

Terra Energy Partners

Sample Delivery Group: L1746290
Samples Received: 06/13/2024
Project Number: SOUTH LEVERICH 13-09
Description:

Report To: Kris Rowe / Mike Gardner / Bruce Smith
743 Horizon Ct. Suite 330
Grand Junction, CO 81506

Entire Report Reviewed By:



Chris Ward
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 mydata.pacelabs.com

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	5
Sr: Sample Results	6
RINEHART #1 L1746290-01	6
RINEHART #2 L1746290-02	8
HLS TANK L1746290-03	11
FISCHER 314384 L1746290-04	13
TRIP BLANK L1746290-05	15
Qc: Quality Control Summary	16
Gravimetric Analysis by Method 2540 C-2011	16
Wet Chemistry by Method 2320 B-2011	18
Wet Chemistry by Method 353.2	20
Wet Chemistry by Method 365.4	21
Wet Chemistry by Method 9040C	22
Wet Chemistry by Method 9050A	23
Wet Chemistry by Method 9056A	24
Metals (ICP) by Method 6010B	27
Volatile Organic Compounds (GC) by Method 8015D/GRO	29
Volatile Organic Compounds (GC) by Method RSK175	30
Volatile Organic Compounds (GC/MS) by Method 8260B	31
Semi-Volatile Organic Compounds (GC) by Method 8015M	33
Gl: Glossary of Terms	35
Al: Accreditations & Locations	36
Sc: Sample Chain of Custody	37

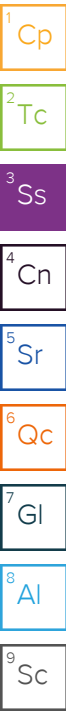


SAMPLE SUMMARY

RINEHART #1 L1746290-01 GW

Collected by: Alex Kubala
 Collected date/time: 06/12/24 10:30
 Received date/time: 06/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Microbiology by Method BART	WG2304713	1	06/23/24 11:57	06/23/24 11:57	EAO	Mt. Juliet, TN
Microbiology by Method BART	WG2304713	1	06/28/24 15:49	06/28/24 15:49	EAO	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2307397	1	06/19/24 08:09	06/19/24 12:00	DLS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2305410	1	06/16/24 12:42	06/16/24 12:42	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2306325	1	06/17/24 18:48	06/17/24 18:48	RTW	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG2311026	1	06/21/24 08:51	06/24/24 16:29	LDT	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2305564	1	06/15/24 17:00	06/15/24 17:00	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2306108	1	06/16/24 14:16	06/16/24 14:16	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304701	1	06/13/24 23:27	06/13/24 23:27	JDG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2308300	1	06/20/24 15:34	06/20/24 15:34	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2309766	1	06/27/24 09:52	06/27/24 17:17	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2307444	1	06/18/24 16:46	06/18/24 16:46	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2306736	1	06/19/24 14:57	06/19/24 14:57	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2307649	1	06/20/24 09:43	06/20/24 09:43	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2307739	1	06/19/24 07:57	06/23/24 15:58	MAA	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2307739	1	06/19/24 07:57	06/25/24 18:07	DMG	Mt. Juliet, TN



RINEHART #2 L1746290-02 GW

Collected by: Alex Kubala
 Collected date/time: 06/12/24 10:50
 Received date/time: 06/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Microbiology by Method BART	WG2304713	1	06/23/24 11:57	06/23/24 11:57	EAO	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2307397	1	06/19/24 08:09	06/19/24 12:00	DLS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2305410	1	06/16/24 12:05	06/16/24 12:05	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2306325	1	06/17/24 18:52	06/17/24 18:52	RTW	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG2311026	1	06/21/24 08:51	06/24/24 16:31	LDT	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2305564	1	06/15/24 17:00	06/15/24 17:00	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2306108	1	06/16/24 14:16	06/16/24 14:16	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304701	1	06/14/24 00:21	06/14/24 00:21	JDG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2308300	1	06/20/24 15:47	06/20/24 15:47	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2309766	1	06/27/24 09:52	06/27/24 17:19	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2307444	1	06/18/24 17:08	06/18/24 17:08	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2306736	1	06/19/24 15:00	06/19/24 15:00	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2307649	1	06/20/24 10:05	06/20/24 10:05	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2307739	2	06/19/24 07:57	06/23/24 14:17	MAA	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2307739	2	06/19/24 07:57	06/25/24 18:47	DMG	Mt. Juliet, TN

HLS TANK L1746290-03 GW

Collected by: Alex Kubala
 Collected date/time: 06/12/24 11:30
 Received date/time: 06/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Microbiology by Method BART	WG2304713	1	06/23/24 11:57	06/23/24 11:57	EAO	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2307397	1	06/19/24 08:09	06/19/24 12:00	DLS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2305410	1	06/16/24 12:12	06/16/24 12:12	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2306325	1	06/17/24 18:53	06/17/24 18:53	RTW	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG2311026	1	06/21/24 08:51	06/24/24 16:32	LDT	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2305564	1	06/15/24 17:00	06/15/24 17:00	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2306108	1	06/16/24 14:16	06/16/24 14:16	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304701	1	06/14/24 00:34	06/14/24 00:34	JDG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2308300	1	06/20/24 16:00	06/20/24 16:00	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2309766	1	06/27/24 09:52	06/27/24 17:21	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2307444	1	06/18/24 17:31	06/18/24 17:31	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2306736	1	06/19/24 15:04	06/19/24 15:04	CCM	Mt. Juliet, TN

SAMPLE SUMMARY

HLS TANK L1746290-03 GW

Collected by: Alex Kubala
 Collected date/time: 06/12/24 11:30
 Received date/time: 06/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2307649	1	06/20/24 10:26	06/20/24 10:26	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2308158	1	06/20/24 19:34	06/22/24 05:37	DMG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

