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.360		0.200	1	09/12/2023 12:03	WG2130158

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.30		1.00	5	09/16/2023 15:00	WG2131331
Barium	142		2.50	5	09/16/2023 15:00	WG2131331
Cadmium	ND		1.00	5	09/16/2023 15:00	WG2131331
Copper	12.2		5.00	5	09/16/2023 15:00	WG2131331
Lead	9.41		2.00	5	09/16/2023 15:00	WG2131331
Nickel	11.0		2.50	5	09/16/2023 15:00	WG2131331
Selenium	ND		2.50	5	09/16/2023 15:00	WG2131331
Silver	ND		0.500	5	09/16/2023 15:00	WG2131331
Zinc	38.6		25.0	5	09/16/2023 15:00	WG2131331

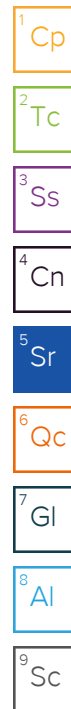
Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	09/15/2023 06:37	WG2132618
(S) a,a,a-Trifluorotoluene(FID)	85.7		77.0-120		09/15/2023 06:37	WG2132618



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND	J3	0.0500	1	09/14/2023 09:20	WG2131988
Acrylonitrile	ND		0.0125	1	09/14/2023 09:20	WG2131988
Benzene	ND		0.00100	1	09/14/2023 09:20	WG2131988
Bromobenzene	ND		0.0125	1	09/14/2023 09:20	WG2131988
Bromodichloromethane	ND	J3	0.00250	1	09/14/2023 09:20	WG2131988
Bromoform	ND		0.0250	1	09/14/2023 09:20	WG2131988
Bromomethane	ND	J3	0.0125	1	09/14/2023 09:20	WG2131988
n-Butylbenzene	ND		0.0125	1	09/14/2023 09:20	WG2131988
sec-Butylbenzene	ND		0.0125	1	09/14/2023 09:20	WG2131988
tert-Butylbenzene	ND		0.00500	1	09/14/2023 09:20	WG2131988
Carbon tetrachloride	ND		0.00500	1	09/14/2023 09:20	WG2131988
Chlorobenzene	ND		0.00250	1	09/14/2023 09:20	WG2131988
Chlorodibromomethane	ND		0.00250	1	09/14/2023 09:20	WG2131988
Chloroethane	ND		0.00500	1	09/14/2023 09:20	WG2131988
Chloroform	ND		0.00250	1	09/14/2023 09:20	WG2131988
Chloromethane	ND	J3	0.0125	1	09/14/2023 09:20	WG2131988
2-Chlorotoluene	ND		0.00250	1	09/14/2023 09:20	WG2131988
4-Chlorotoluene	ND		0.00500	1	09/14/2023 09:20	WG2131988
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	09/14/2023 09:20	WG2131988
1,2-Dibromoethane	ND		0.00250	1	09/14/2023 09:20	WG2131988
Dibromomethane	ND	J3	0.00500	1	09/14/2023 09:20	WG2131988
1,2-Dichlorobenzene	ND		0.00500	1	09/14/2023 09:20	WG2131988
1,3-Dichlorobenzene	ND		0.00500	1	09/14/2023 09:20	WG2131988
1,4-Dichlorobenzene	ND		0.00500	1	09/14/2023 09:20	WG2131988
Dichlorodifluoromethane	ND	J3	0.00250	1	09/14/2023 09:20	WG2131988
1,1-Dichloroethane	ND		0.00250	1	09/14/2023 09:20	WG2131988
1,2-Dichloroethane	ND		0.00250	1	09/14/2023 09:20	WG2131988
1,1-Dichloroethene	ND		0.00250	1	09/14/2023 09:20	WG2131988
cis-1,2-Dichloroethene	ND		0.00250	1	09/14/2023 09:20	WG2131988
trans-1,2-Dichloroethene	ND		0.00500	1	09/14/2023 09:20	WG2131988
1,2-Dichloropropane	ND		0.00500	1	09/14/2023 09:20	WG2131988
1,1-Dichloropropene	ND		0.00250	1	09/14/2023 09:20	WG2131988
1,3-Dichloropropane	ND	J4	0.00500	1	09/14/2023 09:20	WG2131988
cis-1,3-Dichloropropene	ND	J3	0.00250	1	09/14/2023 09:20	WG2131988
trans-1,3-Dichloropropene	ND		0.00500	1	09/14/2023 09:20	WG2131988
2,2-Dichloropropane	ND		0.00250	1	09/14/2023 09:20	WG2131988
Di-isopropyl ether	ND		0.00100	1	09/14/2023 09:20	WG2131988
Ethylbenzene	ND		0.00250	1	09/14/2023 09:20	WG2131988
Hexachloro-1,3-butadiene	ND		0.0250	1	09/14/2023 09:20	WG2131988
Isopropylbenzene	ND		0.00250	1	09/14/2023 09:20	WG2131988
p-Isopropyltoluene	ND		0.00500	1	09/14/2023 09:20	WG2131988
2-Butanone (MEK)	ND		0.100	1	09/14/2023 09:20	WG2131988
Methylene Chloride	ND		0.0250	1	09/14/2023 09:20	WG2131988
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	09/14/2023 09:20	WG2131988
Methyl tert-butyl ether	ND		0.00100	1	09/14/2023 09:20	WG2131988
Naphthalene	ND		0.0125	1	09/14/2023 09:20	WG2131988
n-Propylbenzene	ND		0.00500	1	09/14/2023 09:20	WG2131988
Styrene	ND		0.0125	1	09/14/2023 09:20	WG2131988
1,1,1,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 09:20	WG2131988
1,1,2,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 09:20	WG2131988
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	09/14/2023 09:20	WG2131988
Tetrachloroethene	ND		0.00250	1	09/14/2023 09:20	WG2131988
Toluene	ND	J3	0.00500	1	09/14/2023 09:20	WG2131988
1,2,3-Trichlorobenzene	ND		0.0125	1	09/14/2023 09:20	WG2131988
1,2,4-Trichlorobenzene	ND		0.0125	1	09/14/2023 09:20	WG2131988
1,1,1-Trichloroethane	ND		0.00250	1	09/14/2023 09:20	WG2131988



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

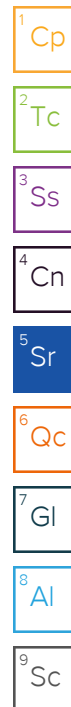
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	ND	J3	0.00250	1	09/14/2023 09:20	WG2131988
Trichloroethene	ND		0.00100	1	09/14/2023 09:20	WG2131988
Trichlorofluoromethane	ND		0.00250	1	09/14/2023 09:20	WG2131988
1,2,3-Trichloropropane	ND		0.0125	1	09/14/2023 09:20	WG2131988
1,2,4-Trimethylbenzene	ND		0.00500	1	09/14/2023 09:20	WG2131988
1,2,3-Trimethylbenzene	ND		0.00500	1	09/14/2023 09:20	WG2131988
1,3,5-Trimethylbenzene	ND		0.00500	1	09/14/2023 09:20	WG2131988
Vinyl chloride	ND	J3	0.00250	1	09/14/2023 09:20	WG2131988
Xylenes, Total	ND		0.00650	1	09/14/2023 09:20	WG2131988
(S) Toluene-d8	105		75.0-131		09/14/2023 09:20	WG2131988
(S) 4-Bromofluorobenzene	104		67.0-138		09/14/2023 09:20	WG2131988
(S) 1,2-Dichloroethane-d4	93.5		70.0-130		09/14/2023 09:20	WG2131988

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	09/16/2023 13:19	WG2132048
C28-C36 Motor Oil Range	15.8		4.00	1	09/16/2023 13:19	WG2132048
(S) o-Terphenyl	50.6		18.0-148		09/16/2023 13:19	WG2132048