FISCHER 314384 L1746290-04 GW

Collected by: Alex Kubala
 Collected date/time: 06/12/24 13:15
 Received date/time: 06/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Microbiology by Method BART	WG2304713	1	06/23/24 11:57	06/23/24 11:57	EAO	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2306678	1	06/17/24 14:25	06/17/24 18:13	EPW	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2305410	1	06/16/24 12:17	06/16/24 12:17	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2306325	1	06/17/24 18:56	06/17/24 18:56	RTW	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG2311026	1	06/21/24 08:51	06/24/24 16:33	LDT	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2305564	1	06/15/24 17:00	06/15/24 17:00	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2306108	1	06/16/24 14:16	06/16/24 14:16	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304701	1	06/14/24 00:48	06/14/24 00:48	JDG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2308300	1	06/20/24 16:13	06/20/24 16:13	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2309766	1	06/27/24 09:52	06/27/24 17:22	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2307444	1	06/18/24 17:54	06/18/24 17:54	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2306736	1	06/19/24 15:08	06/19/24 15:08	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2307649	1	06/20/24 10:48	06/20/24 10:48	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2308158	1	06/20/24 19:34	06/22/24 05:57	DMG	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

TRIP BLANK L1746290-05 GW

Collected by: Alex Kubala
 Collected date/time: 06/12/24 00:00
 Received date/time: 06/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2307683	1	06/19/24 00:03	06/19/24 00:03	JAH	Mt. Juliet, TN

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.



Chris Ward
Project Manager

Project Narrative

The following reactions were observed on one or more samples within this SDG.

- BL Blackened Liquid
- BR Brown Ring
- FO Foam
- BB Blackened Base
- BT Blackening around Ball
- SR Slime Ring around Ball
- PB Pale Blue Glow in UV Light

Sample Delivery Group (SDG) Narrative

Analysis was filtered in the laboratory.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
L1746290-01	RINEHART #1	6010B
L1746290-02	RINEHART #2	6010B
L1746290-03	HLS TANK	6010B
L1746290-04	FISCHER 314384	6010B

The Laboratory is not accredited for specific analytes on the associated Sample/Method. These analytes are flagged in the Sample Results section of the report with an asterisk (*).

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
L1746290-01	RINEHART #1	9056A
L1746290-02	RINEHART #2	9056A
L1746290-03	HLS TANK	9056A
L1746290-04	FISCHER 314384	9056A

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Microbiology by Method BART

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Iron Related Bacteria	Present		1	06/23/2024 11:57	WG2304713
Slime Forming Bacteria	Present		1	06/23/2024 11:57	WG2304713
Sulfate Reducing Bacteria	Absent		1	06/28/2024 15:49	WG2304713

Sample Narrative:

L1746290-01 WG2304713: IRB Approximate Population= 9,000 CFU/mL. Reactions= FO/BR.
 L1746290-01 WG2304713: SLYM Approximate Population= 13,000 CFU/mL. Reactions= PB/SR.

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	272		10.0	1	06/19/2024 12:00	WG2307397

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	304		8.45	20.0	1	06/16/2024 12:42	WG2305410
Alkalinity,Bicarbonate	304		8.45	20.0	1	06/16/2024 12:42	WG2305410
Alkalinity,Carbonate	U		8.45	20.0	1	06/16/2024 12:42	WG2305410
Alkalinity,Hydroxide	U		8.45	20.0	1	06/16/2024 12:42	WG2305410

Sample Narrative:

L1746290-01 WG2305410: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	1.02	J6	0.0500	0.100	1	06/17/2024 18:48	WG2306325

Wet Chemistry by Method 365.4

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Phosphorus>Total	0.0415	J	0.0350	0.100	1	06/24/2024 16:29	WG2311026

Wet Chemistry by Method 9040C

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.55	T8	1	06/15/2024 17:00	WG2305564

Sample Narrative:

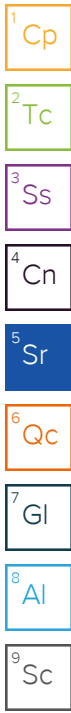
L1746290-01 WG2305564: 7.55 at 20.1C

Wet Chemistry by Method 9050A

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	651		10.0	1	06/16/2024 14:16	WG2306108

Sample Narrative:

L1746290-01 WG2306108: at 25C



RINEHART #1

SAMPLE RESULTS - 01

Collected date/time: 06/12/24 10:30

L1746290

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
*Bromide	1.67		0.353	1.00	1	06/20/2024 15:34	WG2308300
Chloride	7.12		0.379	1.00	1	06/13/2024 23:27	WG2304701
Fluoride	0.250	P1	0.0640	0.150	1	06/13/2024 23:27	WG2304701
Nitrate as (N)	1.08		0.0480	0.100	1	06/13/2024 23:27	WG2304701
Nitrite as (N)	U		0.0420	0.100	1	06/13/2024 23:27	WG2304701
Sulfate	35.6		0.594	5.00	1	06/13/2024 23:27	WG2304701

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

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Barium,Dissolved	0.0808		0.000736	0.00500	1	06/27/2024 17:17	WG2309766
Boron,Dissolved	U		0.0200	0.200	1	06/27/2024 17:17	WG2309766
Calcium,Dissolved	89.7		0.0793	1.00	1	06/27/2024 17:17	WG2309766
Iron,Dissolved	U		0.0180	0.100	1	06/27/2024 17:17	WG2309766
Magnesium,Dissolved	22.7		0.0853	1.00	1	06/27/2024 17:17	WG2309766
Manganese,Dissolved	U		0.000934	0.0100	1	06/27/2024 17:17	WG2309766
Potassium,Dissolved	1.57	J	0.261	2.00	1	06/27/2024 17:17	WG2309766
Selenium,Dissolved	U		0.00735	0.0100	1	06/27/2024 17:17	WG2309766
Sodium,Dissolved	21.2		0.504	3.00	1	06/27/2024 17:17	WG2309766
Strontium,Dissolved	0.607		0.000640	0.0100	1	06/27/2024 17:17	WG2309766