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/16/2023 07:01	WG2132065
Acenaphthene	ND		0.00600	1	09/16/2023 07:01	WG2132065
Acenaphthylene	ND		0.00600	1	09/16/2023 07:01	WG2132065
Benzo(a)anthracene	ND		0.00600	1	09/16/2023 07:01	WG2132065
Benzo(a)pyrene	ND		0.00600	1	09/16/2023 07:01	WG2132065
Benzo(b)fluoranthene	0.00684		0.00600	1	09/16/2023 07:01	WG2132065
Benzo(g,h,i)perylene	ND		0.00600	1	09/16/2023 07:01	WG2132065
Benzo(k)fluoranthene	ND		0.00600	1	09/16/2023 07:01	WG2132065
Chrysene	ND		0.00600	1	09/16/2023 07:01	WG2132065
Dibenz(a,h)anthracene	ND		0.00600	1	09/16/2023 07:01	WG2132065
Fluoranthene	ND		0.00600	1	09/16/2023 07:01	WG2132065
Fluorene	ND		0.00600	1	09/16/2023 07:01	WG2132065
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/16/2023 07:01	WG2132065
Naphthalene	ND		0.0200	1	09/16/2023 07:01	WG2132065
Phenanthrene	ND		0.00600	1	09/16/2023 07:01	WG2132065
Pyrene	ND		0.00600	1	09/16/2023 07:01	WG2132065
1-Methylnaphthalene	ND		0.0200	1	09/16/2023 07:01	WG2132065
2-Methylnaphthalene	ND		0.0200	1	09/16/2023 07:01	WG2132065
2-Chloronaphthalene	ND		0.0200	1	09/16/2023 07:01	WG2132065
(S) p-Terphenyl-d14	92.0		23.0-120		09/16/2023 07:01	WG2132065
(S) Nitrobenzene-d5	84.0		14.0-149		09/16/2023 07:01	WG2132065
(S) 2-Fluorobiphenyl	80.5		34.0-125		09/16/2023 07:01	WG2132065



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.126		1	09/12/2023 14:52	WG2130085

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		1.00	1	09/13/2023 11:47	WG2130680

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.04	T8	1	09/14/2023 12:30	WG2131713

Sample Narrative:

L1654165-07 WG2131713: 8.04 at 21.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	274		10.0	1	09/14/2023 12:06	WG2131656

Sample Narrative:

L1654165-07 WG2131656: at 25C

Metals (ICP) by Method 6010B-NE493 Ch 2

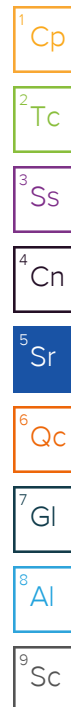
Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.416		0.200	1	09/12/2023 12:06	WG2130158

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.46		1.00	5	09/16/2023 15:04	WG2131331
Barium	140		2.50	5	09/16/2023 15:04	WG2131331
Cadmium	ND		1.00	5	09/16/2023 15:04	WG2131331
Copper	13.2		5.00	5	09/16/2023 15:04	WG2131331
Lead	12.4		2.00	5	09/16/2023 15:04	WG2131331
Nickel	13.4		2.50	5	09/16/2023 15:04	WG2131331
Selenium	ND		2.50	5	09/16/2023 15:04	WG2131331
Silver	ND		0.500	5	09/16/2023 15:04	WG2131331
Zinc	46.3		25.0	5	09/16/2023 15:04	WG2131331

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	09/15/2023 07:01	WG2132618
(S) a,a,a-Trifluorotoluene(FID)	86.2		77.0-120		09/15/2023 07:01	WG2132618



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND	J3	0.0500	1	09/14/2023 09:38	WG2131988
Acrylonitrile	ND		0.0125	1	09/14/2023 09:38	WG2131988
Benzene	ND		0.00100	1	09/14/2023 09:38	WG2131988
Bromobenzene	ND		0.0125	1	09/14/2023 09:38	WG2131988
Bromodichloromethane	ND	J3	0.00250	1	09/14/2023 09:38	WG2131988
Bromoform	ND		0.0250	1	09/14/2023 09:38	WG2131988
Bromomethane	ND	J3	0.0125	1	09/14/2023 09:38	WG2131988
n-Butylbenzene	ND		0.0125	1	09/14/2023 09:38	WG2131988
sec-Butylbenzene	ND		0.0125	1	09/14/2023 09:38	WG2131988
tert-Butylbenzene	ND		0.00500	1	09/14/2023 09:38	WG2131988
Carbon tetrachloride	ND		0.00500	1	09/14/2023 09:38	WG2131988
Chlorobenzene	ND		0.00250	1	09/14/2023 09:38	WG2131988
Chlorodibromomethane	ND		0.00250	1	09/14/2023 09:38	WG2131988
Chloroethane	ND		0.00500	1	09/14/2023 09:38	WG2131988
Chloroform	ND		0.00250	1	09/14/2023 09:38	WG2131988
Chloromethane	ND	J3	0.0125	1	09/14/2023 09:38	WG2131988
2-Chlorotoluene	ND		0.00250	1	09/14/2023 09:38	WG2131988
4-Chlorotoluene	ND		0.00500	1	09/14/2023 09:38	WG2131988
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	09/14/2023 09:38	WG2131988
1,2-Dibromoethane	ND		0.00250	1	09/14/2023 09:38	WG2131988
Dibromomethane	ND	J3	0.00500	1	09/14/2023 09:38	WG2131988
1,2-Dichlorobenzene	ND		0.00500	1	09/14/2023 09:38	WG2131988
1,3-Dichlorobenzene	ND		0.00500	1	09/14/2023 09:38	WG2131988
1,4-Dichlorobenzene	ND		0.00500	1	09/14/2023 09:38	WG2131988
Dichlorodifluoromethane	ND	J3	0.00250	1	09/14/2023 09:38	WG2131988
1,1-Dichloroethane	ND		0.00250	1	09/14/2023 09:38	WG2131988
1,2-Dichloroethane	ND		0.00250	1	09/14/2023 09:38	WG2131988
1,1-Dichloroethene	ND		0.00250	1	09/14/2023 09:38	WG2131988
cis-1,2-Dichloroethene	ND		0.00250	1	09/14/2023 09:38	WG2131988
trans-1,2-Dichloroethene	ND		0.00500	1	09/14/2023 09:38	WG2131988
1,2-Dichloropropane	ND		0.00500	1	09/14/2023 09:38	WG2131988
1,1-Dichloropropene	ND		0.00250	1	09/14/2023 09:38	WG2131988
1,3-Dichloropropane	ND	J4	0.00500	1	09/14/2023 09:38	WG2131988
cis-1,3-Dichloropropene	ND	J3	0.00250	1	09/14/2023 09:38	WG2131988
trans-1,3-Dichloropropene	ND		0.00500	1	09/14/2023 09:38	WG2131988
2,2-Dichloropropane	ND		0.00250	1	09/14/2023 09:38	WG2131988
Di-isopropyl ether	ND		0.00100	1	09/14/2023 09:38	WG2131988
Ethylbenzene	ND		0.00250	1	09/14/2023 09:38	WG2131988
Hexachloro-1,3-butadiene	ND		0.0250	1	09/14/2023 09:38	WG2131988
Isopropylbenzene	ND		0.00250	1	09/14/2023 09:38	WG2131988
p-Isopropyltoluene	ND		0.00500	1	09/14/2023 09:38	WG2131988
2-Butanone (MEK)	ND		0.100	1	09/14/2023 09:38	WG2131988
Methylene Chloride	ND		0.0250	1	09/14/2023 09:38	WG2131988
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	09/14/2023 09:38	WG2131988
Methyl tert-butyl ether	ND		0.00100	1	09/14/2023 09:38	WG2131988
Naphthalene	ND		0.0125	1	09/14/2023 09:38	WG2131988
n-Propylbenzene	ND		0.00500	1	09/14/2023 09:38	WG2131988
Styrene	ND		0.0125	1	09/14/2023 09:38	WG2131988
1,1,1,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 09:38	WG2131988
1,1,2,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 09:38	WG2131988
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	09/14/2023 09:38	WG2131988
Tetrachloroethene	ND		0.00250	1	09/14/2023 09:38	WG2131988
Toluene	ND	J3	0.00500	1	09/14/2023 09:38	WG2131988
1,2,3-Trichlorobenzene	ND		0.0125	1	09/14/2023 09:38	WG2131988
1,2,4-Trichlorobenzene	ND		0.0125	1	09/14/2023 09:38	WG2131988
1,1,1-Trichloroethane	ND		0.00250	1	09/14/2023 09:38	WG2131988