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.4	100	1	06/18/2024 16:46	WG2307444
(S) a,a,a-Trifluorotoluene(FID)	105			78.0-120		06/18/2024 16:46	WG2307444

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		2.91	10.0	1	06/19/2024 14:57	WG2306736
Ethane	U		4.07	13.0	1	06/19/2024 14:57	WG2306736
Propane	U		5.48	18.6	1	06/19/2024 14:57	WG2306736

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/20/2024 09:43	WG2307649
Toluene	U		0.278	1.00	1	06/20/2024 09:43	WG2307649
Ethylbenzene	U		0.137	1.00	1	06/20/2024 09:43	WG2307649
Xylenes, Total	U		0.174	3.00	1	06/20/2024 09:43	WG2307649
(S) Toluene-d8	106			80.0-120		06/20/2024 09:43	WG2307649
(S) 4-Bromofluorobenzene	99.4			77.0-126		06/20/2024 09:43	WG2307649
(S) 1,2-Dichloroethane-d4	109			70.0-130		06/20/2024 09:43	WG2307649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
C10-C28 Diesel Range	166		22.2	100	1	06/23/2024 15:58	WG2307739
C28-C36 Motor Oil Range	U		11.8	100	1	06/25/2024 18:07	WG2307739
(S) o-Terphenyl	143			52.0-156		06/23/2024 15:58	WG2307739
(S) o-Terphenyl	164	J1		52.0-156		06/25/2024 18:07	WG2307739

Microbiology by Method BART

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Iron Related Bacteria	Present		1	06/23/2024 11:57	WG2304713
Slime Forming Bacteria	Absent		1	06/23/2024 11:57	WG2304713
Sulfate Reducing Bacteria	Present		1	06/23/2024 11:57	WG2304713

Sample Narrative:

L1746290-02 WG2304713: IRB Approximate Population= 35,000 CFU/mL. Reactions= FO/BR/BL.
 L1746290-02 WG2304713: SRB Approximate Population= 500,000 CFU/mL. Reactions= BT/BB.

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	358		10.0	1	06/19/2024 12:00	WG2307397

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	231		8.45	20.0	1	06/16/2024 12:05	WG2305410
Alkalinity,Bicarbonate	231		8.45	20.0	1	06/16/2024 12:05	WG2305410
Alkalinity,Carbonate	U		8.45	20.0	1	06/16/2024 12:05	WG2305410
Alkalinity,Hydroxide	U		8.45	20.0	1	06/16/2024 12:05	WG2305410

Sample Narrative:

L1746290-02 WG2305410: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.0500	0.100	1	06/17/2024 18:52	WG2306325

Wet Chemistry by Method 365.4

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Phosphorus>Total	0.0590	J	0.0350	0.100	1	06/24/2024 16:31	WG2311026

Wet Chemistry by Method 9040C

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.89	T8	1	06/15/2024 17:00	WG2305564

Sample Narrative:

L1746290-02 WG2305564: 7.89 at 19.8C

Wet Chemistry by Method 9050A

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	509		10.0	1	06/16/2024 14:16	WG2306108

Sample Narrative:

L1746290-02 WG2306108: at 25C

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

RINEHART #2

Collected date/time: 06/12/24 10:50

SAMPLE RESULTS - 02

L1746290

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
*Bromide	U		0.353	1.00	1	06/20/2024 15:47	WG2308300
Chloride	7.78		0.379	1.00	1	06/14/2024 00:21	WG2304701
Fluoride	0.305		0.0640	0.150	1	06/14/2024 00:21	WG2304701
Nitrate as (N)	0.106		0.0480	0.100	1	06/14/2024 00:21	WG2304701
Nitrite as (N)	U		0.0420	0.100	1	06/14/2024 00:21	WG2304701
Sulfate	32.2		0.594	5.00	1	06/14/2024 00:21	WG2304701

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

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Barium,Dissolved	0.0873		0.000736	0.00500	1	06/27/2024 17:19	WG2309766
Boron,Dissolved	0.0202	J	0.0200	0.200	1	06/27/2024 17:19	WG2309766
Calcium,Dissolved	58.8		0.0793	1.00	1	06/27/2024 17:19	WG2309766
Iron,Dissolved	0.0365	J	0.0180	0.100	1	06/27/2024 17:19	WG2309766
Magnesium,Dissolved	21.8		0.0853	1.00	1	06/27/2024 17:19	WG2309766
Manganese,Dissolved	0.00199	B J	0.000934	0.0100	1	06/27/2024 17:19	WG2309766
Potassium,Dissolved	2.37		0.261	2.00	1	06/27/2024 17:19	WG2309766
Selenium,Dissolved	U		0.00735	0.0100	1	06/27/2024 17:19	WG2309766
Sodium,Dissolved	22.1		0.504	3.00	1	06/27/2024 17:19	WG2309766
Strontium,Dissolved	0.522		0.000640	0.0100	1	06/27/2024 17:19	WG2309766

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.4	100	1	06/18/2024 17:08	WG2307444
(S) a,a,a-Trifluorotoluene(FID)	106			78.0-120		06/18/2024 17:08	WG2307444

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	147		2.91	10.0	1	06/19/2024 15:00	WG2306736
Ethane	U		4.07	13.0	1	06/19/2024 15:00	WG2306736
Propane	U		5.48	18.6	1	06/19/2024 15:00	WG2306736

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/20/2024 10:05	WG2307649
Toluene	U		0.278	1.00	1	06/20/2024 10:05	WG2307649
Ethylbenzene	U		0.137	1.00	1	06/20/2024 10:05	WG2307649
Xylenes, Total	U		0.174	3.00	1	06/20/2024 10:05	WG2307649
(S) Toluene-d8	109			80.0-120		06/20/2024 10:05	WG2307649
(S) 4-Bromofluorobenzene	106			77.0-126		06/20/2024 10:05	WG2307649
(S) 1,2-Dichloroethane-d4	110			70.0-130		06/20/2024 10:05	WG2307649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
C10-C28 Diesel Range	640		44.4	200	2	06/23/2024 14:17	WG2307739
C28-C36 Motor Oil Range	226		23.6	200	2	06/25/2024 18:47	WG2307739
(S) o-Terphenyl	259	J1		52.0-156		06/23/2024 14:17	WG2307739
(S) o-Terphenyl	276	J1		52.0-156		06/25/2024 18:47	WG2307739

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	

Sample Narrative:

L1746290-02 WG2307739: Dilution due to matrix impact during extraction procedure. Surrogate failure due to matrix.

L1746290-02 WG2307739: Surrogate failure due to matrix interference

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

Microbiology by Method BART

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Iron Related Bacteria	Present		1	06/23/2024 11:57	WG2304713
Slime Forming Bacteria	Absent		1	06/23/2024 11:57	WG2304713
Sulfate Reducing Bacteria	Present		1	06/23/2024 11:57	WG2304713

Sample Narrative:

L1746290-03 WG2304713: IRB Approximate Population= 35,000 CFU/mL. Reactions= FO/BR/BL.
 L1746290-03 WG2304713: SRB Approximate Population= 500,000 CFU/mL. Reactions= BT/BB.

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	433		10.0	1	06/19/2024 12:00	WG2307397

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	365		8.45	20.0	1	06/16/2024 12:12	WG2305410
Alkalinity,Bicarbonate	365		8.45	20.0	1	06/16/2024 12:12	WG2305410
Alkalinity,Carbonate	U		8.45	20.0	1	06/16/2024 12:12	WG2305410
Alkalinity,Hydroxide	U		8.45	20.0	1	06/16/2024 12:12	WG2305410

Sample Narrative:

L1746290-03 WG2305410: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.152		0.0500	0.100	1	06/17/2024 18:53	WG2306325

Wet Chemistry by Method 365.4

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Phosphorus,Total	U		0.0350	0.100	1	06/24/2024 16:32	WG2311026

Wet Chemistry by Method 9040C

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.46	T8	1	06/15/2024 17:00	WG2305564

Sample Narrative:

L1746290-03 WG2305564: 7.46 at 19.9C

Wet Chemistry by Method 9050A

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	777		10.0	1	06/16/2024 14:16	WG2306108

Sample Narrative:

L1746290-03 WG2306108: at 25C



HLS TANK

Collected date/time: 06/12/24 11:30

SAMPLE RESULTS - 03

L1746290

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
*Bromide	2.09		0.353	1.00	1	06/20/2024 16:00	WG2308300
Chloride	9.91		0.379	1.00	1	06/14/2024 00:34	WG2304701
Fluoride	0.231		0.0640	0.150	1	06/14/2024 00:34	WG2304701
Nitrate as (N)	0.264		0.0480	0.100	1	06/14/2024 00:34	WG2304701
Nitrite as (N)	U		0.0420	0.100	1	06/14/2024 00:34	WG2304701
Sulfate	46.9		0.594	5.00	1	06/14/2024 00:34	WG2304701

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

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Barium,Dissolved	0.0934		0.000736	0.00500	1	06/27/2024 17:21	WG2309766
Boron,Dissolved	0.0216	J	0.0200	0.200	1	06/27/2024 17:21	WG2309766
Calcium,Dissolved	101		0.0793	1.00	1	06/27/2024 17:21	WG2309766
Iron,Dissolved	U		0.0180	0.100	1	06/27/2024 17:21	WG2309766
Magnesium,Dissolved	27.9		0.0853	1.00	1	06/27/2024 17:21	WG2309766
Manganese,Dissolved	U		0.000934	0.0100	1	06/27/2024 17:21	WG2309766
Potassium,Dissolved	1.62	J	0.261	2.00	1	06/27/2024 17:21	WG2309766
Selenium,Dissolved	U		0.00735	0.0100	1	06/27/2024 17:21	WG2309766
Sodium,Dissolved	33.0		0.504	3.00	1	06/27/2024 17:21	WG2309766
Strontium,Dissolved	0.675		0.000640	0.0100	1	06/27/2024 17:21	WG2309766

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.4	100	1	06/18/2024 17:31	WG2307444
(S) a,a,a-Trifluorotoluene(FID)	105			78.0-120		06/18/2024 17:31	WG2307444

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		2.91	10.0	1	06/19/2024 15:04	WG2306736
Ethane	U		4.07	13.0	1	06/19/2024 15:04	WG2306736
Propane	U		5.48	18.6	1	06/19/2024 15:04	WG2306736

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/20/2024 10:26	WG2307649
Toluene	U		0.278	1.00	1	06/20/2024 10:26	WG2307649
Ethylbenzene	U		0.137	1.00	1	06/20/2024 10:26	WG2307649
Xylenes, Total	U		0.174	3.00	1	06/20/2024 10:26	WG2307649
(S) Toluene-d8	107			80.0-120		06/20/2024 10:26	WG2307649
(S) 4-Bromofluorobenzene	104			77.0-126		06/20/2024 10:26	WG2307649
(S) 1,2-Dichloroethane-d4	111			70.0-130		06/20/2024 10:26	WG2307649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
C10-C28 Diesel Range	24.6	J	22.2	100	1	06/22/2024 05:37	WG2308158
C28-C36 Motor Oil Range	U		11.8	100	1	06/22/2024 05:37	WG2308158
(S) o-Terphenyl	134			52.0-156		06/22/2024 05:37	WG2308158

Microbiology by Method BART

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Iron Related Bacteria	Present		1	06/23/2024 11:57	WG2304713
Slime Forming Bacteria	Present		1	06/23/2024 11:57	WG2304713
Sulfate Reducing Bacteria	Present		1	06/23/2024 11:57	WG2304713

Sample Narrative:

L1746290-04 WG2304713: IRB Approximate Population= 35,000 CFU/mL. Reactions= FO/BR.
 L1746290-04 WG2304713: SLYM Approximate Population= 67,000 CFU/mL. Reactions= PB.
 L1746290-04 WG2304713: SRB Approximate Population= 20 CFU/mL. Reactions=BB.