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

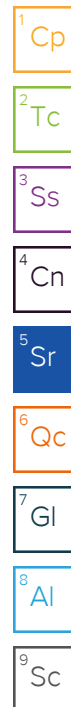
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	ND	<u>J3</u>	0.00250	1	09/14/2023 09:38	WG2131988
Trichloroethene	ND		0.00100	1	09/14/2023 09:38	WG2131988
Trichlorofluoromethane	ND		0.00250	1	09/14/2023 09:38	WG2131988
1,2,3-Trichloropropane	ND		0.0125	1	09/14/2023 09:38	WG2131988
1,2,4-Trimethylbenzene	ND		0.00500	1	09/14/2023 09:38	WG2131988
1,2,3-Trimethylbenzene	ND		0.00500	1	09/14/2023 09:38	WG2131988
1,3,5-Trimethylbenzene	ND		0.00500	1	09/14/2023 09:38	WG2131988
Vinyl chloride	ND	<u>J3</u>	0.00250	1	09/14/2023 09:38	WG2131988
Xylenes, Total	ND		0.00650	1	09/14/2023 09:38	WG2131988
(S) Toluene-d8	104		75.0-131		09/14/2023 09:38	WG2131988
(S) 4-Bromofluorobenzene	101		67.0-138		09/14/2023 09:38	WG2131988
(S) 1,2-Dichloroethane-d4	86.1		70.0-130		09/14/2023 09:38	WG2131988

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	09/16/2023 13:32	WG2132048
C28-C36 Motor Oil Range	16.6		4.00	1	09/16/2023 13:32	WG2132048
(S) o-Terphenyl	45.9		18.0-148		09/16/2023 13:32	WG2132048

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/16/2023 11:56	WG2132066
Acenaphthene	ND		0.00600	1	09/16/2023 11:56	WG2132066
Acenaphthylene	ND		0.00600	1	09/16/2023 11:56	WG2132066
Benzo(a)anthracene	ND		0.00600	1	09/16/2023 11:56	WG2132066
Benzo(a)pyrene	ND		0.00600	1	09/16/2023 11:56	WG2132066
Benzo(b)fluoranthene	ND		0.00600	1	09/16/2023 11:56	WG2132066
Benzo(g,h,i)perylene	ND		0.00600	1	09/16/2023 11:56	WG2132066
Benzo(k)fluoranthene	ND		0.00600	1	09/16/2023 11:56	WG2132066
Chrysene	ND		0.00600	1	09/16/2023 11:56	WG2132066
Dibenz(a,h)anthracene	ND		0.00600	1	09/16/2023 11:56	WG2132066
Fluoranthene	ND		0.00600	1	09/16/2023 11:56	WG2132066
Fluorene	ND		0.00600	1	09/16/2023 11:56	WG2132066
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/16/2023 11:56	WG2132066
Naphthalene	ND		0.0200	1	09/16/2023 11:56	WG2132066
Phenanthrene	ND		0.00600	1	09/16/2023 11:56	WG2132066
Pyrene	ND		0.00600	1	09/16/2023 11:56	WG2132066
1-Methylnaphthalene	ND		0.0200	1	09/16/2023 11:56	WG2132066
2-Methylnaphthalene	ND		0.0200	1	09/16/2023 11:56	WG2132066
2-Chloronaphthalene	ND		0.0200	1	09/16/2023 11:56	WG2132066
(S) p-Terphenyl-d14	65.0		23.0-120		09/16/2023 11:56	WG2132066
(S) Nitrobenzene-d5	73.5		14.0-149		09/16/2023 11:56	WG2132066
(S) 2-Fluorobiphenyl	58.8		34.0-125		09/16/2023 11:56	WG2132066



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.0805		1	09/12/2023 14:55	WG2130085

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		1.00	1	09/13/2023 12:02	WG2130680

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	RDL	Dilution	Analysis date / time	Batch
pH	7.95	T8		1	09/14/2023 12:30	WG2131713

Sample Narrative:

L1654165-08 WG2131713: 7.95 at 21.2C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	270		10.0	1	09/14/2023 12:06	WG2131656

Sample Narrative:

L1654165-08 WG2131656: at 25C

Metals (ICP) by Method 6010B-NE493 Ch 2

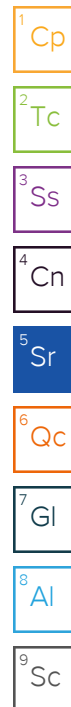
Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.380		0.200	1	09/12/2023 12:09	WG2130158

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.82		1.00	5	09/15/2023 15:58	WG2131329
Barium	170		2.50	5	09/15/2023 15:58	WG2131329
Cadmium	ND		1.00	5	09/15/2023 15:58	WG2131329
Copper	11.7		5.00	5	09/15/2023 15:58	WG2131329
Lead	11.2		2.00	5	09/15/2023 15:58	WG2131329
Nickel	13.8		2.50	5	09/15/2023 15:58	WG2131329
Selenium	ND		2.50	5	09/15/2023 15:58	WG2131329
Silver	ND		0.500	5	09/15/2023 15:58	WG2131329
Zinc	47.6		25.0	5	09/15/2023 15:58	WG2131329

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	09/15/2023 07:24	WG2132618
(S) a,a,a-Trifluorotoluene(FID)	86.3		77.0-120		09/15/2023 07:24	WG2132618



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND	J3	0.0500	1	09/14/2023 09:57	WG2131988
Acrylonitrile	ND		0.0125	1	09/14/2023 09:57	WG2131988
Benzene	ND		0.00100	1	09/14/2023 09:57	WG2131988
Bromobenzene	ND		0.0125	1	09/14/2023 09:57	WG2131988
Bromodichloromethane	ND	J3	0.00250	1	09/14/2023 09:57	WG2131988
Bromoform	ND		0.0250	1	09/14/2023 09:57	WG2131988
Bromomethane	ND	J3	0.0125	1	09/14/2023 09:57	WG2131988
n-Butylbenzene	ND		0.0125	1	09/14/2023 09:57	WG2131988
sec-Butylbenzene	ND		0.0125	1	09/14/2023 09:57	WG2131988
tert-Butylbenzene	ND		0.00500	1	09/14/2023 09:57	WG2131988
Carbon tetrachloride	ND		0.00500	1	09/14/2023 09:57	WG2131988
Chlorobenzene	ND		0.00250	1	09/14/2023 09:57	WG2131988
Chlorodibromomethane	ND		0.00250	1	09/14/2023 09:57	WG2131988
Chloroethane	ND		0.00500	1	09/14/2023 09:57	WG2131988
Chloroform	ND		0.00250	1	09/14/2023 09:57	WG2131988
Chloromethane	ND	J3	0.0125	1	09/14/2023 09:57	WG2131988
2-Chlorotoluene	ND		0.00250	1	09/14/2023 09:57	WG2131988
4-Chlorotoluene	ND		0.00500	1	09/14/2023 09:57	WG2131988
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	09/14/2023 09:57	WG2131988
1,2-Dibromoethane	ND		0.00250	1	09/14/2023 09:57	WG2131988
Dibromomethane	ND	J3	0.00500	1	09/14/2023 09:57	WG2131988
1,2-Dichlorobenzene	ND		0.00500	1	09/14/2023 09:57	WG2131988
1,3-Dichlorobenzene	ND		0.00500	1	09/14/2023 09:57	WG2131988
1,4-Dichlorobenzene	ND		0.00500	1	09/14/2023 09:57	WG2131988
Dichlorodifluoromethane	ND	J3	0.00250	1	09/14/2023 09:57	WG2131988
1,1-Dichloroethane	ND		0.00250	1	09/14/2023 09:57	WG2131988
1,2-Dichloroethane	ND		0.00250	1	09/14/2023 09:57	WG2131988
1,1-Dichloroethene	ND		0.00250	1	09/14/2023 09:57	WG2131988
cis-1,2-Dichloroethene	ND		0.00250	1	09/14/2023 09:57	WG2131988
trans-1,2-Dichloroethene	ND		0.00500	1	09/14/2023 09:57	WG2131988
1,2-Dichloropropane	ND		0.00500	1	09/14/2023 09:57	WG2131988
1,1-Dichloropropene	ND		0.00250	1	09/14/2023 09:57	WG2131988
1,3-Dichloropropane	ND	J4	0.00500	1	09/14/2023 09:57	WG2131988
cis-1,3-Dichloropropene	ND	J3	0.00250	1	09/14/2023 09:57	WG2131988
trans-1,3-Dichloropropene	ND		0.00500	1	09/14/2023 09:57	WG2131988
2,2-Dichloropropane	ND		0.00250	1	09/14/2023 09:57	WG2131988
Di-isopropyl ether	ND		0.00100	1	09/14/2023 09:57	WG2131988
Ethylbenzene	ND		0.00250	1	09/14/2023 09:57	WG2131988
Hexachloro-1,3-butadiene	ND		0.0250	1	09/14/2023 09:57	WG2131988
Isopropylbenzene	ND		0.00250	1	09/14/2023 09:57	WG2131988
p-Isopropyltoluene	ND		0.00500	1	09/14/2023 09:57	WG2131988
2-Butanone (MEK)	ND		0.100	1	09/14/2023 09:57	WG2131988
Methylene Chloride	ND		0.0250	1	09/14/2023 09:57	WG2131988
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	09/14/2023 09:57	WG2131988
Methyl tert-butyl ether	ND		0.00100	1	09/14/2023 09:57	WG2131988
Naphthalene	ND		0.0125	1	09/14/2023 09:57	WG2131988
n-Propylbenzene	ND		0.00500	1	09/14/2023 09:57	WG2131988
Styrene	ND		0.0125	1	09/14/2023 09:57	WG2131988
1,1,1,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 09:57	WG2131988
1,1,2,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 09:57	WG2131988
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	09/14/2023 09:57	WG2131988
Tetrachloroethene	ND		0.00250	1	09/14/2023 09:57	WG2131988
Toluene	ND	J3	0.00500	1	09/14/2023 09:57	WG2131988
1,2,3-Trichlorobenzene	ND		0.0125	1	09/14/2023 09:57	WG2131988
1,2,4-Trichlorobenzene	ND		0.0125	1	09/14/2023 09:57	WG2131988
1,1,1-Trichloroethane	ND		0.00250	1	09/14/2023 09:57	WG2131988