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	260		10.0	1	06/17/2024 18:13	WG2306678

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	224		8.45	20.0	1	06/16/2024 12:17	WG2305410
Alkalinity,Bicarbonate	224		8.45	20.0	1	06/16/2024 12:17	WG2305410
Alkalinity,Carbonate	U		8.45	20.0	1	06/16/2024 12:17	WG2305410
Alkalinity,Hydroxide	U		8.45	20.0	1	06/16/2024 12:17	WG2305410

Sample Narrative:

L1746290-04 WG2305410: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.0500	0.100	1	06/17/2024 18:56	WG2306325

Wet Chemistry by Method 365.4

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Phosphorus,Total	0.0487	J	0.0350	0.100	1	06/24/2024 16:33	WG2311026

Wet Chemistry by Method 9040C

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.33	T8	1	06/15/2024 17:00	WG2305564

Sample Narrative:

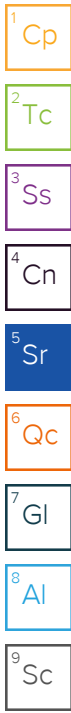
L1746290-04 WG2305564: 8.33 at 19.4C

Wet Chemistry by Method 9050A

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	460		10.0	1	06/16/2024 14:16	WG2306108

Sample Narrative:

L1746290-04 WG2306108: at 25C



Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
*Bromide	1.45		0.353	1.00	1	06/20/2024 16:13	WG2308300
Chloride	4.39		0.379	1.00	1	06/14/2024 00:48	WG2304701
Fluoride	0.178		0.0640	0.150	1	06/14/2024 00:48	WG2304701
Nitrate as (N)	0.0889	J	0.0480	0.100	1	06/14/2024 00:48	WG2304701
Nitrite as (N)	0.0889	J	0.0420	0.100	1	06/14/2024 00:48	WG2304701
Sulfate	20.8		0.594	5.00	1	06/14/2024 00:48	WG2304701

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

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Barium,Dissolved	0.119		0.000736	0.00500	1	06/27/2024 17:22	WG2309766
Boron,Dissolved	0.0297	J	0.0200	0.200	1	06/27/2024 17:22	WG2309766
Calcium,Dissolved	9.36		0.0793	1.00	1	06/27/2024 17:22	WG2309766
Iron,Dissolved	U		0.0180	0.100	1	06/27/2024 17:22	WG2309766
Magnesium,Dissolved	11.5		0.0853	1.00	1	06/27/2024 17:22	WG2309766
Manganese,Dissolved	0.0189		0.000934	0.0100	1	06/27/2024 17:22	WG2309766
Potassium,Dissolved	3.20		0.261	2.00	1	06/27/2024 17:22	WG2309766
Selenium,Dissolved	U		0.00735	0.0100	1	06/27/2024 17:22	WG2309766
Sodium,Dissolved	78.9		0.504	3.00	1	06/27/2024 17:22	WG2309766
Strontium,Dissolved	0.211		0.000640	0.0100	1	06/27/2024 17:22	WG2309766

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.4	100	1	06/18/2024 17:54	WG2307444
(S) a,a,a-Trifluorotoluene(FID)	106			78.0-120		06/18/2024 17:54	WG2307444

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		2.91	10.0	1	06/19/2024 15:08	WG2306736
Ethane	U		4.07	13.0	1	06/19/2024 15:08	WG2306736
Propane	U		5.48	18.6	1	06/19/2024 15:08	WG2306736

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/20/2024 10:48	WG2307649
Toluene	U		0.278	1.00	1	06/20/2024 10:48	WG2307649
Ethylbenzene	U		0.137	1.00	1	06/20/2024 10:48	WG2307649
Xylenes, Total	U		0.174	3.00	1	06/20/2024 10:48	WG2307649
(S) Toluene-d8	108			80.0-120		06/20/2024 10:48	WG2307649
(S) 4-Bromofluorobenzene	103			77.0-126		06/20/2024 10:48	WG2307649
(S) 1,2-Dichloroethane-d4	111			70.0-130		06/20/2024 10:48	WG2307649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
C10-C28 Diesel Range	31.8	J	22.2	100	1	06/22/2024 05:57	WG2308158
C28-C36 Motor Oil Range	U		11.8	100	1	06/22/2024 05:57	WG2308158
(S) o-Terphenyl	136			52.0-156		06/22/2024 05:57	WG2308158

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/19/2024 00:03	WG2307683
Toluene	U		0.278	1.00	1	06/19/2024 00:03	WG2307683
Ethylbenzene	U		0.137	1.00	1	06/19/2024 00:03	WG2307683
Xylenes, Total	U		0.174	3.00	1	06/19/2024 00:03	WG2307683
<i>(S) Toluene-d8</i>	106			80.0-120		06/19/2024 00:03	WG2307683
<i>(S) 4-Bromofluorobenzene</i>	105			77.0-126		06/19/2024 00:03	WG2307683
<i>(S) 1,2-Dichloroethane-d4</i>	102			70.0-130		06/19/2024 00:03	WG2307683

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

Method Blank (MB)

(MB) R4083966-1 06/17/24 18:13

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10.0	10.0

1 Cp

2 Tc

3 Ss

L1745986-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1745986-04 06/17/24 18:13 • (DUP) R4083966-3 06/17/24 18:13

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	89.0	90.0	1	1.12		10

4 Cn

5 Sr

L1745986-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1745986-05 06/17/24 18:13 • (DUP) R4083966-4 06/17/24 18:13

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	93.0	93.0	1	0.000		10

6 Qc

7 Gl

8 Al

Laboratory Control Sample (LCS)

(LCS) R4083966-2 06/17/24 18:13

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800	8650	98.3	85.0-115	

9 Sc

Method Blank (MB)

(MB) R4084486-1 06/19/24 12:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10.0	10.0

1 Cp

2 Tc

3 Ss

L1746290-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1746290-02 06/19/24 12:00 • (DUP) R4084486-3 06/19/24 12:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	358	371	1	3.57		10

4 Cn

5 Sr

L1746290-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1746290-03 06/19/24 12:00 • (DUP) R4084486-4 06/19/24 12:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	433	442	1	2.06		10

6 Qc

7 Gl

8 Al

Laboratory Control Sample (LCS)

(LCS) R4084486-2 06/19/24 12:00

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800	8420	95.7	85.0-115	

9 Sc

Method Blank (MB)

(MB) R4082368-2 06/16/24 10:23

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Alkalinity	U		8.45	20.0
Alkalinity,Bicarbonate	U		8.45	20.0
Alkalinity,Carbonate	U		8.45	20.0
Alkalinity,Hydroxide	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1745720-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1745720-01 06/16/24 10:33 • (DUP) R4082368-3 06/16/24 10:38

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Alkalinity	323	333	1	2.92		20
Alkalinity,Bicarbonate	323	333	1	2.92		20
Alkalinity,Carbonate	U	U	1	0.000		20
Alkalinity,Hydroxide	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1746290-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1746290-01 06/16/24 12:42 • (DUP) R4082368-4 06/16/24 12:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Alkalinity	304	303	1	0.580		20
Alkalinity,Bicarbonate	304	303	1	0.580		20
Alkalinity,Carbonate	U	U	1	0.000		20
Alkalinity,Hydroxide	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4082368-1 06/16/24 10:17

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Alkalinity	100	108	108	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4082963-1 06/17/24 18:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Nitrate-Nitrite	U		0.0500	0.100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1746279-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1746279-02 06/17/24 18:37 • (DUP) R4082963-3 06/17/24 18:38

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Nitrate-Nitrite	2.16	2.14	1	0.930		20

L1746357-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1746357-01 06/17/24 19:03 • (DUP) R4082963-7 06/17/24 19:05

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Nitrate-Nitrite	1.06	1.07	1	0.939		20

Laboratory Control Sample (LCS)

(LCS) R4082963-2 06/17/24 18:31

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Nitrate-Nitrite	2.50	2.48	99.2	90.0-110	

L1746290-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1746290-01 06/17/24 18:48 • (MS) R4082963-4 06/17/24 18:49 • (MSD) R4082963-5 06/17/24 18:51

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Nitrate-Nitrite	2.50	1.02	3.25	3.28	89.2	90.4	1	90.0-110	J6		0.919	20

L1746290-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1746290-03 06/17/24 18:53 • (MS) R4082963-6 06/17/24 18:54

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Nitrate-Nitrite	2.50	0.152	2.44	91.5	1	90.0-110	

Method Blank (MB)

(MB) R4085827-1 06/24/24 16:23

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Phosphorus,Total	U		0.0350	0.100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1746559-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1746559-01 06/24/24 16:45 • (DUP) R4085827-3 06/24/24 16:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Phosphorus,Total	1.09	1.11	1	1.82		20

L1746279-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1746279-02 06/24/24 17:17 • (DUP) R4085827-6 06/24/24 17:18

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Phosphorus,Total	18.1	17.8	5	1.39		20

Laboratory Control Sample (LCS)

(LCS) R4085827-2 06/24/24 16:24

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Phosphorus,Total	1.81	1.76	97.5	85.0-115	

L1746559-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1746559-01 06/24/24 16:45 • (MS) R4085827-4 06/24/24 16:47 • (MSD) R4085827-5 06/24/24 16:48

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Phosphorus,Total	2.50	1.09	3.68	3.67	104	103	1	90.0-110			0.272	20

L1746286-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1746286-01 06/15/24 17:00 • (DUP) R4082215-2 06/15/24 17:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.42	7.43	1	0.135		1

Sample Narrative:

OS: 7.42 at 20.3C
 DUP: 7.43 at 20.5C

L1746375-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1746375-01 06/15/24 17:00 • (DUP) R4082215-3 06/15/24 17:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	6.66	6.70	1	0.599		1

Sample Narrative:

OS: 6.66 at 21.5C
 DUP: 6.7 at 21.8C

Laboratory Control Sample (LCS)

(LCS) R4082215-1 06/15/24 17:00

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

Sample Narrative:

LCS: 10.02 at 22.7C



Method Blank (MB)

(MB) R4082360-1 06/16/24 14:16

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Specific Conductance	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1746285-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1746285-01 06/16/24 14:16 • (DUP) R4082360-3 06/16/24 14:16

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	3100	3130	1	0.963		20

Sample Narrative:

OS: at 25C
DUP: at 25C

L1747053-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1747053-25 06/16/24 14:16 • (DUP) R4082360-4 06/16/24 14:16

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	ND	ND	1	0.000		20

Sample Narrative:

OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4082360-2 06/16/24 14:16

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Specific Conductance	733	722	98.5	85.0-115	

Sample Narrative:

LCS: at 25C



Method Blank (MB)

(MB) R4082154-1 06/13/24 13:57

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Chloride	U		0.379	1.00
Fluoride	U		0.0640	0.150
Nitrate as (N)	U		0.0480	0.100
Nitrite as (N)	U		0.0420	0.100
Sulfate	U		0.594	5.00

L1746290-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1746290-01 06/13/24 23:27 • (DUP) R4082154-3 06/13/24 23:41

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	7.12	7.45	1	4.54		15
Fluoride	0.250	0.112	1	76.1	J P1	15
Nitrate as (N)	1.08	1.15	1	6.65		15
Nitrite as (N)	U	U	1	0.000		15
Sulfate	35.6	38.3	1	7.40		15