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 mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	ND	<u>J3</u>	0.00250	1	09/14/2023 09:57	WG2131988
Trichloroethene	ND		0.00100	1	09/14/2023 09:57	WG2131988
Trichlorofluoromethane	ND		0.00250	1	09/14/2023 09:57	WG2131988
1,2,3-Trichloropropane	ND		0.0125	1	09/14/2023 09:57	WG2131988
1,2,4-Trimethylbenzene	ND		0.00500	1	09/14/2023 09:57	WG2131988
1,2,3-Trimethylbenzene	ND		0.00500	1	09/14/2023 09:57	WG2131988
1,3,5-Trimethylbenzene	ND		0.00500	1	09/14/2023 09:57	WG2131988
Vinyl chloride	ND	<u>J3</u>	0.00250	1	09/14/2023 09:57	WG2131988
Xylenes, Total	ND		0.00650	1	09/14/2023 09:57	WG2131988
(S) Toluene-d8	105		75.0-131		09/14/2023 09:57	WG2131988
(S) 4-Bromofluorobenzene	103		67.0-138		09/14/2023 09:57	WG2131988
(S) 1,2-Dichloroethane-d4	90.6		70.0-130		09/14/2023 09:57	WG2131988

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	09/16/2023 13:07	WG2132048
C28-C36 Motor Oil Range	12.8		4.00	1	09/16/2023 13:07	WG2132048
(S) o-Terphenyl	52.4		18.0-148		09/16/2023 13:07	WG2132048

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/16/2023 12:14	WG2132066
Acenaphthene	ND		0.00600	1	09/16/2023 12:14	WG2132066
Acenaphthylene	ND		0.00600	1	09/16/2023 12:14	WG2132066
Benzo(a)anthracene	ND		0.00600	1	09/16/2023 12:14	WG2132066
Benzo(a)pyrene	ND		0.00600	1	09/16/2023 12:14	WG2132066
Benzo(b)fluoranthene	ND		0.00600	1	09/16/2023 12:14	WG2132066
Benzo(g,h,i)perylene	ND		0.00600	1	09/16/2023 12:14	WG2132066
Benzo(k)fluoranthene	ND		0.00600	1	09/16/2023 12:14	WG2132066
Chrysene	ND		0.00600	1	09/16/2023 12:14	WG2132066
Dibenz(a,h)anthracene	ND		0.00600	1	09/16/2023 12:14	WG2132066
Fluoranthene	ND		0.00600	1	09/16/2023 12:14	WG2132066
Fluorene	ND		0.00600	1	09/16/2023 12:14	WG2132066
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/16/2023 12:14	WG2132066
Naphthalene	ND		0.0200	1	09/16/2023 12:14	WG2132066
Phenanthrene	ND		0.00600	1	09/16/2023 12:14	WG2132066
Pyrene	ND		0.00600	1	09/16/2023 12:14	WG2132066
1-Methylnaphthalene	ND		0.0200	1	09/16/2023 12:14	WG2132066
2-Methylnaphthalene	ND		0.0200	1	09/16/2023 12:14	WG2132066
2-Chloronaphthalene	ND		0.0200	1	09/16/2023 12:14	WG2132066
(S) p-Terphenyl-d14	80.7		23.0-120		09/16/2023 12:14	WG2132066
(S) Nitrobenzene-d5	82.8		14.0-149		09/16/2023 12:14	WG2132066
(S) 2-Fluorobiphenyl	67.2		34.0-125		09/16/2023 12:14	WG2132066

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.138		1	09/12/2023 14:58	WG2130085

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		1.00	1	09/13/2023 12:07	WG2130680

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.06	T8	1	09/14/2023 12:30	WG2131713

Sample Narrative:

L1654165-09 WG2131713: 8.06 at 21.5C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	224		10.0	1	09/14/2023 12:06	WG2131656

Sample Narrative:

L1654165-09 WG2131656: at 25C

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.446		0.200	1	09/12/2023 12:12	WG2130158

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.42		1.00	5	09/15/2023 16:02	WG2131329
Barium	66.4		2.50	5	09/15/2023 16:02	WG2131329
Cadmium	ND		1.00	5	09/15/2023 16:02	WG2131329
Copper	6.54		5.00	5	09/15/2023 16:02	WG2131329
Lead	6.66		2.00	5	09/15/2023 16:02	WG2131329
Nickel	8.41		2.50	5	09/15/2023 16:02	WG2131329
Selenium	ND		2.50	5	09/15/2023 16:02	WG2131329
Silver	ND		0.500	5	09/15/2023 16:02	WG2131329
Zinc	28.1		25.0	5	09/15/2023 16:02	WG2131329

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	09/15/2023 00:00	WG2132620
(S) a,a,a-Trifluorotoluene(FID)	88.6		77.0-120		09/15/2023 00:00	WG2132620