L1746357-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1746357-01 06/14/24 02:35 • (DUP) R4082154-6 06/14/24 02:49

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	33.7	32.4	1	3.91		15
Nitrite as (N)	0.0422	U	1	200	P1	15
Sulfate	22.2	21.0	1	5.31		15

Laboratory Control Sample (LCS)

(LCS) R4082154-2 06/13/24 14:11

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/l	mg/l	%	%	
Chloride	40.0	37.4	93.5	80.0-120	
Fluoride	8.00	7.49	93.7	80.0-120	
Nitrate as (N)	8.00	7.35	91.9	80.0-120	
Nitrite as (N)	8.00	7.78	97.2	80.0-120	
Sulfate	40.0	36.7	91.8	80.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1746290-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1746290-01 06/13/24 23:27 • (MS) R4082154-4 06/13/24 23:54 • (MSD) R4082154-5 06/14/24 00:08

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	7.12	43.6	44.6	91.2	93.6	1	80.0-120			2.14	15
Fluoride	8.00	0.250	7.92	8.03	95.8	97.2	1	80.0-120			1.41	15
Nitrate as (N)	8.00	1.08	8.50	8.76	92.8	96.0	1	80.0-120			2.99	15
Nitrite as (N)	8.00	U	8.09	8.29	101	104	1	80.0-120			2.41	15
Sulfate	40.0	35.6	68.6	70.1	82.6	86.4	1	80.0-120			2.19	15

L1746357-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1746357-01 06/14/24 02:35 • (MS) R4082154-7 06/14/24 03:02

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40.0	33.7	68.1	86.0	1	80.0-120	
Nitrite as (N)	8.00	0.0422	8.71	108	1	80.0-120	
Sulfate	40.0	22.2	59.5	93.2	1	80.0-120	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Method Blank (MB)

(MB) R4084509-1 06/20/24 09:10

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Bromide	U		0.353	1.00

¹Cp

²Tc

³Ss

L1747059-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1747059-07 06/20/24 16:26 • (DUP) R4084509-5 06/20/24 16:39

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Bromide	U	85.1	100	200	J P1	15

⁴Cn

⁵Sr

Laboratory Control Sample (LCS)

(LCS) R4084509-2 06/20/24 09:23

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Bromide	40.0	37.6	94.1	80.0-120	

⁶Qc

⁷Gl

L1747059-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1747059-07 06/20/24 16:26 • (MS) R4084509-6 06/20/24 16:52 • (MSD) R4084509-7 06/20/24 17:04

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Bromide	40.0	U	92.0	110	230	276	100	80.0-120	J5	J3 J5	18.0	15

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4087500-1 06/27/24 16:57

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Barium,Dissolved	0.000873	U	0.000736	0.00500
Boron,Dissolved	U		0.0200	0.200
Calcium,Dissolved	U		0.0793	1.00
Iron,Dissolved	U		0.0180	0.100
Magnesium,Dissolved	U		0.0853	1.00
Manganese,Dissolved	0.000942	U	0.000934	0.0100
Potassium,Dissolved	U		0.261	2.00
Selenium,Dissolved	U		0.00735	0.0100
Sodium,Dissolved	0.512	U	0.504	3.00
Strontium,Dissolved	0.000785	U	0.000640	0.0100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4087500-2 06/27/24 16:58

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium,Dissolved	1.00	1.05	105	80.0-120	
Boron,Dissolved	1.00	0.975	97.5	80.0-120	
Calcium,Dissolved	10.0	10.3	103	80.0-120	
Iron,Dissolved	10.0	10.2	102	80.0-120	
Magnesium,Dissolved	10.0	10.1	101	80.0-120	
Manganese,Dissolved	1.00	1.03	103	80.0-120	
Potassium,Dissolved	10.0	9.82	98.2	80.0-120	
Selenium,Dissolved	1.00	0.980	98.0	80.0-120	
Sodium,Dissolved	10.0	11.2	112	80.0-120	
Strontium,Dissolved	1.00	1.02	102	80.0-120	

L1746357-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1746357-02 06/27/24 17:00 • (MS) R4087500-4 06/27/24 17:03 • (MSD) R4087500-5 06/27/24 17:05

Analyte	Spike Amount mg/l	Original Result	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Barium,Dissolved	1.00		1.05	1.05	101	102	1	75.0-125			0.642	20
Boron,Dissolved	1.00		1.05	1.05	95.4	95.8	1	75.0-125			0.353	20
Calcium,Dissolved	10.0		71.8	72.2	84.8	88.7	1	75.0-125			0.538	20
Iron,Dissolved	10.0		10.1	10.1	99.6	100	1	75.0-125			0.494	20
Magnesium,Dissolved	10.0		25.4	25.5	95.2	96.0	1	75.0-125			0.294	20
Manganese,Dissolved	1.00	0.0441	1.04	1.05	99.4	100	1	75.0-125			0.832	20
Potassium,Dissolved	10.0		12.7	12.8	93.6	94.8	1	75.0-125			0.880	20

L1746357-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1746357-02 06/27/24 17:00 • (MS) R4087500-4 06/27/24 17:03 • (MSD) R4087500-5 06/27/24 17:05

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Selenium,Dissolved	1.00	1.01	1.00	1.00	101	100	1	75.0-125			0.824	20
Sodium,Dissolved	10.0	27.2	28.0	28.0	76.7	84.3	1	75.0-125			2.74	20
Strontium,Dissolved	1.00	1.19	1.19	1.19	98.5	98.8	1	75.0-125			0.251	20

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

Method Blank (MB)

(MB) R4083362-2 06/18/24 14:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TPH (GC/FID) Low Fraction	U		31.4	100
^(S) a,a,a-Trifluorotoluene(FID)	105			78.0-120

Laboratory Control Sample (LCS)