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND	J3	0.0500	1	09/14/2023 10:16	WG2131988
Acrylonitrile	ND		0.0125	1	09/14/2023 10:16	WG2131988
Benzene	ND		0.00100	1	09/14/2023 10:16	WG2131988
Bromobenzene	ND		0.0125	1	09/14/2023 10:16	WG2131988
Bromodichloromethane	ND	J3	0.00250	1	09/14/2023 10:16	WG2131988
Bromoform	ND		0.0250	1	09/14/2023 10:16	WG2131988
Bromomethane	ND	J3	0.0125	1	09/14/2023 10:16	WG2131988
n-Butylbenzene	ND		0.0125	1	09/14/2023 10:16	WG2131988
sec-Butylbenzene	ND		0.0125	1	09/14/2023 10:16	WG2131988
tert-Butylbenzene	ND		0.00500	1	09/14/2023 10:16	WG2131988
Carbon tetrachloride	ND		0.00500	1	09/14/2023 10:16	WG2131988
Chlorobenzene	ND		0.00250	1	09/14/2023 10:16	WG2131988
Chlorodibromomethane	ND		0.00250	1	09/14/2023 10:16	WG2131988
Chloroethane	ND		0.00500	1	09/14/2023 10:16	WG2131988
Chloroform	ND		0.00250	1	09/14/2023 10:16	WG2131988
Chloromethane	ND	J3	0.0125	1	09/14/2023 10:16	WG2131988
2-Chlorotoluene	ND		0.00250	1	09/14/2023 10:16	WG2131988
4-Chlorotoluene	ND		0.00500	1	09/14/2023 10:16	WG2131988
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	09/14/2023 10:16	WG2131988
1,2-Dibromoethane	ND		0.00250	1	09/14/2023 10:16	WG2131988
Dibromomethane	ND	J3	0.00500	1	09/14/2023 10:16	WG2131988
1,2-Dichlorobenzene	ND		0.00500	1	09/14/2023 10:16	WG2131988
1,3-Dichlorobenzene	ND		0.00500	1	09/14/2023 10:16	WG2131988
1,4-Dichlorobenzene	ND		0.00500	1	09/14/2023 10:16	WG2131988
Dichlorodifluoromethane	ND	J3	0.00250	1	09/14/2023 10:16	WG2131988
1,1-Dichloroethane	ND		0.00250	1	09/14/2023 10:16	WG2131988
1,2-Dichloroethane	ND		0.00250	1	09/14/2023 10:16	WG2131988
1,1-Dichloroethene	ND		0.00250	1	09/14/2023 10:16	WG2131988
cis-1,2-Dichloroethene	ND		0.00250	1	09/14/2023 10:16	WG2131988
trans-1,2-Dichloroethene	ND		0.00500	1	09/14/2023 10:16	WG2131988
1,2-Dichloropropane	ND		0.00500	1	09/14/2023 10:16	WG2131988
1,1-Dichloropropene	ND		0.00250	1	09/14/2023 10:16	WG2131988
1,3-Dichloropropane	ND	J4	0.00500	1	09/14/2023 10:16	WG2131988
cis-1,3-Dichloropropene	ND	J3	0.00250	1	09/14/2023 10:16	WG2131988
trans-1,3-Dichloropropene	ND		0.00500	1	09/14/2023 10:16	WG2131988
2,2-Dichloropropane	ND		0.00250	1	09/14/2023 10:16	WG2131988
Di-isopropyl ether	ND		0.00100	1	09/14/2023 10:16	WG2131988
Ethylbenzene	ND		0.00250	1	09/14/2023 10:16	WG2131988
Hexachloro-1,3-butadiene	ND		0.0250	1	09/14/2023 10:16	WG2131988
Isopropylbenzene	ND		0.00250	1	09/14/2023 10:16	WG2131988
p-Isopropyltoluene	ND		0.00500	1	09/14/2023 10:16	WG2131988
2-Butanone (MEK)	ND		0.100	1	09/14/2023 10:16	WG2131988
Methylene Chloride	ND		0.0250	1	09/14/2023 10:16	WG2131988
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	09/14/2023 10:16	WG2131988
Methyl tert-butyl ether	ND		0.00100	1	09/14/2023 10:16	WG2131988
Naphthalene	ND		0.0125	1	09/14/2023 10:16	WG2131988
n-Propylbenzene	ND		0.00500	1	09/14/2023 10:16	WG2131988
Styrene	ND		0.0125	1	09/14/2023 10:16	WG2131988
1,1,1,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 10:16	WG2131988
1,1,2,2-Tetrachloroethane	ND		0.00250	1	09/14/2023 10:16	WG2131988
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	09/14/2023 10:16	WG2131988
Tetrachloroethene	ND		0.00250	1	09/14/2023 10:16	WG2131988
Toluene	ND	J3	0.00500	1	09/14/2023 10:16	WG2131988
1,2,3-Trichlorobenzene	ND		0.0125	1	09/14/2023 10:16	WG2131988
1,2,4-Trichlorobenzene	ND		0.0125	1	09/14/2023 10:16	WG2131988
1,1,1-Trichloroethane	ND		0.00250	1	09/14/2023 10:16	WG2131988

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 mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	ND	J3	0.00250	1	09/14/2023 10:16	WG2131988
Trichloroethene	ND		0.00100	1	09/14/2023 10:16	WG2131988
Trichlorofluoromethane	ND		0.00250	1	09/14/2023 10:16	WG2131988
1,2,3-Trichloropropane	ND		0.0125	1	09/14/2023 10:16	WG2131988
1,2,4-Trimethylbenzene	ND		0.00500	1	09/14/2023 10:16	WG2131988
1,2,3-Trimethylbenzene	ND		0.00500	1	09/14/2023 10:16	WG2131988
1,3,5-Trimethylbenzene	ND		0.00500	1	09/14/2023 10:16	WG2131988
Vinyl chloride	ND	J3	0.00250	1	09/14/2023 10:16	WG2131988
Xylenes, Total	ND		0.00650	1	09/14/2023 10:16	WG2131988
(S) Toluene-d8	106		75.0-131		09/14/2023 10:16	WG2131988
(S) 4-Bromofluorobenzene	104		67.0-138		09/14/2023 10:16	WG2131988
(S) 1,2-Dichloroethane-d4	91.3		70.0-130		09/14/2023 10:16	WG2131988

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		8.00	2	09/16/2023 15:58	WG2132048
C28-C36 Motor Oil Range	13.4		8.00	2	09/16/2023 15:58	WG2132048
(S) o-Terphenyl	62.1		18.0-148		09/16/2023 15:58	WG2132048

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/16/2023 12:31	WG2132066
Acenaphthene	ND		0.00600	1	09/16/2023 12:31	WG2132066
Acenaphthylene	ND		0.00600	1	09/16/2023 12:31	WG2132066
Benzo(a)anthracene	ND		0.00600	1	09/16/2023 12:31	WG2132066
Benzo(a)pyrene	ND		0.00600	1	09/16/2023 12:31	WG2132066
Benzo(b)fluoranthene	ND		0.00600	1	09/16/2023 12:31	WG2132066
Benzo(g,h,i)perylene	ND		0.00600	1	09/16/2023 12:31	WG2132066
Benzo(k)fluoranthene	ND		0.00600	1	09/16/2023 12:31	WG2132066
Chrysene	ND		0.00600	1	09/16/2023 12:31	WG2132066
Dibenz(a,h)anthracene	ND		0.00600	1	09/16/2023 12:31	WG2132066
Fluoranthene	ND		0.00600	1	09/16/2023 12:31	WG2132066
Fluorene	ND		0.00600	1	09/16/2023 12:31	WG2132066
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/16/2023 12:31	WG2132066
Naphthalene	ND		0.0200	1	09/16/2023 12:31	WG2132066
Phenanthrene	ND		0.00600	1	09/16/2023 12:31	WG2132066
Pyrene	ND		0.00600	1	09/16/2023 12:31	WG2132066
1-Methylnaphthalene	ND		0.0200	1	09/16/2023 12:31	WG2132066
2-Methylnaphthalene	ND		0.0200	1	09/16/2023 12:31	WG2132066
2-Chloronaphthalene	ND		0.0200	1	09/16/2023 12:31	WG2132066
(S) p-Terphenyl-d14	81.3		23.0-120		09/16/2023 12:31	WG2132066
(S) Nitrobenzene-d5	69.7		14.0-149		09/16/2023 12:31	WG2132066
(S) 2-Fluorobiphenyl	57.8		34.0-125		09/16/2023 12:31	WG2132066



Method Blank (MB)

(MB) R3972553-1 09/13/23 09:56

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Hexavalent Chromium	U		0.255	1.00

L1654165-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1654165-01 09/13/23 11:16 • (DUP) R3972553-7 09/13/23 11:21

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Hexavalent Chromium	ND	ND	1	0.000		20

L1654329-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1654329-02 09/13/23 12:18 • (DUP) R3972553-8 09/13/23 12:23

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Hexavalent Chromium	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3972553-2 09/13/23 10:03

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Hexavalent Chromium	10.0	11.0	110	80.0-120	

L1654014-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1654014-06 09/13/23 10:29 • (MS) R3972553-3 09/13/23 10:34 • (MSD) R3972553-4 09/13/23 10:39

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Hexavalent Chromium	20.0	ND	3.99	3.05	19.9	15.3	1	75.0-125	J6	J3 J6	26.5	20

L1654014-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L1654014-06 09/13/23 10:29 • (MS) R3972553-5 09/13/23 10:44

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/kg	mg/kg	mg/kg	%		%	
Hexavalent Chromium	646	ND	600	92.8	50	75.0-125	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3973671-1 09/15/23 09:48

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Hexavalent Chromium	U		0.255	1.00

L1654319-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1654319-04 09/15/23 11:08 • (DUP) R3973671-7 09/15/23 11:13

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Hexavalent Chromium	ND	ND	1	4.19		20

L1654324-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1654324-03 09/15/23 11:34 • (DUP) R3973671-8 09/15/23 11:39

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Hexavalent Chromium	ND	ND	1	200	P1	20

Laboratory Control Sample (LCS)

(LCS) R3973671-2 09/15/23 09:56

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Hexavalent Chromium	10.0	10.4	104	80.0-120	

L1654313-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1654313-03 09/15/23 10:16 • (MS) R3973671-3 09/15/23 10:22 • (MSD) R3973671-4 09/15/23 10:27

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Hexavalent Chromium	20.0	ND	14.8	7.80	74.1	39.0	1	75.0-125	J6	J3 J6	62.1	20

L1654313-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1654313-03 09/15/23 10:16 • (MS) R3973671-5 09/15/23 10:32

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/kg	mg/kg	mg/kg	%		%	
Hexavalent Chromium	643	ND	669	104	50	75.0-125	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1654054-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1654054-03 09/14/23 08:04 • (DUP) R3972851-2 09/14/23 08:04

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	10.7	10.7	1	0.000		1

Sample Narrative:

OS: 10.68 at 20.9C

DUP: 10.68 at 20.9C



L1654054-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1654054-14 09/14/23 08:04 • (DUP) R3972851-3 09/14/23 08:04

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	7.84	7.83	1	0.128		1

Sample Narrative:

OS: 7.84 at 21.3C

DUP: 7.83 at 21.5C

Laboratory Control Sample (LCS)

(LCS) R3972851-1 09/14/23 08:04

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	su	su	%	%	
pH	10.0	10.0	100	99.0-101	

Sample Narrative:

LCS: 10 at 20.7C

L1654165-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1654165-04 09/14/23 12:30 • (DUP) R3973118-2 09/14/23 12:30

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	8.49	8.50	1	0.118		1

Sample Narrative:

OS: 8.49 at 20.7C

DUP: 8.5 at 20.6C

Laboratory Control Sample (LCS)

(LCS) R3973118-1 09/14/23 12:30

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	su	su	%	%	
pH	10.0	10.0	100	99.0-101	

Sample Narrative:

LCS: 10 at 20.2C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3973058-1 09/14/23 12:06

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1654016-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1654016-02 09/14/23 12:06 • (DUP) R3973058-3 09/14/23 12:06

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	292	282	1	3.66		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1654017-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1654017-05 09/14/23 12:06 • (DUP) R3973058-4 09/14/23 12:06

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	246	240	1	2.30		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3973058-2 09/14/23 12:06

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	732	731	99.9	85.0-115	

Sample Narrative:

LCS: at 25C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3971990-1 09/12/23 11:11

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	U		0.0167	0.200

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

(LCS) R3971990-2 09/12/23 11:14 • (LCSD) R3971990-3 09/12/23 11:17

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.07	1.19	107	119	80.0-120			10.6	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3973753-1 09/15/23 14:36

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.100	1.00
Barium	U		0.152	2.50
Cadmium	U		0.0855	1.00
Copper	U		0.133	5.00
Lead	0.350	U	0.0990	2.00
Nickel	U		0.197	2.50
Selenium	U		0.180	2.50
Silver	U		0.0865	0.500
Zinc	U		0.740	25.0

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

Laboratory Control Sample (LCS)

(LCS) R3973753-2 09/15/23 14:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	102	102	80.0-120	
Barium	100	98.5	98.5	80.0-120	
Cadmium	100	97.8	97.8	80.0-120	
Copper	100	87.1	87.1	80.0-120	
Lead	100	97.2	97.2	80.0-120	
Nickel	100	102	102	80.0-120	
Selenium	100	101	101	80.0-120	
Silver	20.0	19.6	98.2	80.0-120	
Zinc	100	96.9	96.9	80.0-120	

7
Gl

8
Al

9
Sc

L1654074-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1654074-11 09/15/23 14:42 • (MS) R3973753-5 09/15/23 14:52 • (MSD) R3973753-6 09/15/23 14:55

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 %
Arsenic	100	2.20	94.7	95.9	92.5	93.7	5	75.0-125			1.23	20
Barium	100	121	207	235	85.3	113	5	75.0-125			12.6	20
Cadmium	100	ND	92.2	94.2	91.8	93.7	5	75.0-125			2.09	20
Copper	100	14.0	92.4	97.0	78.4	83.1	5	75.0-125			4.88	20
Lead	100	45.8	131	133	84.8	87.6	5	75.0-125			2.09	20
Nickel	100	5.50	96.1	98.4	90.6	92.9	5	75.0-125			2.44	20
Selenium	100	ND	97.1	97.9	96.8	97.6	5	75.0-125			0.834	20
Silver	20.0	ND	18.7	18.8	93.7	94.1	5	75.0-125			0.448	20
Zinc	100	64.6	147	152	82.8	87.3	5	75.0-125			2.96	20

Method Blank (MB)

(MB) R3974160-1 09/16/23 14:14

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.100	1.00
Barium	U		0.152	2.50
Cadmium	U		0.0855	1.00
Copper	U		0.133	5.00
Lead	0.311	U	0.0990	2.00
Nickel	U		0.197	2.50
Selenium	U		0.180	2.50
Silver	U		0.0865	0.500
Zinc	U		0.740	25.0

Laboratory Control Sample (LCS)

(LCS) R3974160-2 09/16/23 14:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	96.6	96.6	80.0-120	
Barium	100	93.5	93.5	80.0-120	
Cadmium	100	96.2	96.2	80.0-120	
Copper	100	91.6	91.6	80.0-120	
Lead	100	88.9	88.9	80.0-120	
Nickel	100	95.9	95.9	80.0-120	
Selenium	100	99.9	99.9	80.0-120	
Silver	20.0	18.9	94.4	80.0-120	
Zinc	100	92.5	92.5	80.0-120	

L1654165-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1654165-05 09/16/23 14:21 • (MS) R3974160-5 09/16/23 14:30 • (MSD) R3974160-6 09/16/23 14:34

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 %
Arsenic	100	4.64	101	107	95.9	103	5	75.0-125			6.45	20
Barium	100	170	261	254	90.7	83.4	5	75.0-125			2.84	20
Cadmium	100	ND	100	108	100	108	5	75.0-125			7.62	20
Copper	100	17.3	113	114	95.3	96.3	5	75.0-125			0.876	20
Lead	100	10.1	99.7	105	89.5	95.2	5	75.0-125			5.51	20
Nickel	100	11.8	107	114	95.0	102	5	75.0-125			6.36	20
Selenium	100	ND	102	110	102	109	5	75.0-125			7.01	20
Silver	20.0	ND	19.7	21.0	97.8	104	5	75.0-125			6.46	20
Zinc	100	44.7	138	138	92.9	92.9	5	75.0-125			0.0367	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3973740-2 09/14/23 22:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	92.6			77.0-120

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

(LCS) R3973740-1 09/14/23 22:08 • (LCSD) R3973740-3 09/14/23 23:18

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 %
TPH (GC/FID) Low Fraction	5.50	5.39	5.58	98.0	101	72.0-127			3.46	20
(S) a,a,a-Trifluorotoluene(FID)				99.4	99.6	77.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3973722-2 09/14/23 23:23

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3973722-1 09/14/23 22:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.52	100	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			102	77.0-120	

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3973323-2 09/14/23 06:05

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
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	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
Isopropylbenzene	U		0.000425	0.00250

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3973323-2 09/14/23 06:05

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
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	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
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
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
1,2,3-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
(S) Toluene-d8	104			75.0-131
(S) 4-Bromofluorobenzene	101			67.0-138
(S) 1,2-Dichloroethane-d4	103			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3973323-1 09/14/23 04:30 • (LCSD) R3973323-3 09/14/23 07:23

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 %
Acetone	0.625	0.640	0.406	102	65.0	10.0-160		J3	44.7	31
Acrylonitrile	0.625	0.470	0.495	75.2	79.2	45.0-153			5.18	22
Benzene	0.125	0.116	0.106	92.8	84.8	70.0-123			9.01	20
Bromobenzene	0.125	0.121	0.112	96.8	89.6	73.0-121			7.73	20
Bromodichloromethane	0.125	0.136	0.107	109	85.6	73.0-121		J3	23.9	20

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

(LCS) R3973323-1 09/14/23 04:30 • (LCSD) R3973323-3 09/14/23 07:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromoform	0.125	0.117	0.102	93.6	81.6	64.0-132			13.7	20
Bromomethane	0.125	0.124	0.0943	99.2	75.4	56.0-147		J3	27.2	20
n-Butylbenzene	0.125	0.101	0.0979	80.8	78.3	68.0-135			3.12	20
sec-Butylbenzene	0.125	0.107	0.0945	85.6	75.6	74.0-130			12.4	20
tert-Butylbenzene	0.125	0.109	0.100	87.2	80.0	75.0-127			8.61	20
Carbon tetrachloride	0.125	0.119	0.100	95.2	80.0	66.0-128			17.4	20
Chlorobenzene	0.125	0.121	0.109	96.8	87.2	76.0-128			10.4	20
Chlorodibromomethane	0.125	0.123	0.107	98.4	85.6	74.0-127			13.9	20
Chloroethane	0.125	0.127	0.111	102	88.8	61.0-134			13.4	20
Chloroform	0.125	0.119	0.105	95.2	84.0	72.0-123			12.5	20
Chloromethane	0.125	0.116	0.0909	92.8	72.7	51.0-138		J3	24.3	20
2-Chlorotoluene	0.125	0.118	0.111	94.4	88.8	75.0-124			6.11	20
4-Chlorotoluene	0.125	0.118	0.110	94.4	88.0	75.0-124			7.02	20
1,2-Dibromo-3-Chloropropane	0.125	0.106	0.0970	84.8	77.6	59.0-130			8.87	20
1,2-Dibromoethane	0.125	0.125	0.113	100	90.4	74.0-128			10.1	20
Dibromomethane	0.125	0.139	0.113	111	90.4	75.0-122		J3	20.6	20
1,2-Dichlorobenzene	0.125	0.115	0.109	92.0	87.2	76.0-124			5.36	20
1,3-Dichlorobenzene	0.125	0.115	0.106	92.0	84.8	76.0-125			8.14	20
1,4-Dichlorobenzene	0.125	0.118	0.0986	94.4	78.9	77.0-121			17.9	20
Dichlorodifluoromethane	0.125	0.148	0.113	118	90.4	43.0-156		J3	26.8	20
1,1-Dichloroethane	0.125	0.110	0.104	88.0	83.2	70.0-127			5.61	20
1,2-Dichloroethane	0.125	0.110	0.0960	88.0	76.8	65.0-131			13.6	20
1,1-Dichloroethene	0.125	0.102	0.0950	81.6	76.0	65.0-131			7.11	20
cis-1,2-Dichloroethene	0.125	0.117	0.110	93.6	88.0	73.0-125			6.17	20
trans-1,2-Dichloroethene	0.125	0.125	0.117	100	93.6	71.0-125			6.61	20
1,2-Dichloropropane	0.125	0.126	0.104	101	83.2	74.0-125			19.1	20
1,1-Dichloropropene	0.125	0.110	0.0959	88.0	76.7	73.0-125			13.7	20
1,3-Dichloropropane	0.125	0.121	0.0995	96.8	79.6	80.0-125		J4	19.5	20
cis-1,3-Dichloropropene	0.125	0.142	0.108	114	86.4	76.0-127		J3	27.2	20
trans-1,3-Dichloropropene	0.125	0.118	0.108	94.4	86.4	73.0-127			8.85	20
2,2-Dichloropropane	0.125	0.110	0.0938	88.0	75.0	59.0-135			15.9	20
Di-isopropyl ether	0.125	0.108	0.104	86.4	83.2	60.0-136			3.77	20
Ethylbenzene	0.125	0.125	0.115	100	92.0	74.0-126			8.33	20
Hexachloro-1,3-butadiene	0.125	0.100	0.0920	80.0	73.6	57.0-150			8.33	20
Isopropylbenzene	0.125	0.129	0.117	103	93.6	72.0-127			9.76	20
p-Isopropyltoluene	0.125	0.102	0.0952	81.6	76.2	72.0-133			6.90	20
2-Butanone (MEK)	0.625	0.517	0.531	82.7	85.0	30.0-160			2.67	24
Methylene Chloride	0.125	0.106	0.100	84.8	80.0	68.0-123			5.83	20
4-Methyl-2-pentanone (MIBK)	0.625	0.585	0.539	93.6	86.2	56.0-143			8.19	20
Methyl tert-butyl ether	0.125	0.115	0.103	92.0	82.4	66.0-132			11.0	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3973323-1 09/14/23 04:30 • (LCSD) R3973323-3 09/14/23 07:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Naphthalene	0.125	0.101	0.0853	80.8	68.2	59.0-130			16.9	20
n-Propylbenzene	0.125	0.124	0.110	99.2	88.0	74.0-126			12.0	20
Styrene	0.125	0.125	0.109	100	87.2	72.0-127			13.7	20
1,1,1,2-Tetrachloroethane	0.125	0.124	0.113	99.2	90.4	74.0-129			9.28	20
1,1,2,2-Tetrachloroethane	0.125	0.110	0.102	88.0	81.6	68.0-128			7.55	20
1,1,2-Trichlorotrifluoroethane	0.125	0.103	0.0983	82.4	78.6	61.0-139			4.67	20
Tetrachloroethene	0.125	0.136	0.126	109	101	70.0-136			7.63	20
Toluene	0.125	0.126	0.0983	101	78.6	75.0-121		J3	24.7	20
1,2,3-Trichlorobenzene	0.125	0.101	0.0976	80.8	78.1	59.0-139			3.42	20
1,2,4-Trichlorobenzene	0.125	0.102	0.0836	81.6	66.9	62.0-137			19.8	20
1,1,1-Trichloroethane	0.125	0.117	0.0990	93.6	79.2	69.0-126			16.7	20
1,1,2-Trichloroethane	0.125	0.131	0.105	105	84.0	78.0-123		J3	22.0	20
Trichloroethene	0.125	0.142	0.117	114	93.6	76.0-126			19.3	20
Trichlorofluoromethane	0.125	0.125	0.113	100	90.4	61.0-142			10.1	20
1,2,3-Trichloropropane	0.125	0.114	0.113	91.2	90.4	67.0-129			0.881	20
1,2,4-Trimethylbenzene	0.125	0.122	0.112	97.6	89.6	70.0-126			8.55	20
1,2,3-Trimethylbenzene	0.125	0.116	0.103	92.8	82.4	74.0-124			11.9	20
1,3,5-Trimethylbenzene	0.125	0.103	0.0947	82.4	75.8	73.0-127			8.40	20
Vinyl chloride	0.125	0.115	0.0905	92.0	72.4	63.0-134		J3	23.8	20
Xylenes, Total	0.375	0.386	0.352	103	93.9	72.0-127			9.21	20
(S) Toluene-d8				107	89.4	75.0-131				
(S) 4-Bromofluorobenzene				105	107	67.0-138				
(S) 1,2-Dichloroethane-d4				101	96.9	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3974091-1 09/16/23 15:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	65.5			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3974091-2 09/16/23 15:22

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	35.1	70.2	50.0-150	
(S) o-Terphenyl			67.7	18.0-148	

L1654165-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1654165-01 09/16/23 21:36 • (MS) R3974091-3 09/16/23 21:49 • (MSD) R3974091-4 09/16/23 22:02

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 %
C10-C28 Diesel Range	48.2	ND	32.1	32.1	66.6	66.6	1	50.0-150			0.000	20
(S) o-Terphenyl					57.8	61.2		18.0-148				

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3974030-1 09/16/23 12:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	57.7			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3974030-2 09/16/23 12:42

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	33.7	67.4	50.0-150	
(S) o-Terphenyl			51.8	18.0-148	

L1654169-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1654169-06 09/16/23 12:42 • (MS) R3974030-3 09/16/23 12:54 • (MSD) R3974030-4 09/16/23 13:07

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 %
C10-C28 Diesel Range	47.1	ND	26.5	28.2	56.3	59.6	1	50.0-150			6.22	20
(S) o-Terphenyl					43.3	38.9		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3974027-2 09/16/23 00:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) p-Terphenyl-d14	86.6			23.0-120
(S) Nitrobenzene-d5	81.4			14.0-149
(S) 2-Fluorobiphenyl	75.9			34.0-125

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3974027-1 09/16/23 00:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0751	93.9	50.0-126	
Acenaphthene	0.0800	0.0690	86.3	50.0-120	
Acenaphthylene	0.0800	0.0771	96.4	50.0-120	
Benzo(a)anthracene	0.0800	0.0841	105	45.0-120	
Benzo(a)pyrene	0.0800	0.0873	109	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0831	104	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0764	95.5	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0815	102	49.0-125	
Chrysene	0.0800	0.0865	108	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0811	101	47.0-125	
Fluoranthene	0.0800	0.0790	98.8	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3974027-1 09/16/23 00:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0771	96.4	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0896	112	46.0-125	
Naphthalene	0.0800	0.0756	94.5	50.0-120	
Phenanthrene	0.0800	0.0784	98.0	47.0-120	
Pyrene	0.0800	0.0895	112	43.0-123	
1-Methylnaphthalene	0.0800	0.0780	97.5	51.0-121	
2-Methylnaphthalene	0.0800	0.0735	91.9	50.0-120	
2-Chloronaphthalene	0.0800	0.0685	85.6	50.0-120	
(S) p-Terphenyl-d14			102	23.0-120	
(S) Nitrobenzene-d5			101	14.0-149	
(S) 2-Fluorobiphenyl			89.9	34.0-125	

L1655782-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1655782-01 09/16/23 01:11 • (MS) R3974027-3 09/16/23 01:29 • (MSD) R3974027-4 09/16/23 01:46

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 %
Anthracene	0.0760	ND	0.0423	0.0460	55.7	58.1	1	10.0-145			8.38	30
Acenaphthene	0.0760	ND	0.0410	0.0442	53.9	55.8	1	14.0-127			7.51	27
Acenaphthylene	0.0760	ND	0.0475	0.0505	62.5	63.8	1	21.0-124			6.12	25
Benzo(a)anthracene	0.0760	ND	0.0496	0.0527	65.3	66.5	1	10.0-139			6.06	30
Benzo(a)pyrene	0.0760	ND	0.0541	0.0598	71.2	75.5	1	10.0-141			10.0	31
Benzo(b)fluoranthene	0.0760	ND	0.0436	0.0495	57.4	62.5	1	10.0-140			12.7	36
Benzo(g,h,i)perylene	0.0760	ND	0.0424	0.0459	55.8	58.0	1	10.0-140			7.93	33
Benzo(k)fluoranthene	0.0760	ND	0.0522	0.0548	68.7	69.2	1	10.0-137			4.86	31
Chrysene	0.0760	ND	0.0579	0.0605	76.2	76.4	1	10.0-145			4.39	30
Dibenz(a,h)anthracene	0.0760	ND	0.0553	0.0561	72.8	70.8	1	10.0-132			1.44	31
Fluoranthene	0.0760	ND	0.0413	0.0443	54.3	55.9	1	10.0-153			7.01	33
Fluorene	0.0760	ND	0.0446	0.0470	58.7	59.3	1	11.0-130			5.24	29
Indeno(1,2,3-cd)pyrene	0.0760	ND	0.0499	0.0553	65.7	69.8	1	10.0-137			10.3	32
Naphthalene	0.0760	ND	0.0519	0.0546	68.3	68.9	1	10.0-135			5.07	27
Phenanthrene	0.0760	ND	0.0423	0.0457	55.7	57.7	1	10.0-144			7.73	31
Pyrene	0.0760	ND	0.0471	0.0524	62.0	66.2	1	10.0-148			10.7	35
1-Methylnaphthalene	0.0760	ND	0.0475	0.0505	62.5	63.8	1	10.0-142			6.12	28
2-Methylnaphthalene	0.0760	ND	0.0457	0.0474	60.1	59.8	1	10.0-137			3.65	28
2-Chloronaphthalene	0.0760	ND	0.0429	0.0451	56.4	56.9	1	29.0-120			5.00	24
(S) p-Terphenyl-d14					73.9	72.0		23.0-120				
(S) Nitrobenzene-d5					95.6	93.3		14.0-149				
(S) 2-Fluorobiphenyl					69.6	66.1		34.0-125				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3974149-2 09/16/23 11:03

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) p-Terphenyl-d14	86.2			23.0-120
(S) Nitrobenzene-d5	91.8			14.0-149
(S) 2-Fluorobiphenyl	92.6			34.0-125

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3974149-1 09/16/23 10:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0609	76.1	50.0-126	
Acenaphthene	0.0800	0.0562	70.3	50.0-120	
Acenaphthylene	0.0800	0.0606	75.8	50.0-120	
Benzo(a)anthracene	0.0800	0.0620	77.5	45.0-120	
Benzo(a)pyrene	0.0800	0.0541	67.6	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0548	68.5	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0530	66.3	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0547	68.4	49.0-125	
Chrysene	0.0800	0.0655	81.9	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0575	71.9	47.0-125	
Fluoranthene	0.0800	0.0657	82.1	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3974149-1 09/16/23 10:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0657	82.1	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0604	75.5	46.0-125	
Naphthalene	0.0800	0.0554	69.3	50.0-120	
Phenanthrene	0.0800	0.0585	73.1	47.0-120	
Pyrene	0.0800	0.0581	72.6	43.0-123	
1-Methylnaphthalene	0.0800	0.0589	73.6	51.0-121	
2-Methylnaphthalene	0.0800	0.0589	73.6	50.0-120	
2-Chloronaphthalene	0.0800	0.0597	74.6	50.0-120	
(S) p-Terphenyl-d14			84.1	23.0-120	
(S) Nitrobenzene-d5			96.0	14.0-149	
(S) 2-Fluorobiphenyl			94.1	34.0-125	

L1654169-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1654169-02 09/16/23 15:46 • (MS) R3974149-3 09/16/23 16:04 • (MSD) R3974149-4 09/16/23 16:21

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 %
Anthracene	0.0788	ND	0.0556	0.0548	70.6	70.6	1	10.0-145			1.45	30
Acenaphthene	0.0788	ND	0.0524	0.0513	66.5	66.1	1	14.0-127			2.12	27
Acenaphthylene	0.0788	ND	0.0600	0.0567	76.1	73.1	1	21.0-124			5.66	25
Benzo(a)anthracene	0.0788	ND	0.0650	0.0610	76.5	72.5	1	10.0-139			6.35	30
Benzo(a)pyrene	0.0788	ND	0.0594	0.0552	67.8	63.5	1	10.0-141			7.33	31
Benzo(b)fluoranthene	0.0788	0.00773	0.0543	0.0500	59.1	54.5	1	10.0-140			8.25	36
Benzo(g,h,i)perylene	0.0788	0.00699	0.0495	0.0488	53.9	53.9	1	10.0-140			1.42	33
Benzo(k)fluoranthene	0.0788	ND	0.0491	0.0453	58.5	54.5	1	10.0-137			8.05	31
Chrysene	0.0788	ND	0.0700	0.0634	82.6	75.4	1	10.0-145			9.90	30
Dibenz(a,h)anthracene	0.0788	ND	0.0458	0.0458	58.1	59.0	1	10.0-132			0.000	31
Fluoranthene	0.0788	0.00983	0.0804	0.0734	89.6	81.9	1	10.0-153			9.10	33
Fluorene	0.0788	ND	0.0585	0.0575	74.2	74.1	1	11.0-130			1.72	29
Indeno(1,2,3-cd)pyrene	0.0788	ND	0.0552	0.0538	62.9	62.1	1	10.0-137			2.57	32
Naphthalene	0.0788	ND	0.0513	0.0516	65.1	66.5	1	10.0-135			0.583	27
Phenanthrene	0.0788	ND	0.0620	0.0568	75.1	69.5	1	10.0-144			8.75	31
Pyrene	0.0788	0.00958	0.0728	0.0633	80.2	69.2	1	10.0-148			14.0	35
1-Methylnaphthalene	0.0788	ND	0.0577	0.0555	73.2	71.5	1	10.0-142			3.89	28
2-Methylnaphthalene	0.0788	ND	0.0531	0.0514	67.4	66.2	1	10.0-137			3.25	28
2-Chloronaphthalene	0.0788	ND	0.0542	0.0532	68.8	68.6	1	29.0-120			1.86	24
(S) p-Terphenyl-d14					67.2	66.3		23.0-120				
(S) Nitrobenzene-d5					99.1	90.7		14.0-149				
(S) 2-Fluorobiphenyl					88.6	86.5		34.0-125				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

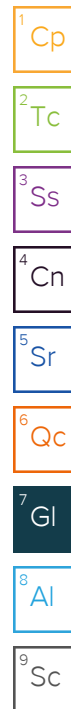
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, 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.
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.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.



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.



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