(LCS) R4083362-1 06/18/24 14:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5000	4310	86.2	72.0-127	
^(S) a,a,a-Trifluorotoluene(FID)			108	78.0-120	

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

Method Blank (MB)

(MB) R4083856-2 06/19/24 13:45

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		2.91	10.0
Ethane	U		4.07	13.0
Propane	U		5.48	18.6

L1745984-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1745984-05 06/19/24 14:04 • (DUP) R4083856-3 06/19/24 14:44

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Propane	U	U	1	0.000		20

L1746290-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1746290-01 06/19/24 14:57 • (DUP) R4083856-4 06/19/24 15:26

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Propane	U	U	1	0.000		20

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

(LCS) R4083856-1 06/19/24 13:42 • (LCSD) R4083856-5 06/19/24 15:29

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	62.2	67.4	91.7	99.4	85.0-115			8.02	20
Ethane	129	111	113	86.0	87.6	85.0-115			1.79	20
Propane	186	163	165	87.6	88.7	85.0-115			1.22	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4084276-3 06/20/24 04:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Xylenes, Total	U		0.174	3.00
<i>(S) Toluene-d8</i>	108			80.0-120
<i>(S) 4-Bromofluorobenzene</i>	104			77.0-126
<i>(S) 1,2-Dichloroethane-d4</i>	105			70.0-130

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

(LCS) R4084276-1 06/20/24 02:13 • (LCSD) R4084276-2 06/20/24 02:34

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Benzene	5.00	5.65	5.38	113	108	70.0-123			4.90	20
Toluene	5.00	5.37	4.90	107	98.0	79.0-120			9.15	20
Ethylbenzene	5.00	5.46	5.02	109	100	79.0-123			8.40	20
Xylenes, Total	15.0	15.9	14.9	106	99.3	79.0-123			6.49	20
<i>(S) Toluene-d8</i>				104	105	80.0-120				
<i>(S) 4-Bromofluorobenzene</i>				104	103	77.0-126				
<i>(S) 1,2-Dichloroethane-d4</i>				110	110	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4083587-2 06/18/24 22:47

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	107			80.0-120
(S) 4-Bromofluorobenzene	102			77.0-126
(S) 1,2-Dichloroethane-d4	81.3			70.0-130

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

(LCS) R4083587-1 06/18/24 21:43 • (LCSD) R4083587-3 06/18/24 23:07

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Benzene	5.00	4.26	3.70	85.2	74.0	70.0-123			14.1	20
Toluene	5.00	4.48	4.13	89.6	82.6	79.0-120			8.13	20
Ethylbenzene	5.00	4.34	4.24	86.8	84.8	79.0-123			2.33	20
Xylenes, Total	15.0	13.7	12.7	91.3	84.7	79.0-123			7.58	20
(S) Toluene-d8				108	108	80.0-120				
(S) 4-Bromofluorobenzene				101	106	77.0-126				
(S) 1,2-Dichloroethane-d4				81.0	82.9	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4084480-1 06/20/24 02:12

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
C10-C28 Diesel Range	U		22.2	100
C28-C36 Motor Oil Range	U		11.8	100
(S) o-Terphenyl	93.0			52.0-156

Laboratory Control Sample (LCS)

(LCS) R4084480-2 06/20/24 02:32

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
C10-C28 Diesel Range	1500	1250	83.3	50.0-150	
(S) o-Terphenyl			92.5	52.0-156	

L1746101-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1746101-05 06/23/24 12:16 • (MS) R4085794-1 06/23/24 12:36 • (MSD) R4085794-2 06/23/24 12:57

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
C10-C28 Diesel Range	1430	3370	4440	4540	74.8	81.8	1	50.0-150			2.23	20
(S) o-Terphenyl					167	167		52.0-156	J1	J1		

Sample Narrative:

OS: Surrogate failure due to matrix interference during extraction procedure.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4085983-1 06/21/24 21:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
C10-C28 Diesel Range	U		22.2	100
C28-C36 Motor Oil Range	U		11.8	100
<i>(S) o-Terphenyl</i>	118			52.0-156

Laboratory Control Sample (LCS)

(LCS) R4085983-2 06/21/24 21:47

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
C10-C28 Diesel Range	1500	1540	103	50.0-150	
<i>(S) o-Terphenyl</i>			140	52.0-156	

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

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
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
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.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCREDITATIONS & LOCATIONS

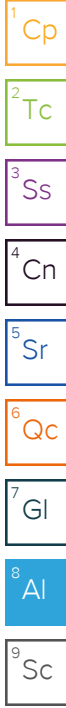
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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.



Terraep Partners
 743 Horizon Ct. Suite 330
 Grand Junction, CO 81506

Billing Information:
Tammy Gose
 1058 County Road 215
 Parachute, CO 81635

Report to:
Kris Rowe & Mike Gardner & Bruce Smith

Project Description: _____ City/State Collected: **Rifle, CO** Please Circle: **PT** (MT) (CT) (ET)

Phone: **970-242-0170** Client Project # **South Leverich 13-09** Lab Project # **TERENGPCO-WWL**

Collected by (print): **Alex Kubala** Site/Facility ID # _____ P.O. # _____

Collected by (signature): **Alex Kubala** **Rush?** (Lab MUST Be Notified)
 ___ Same Day ___ Five Day ___ Next Day ___ 5 Day (Rad Only) ___ Two Day ___ 10 Day (Rad Only) ___ Three Day

Quote # **Rule 615** Date Results Needed _____ No. of Cntrs _____

Analysis / Container / Preservative										
ALK, Bi/Ca/OH, pH, COND 250mlHDPE-NoPres	BART Microbiological	Br, Cl, F, NO2, NO3, SO4 125mlHDPE-NoPres	DRONMLVI 40mlAmb-HCl-BT	Diss Metals 250mlHDPE-NoPres	GRO 40mlAmb HCl	NO2NO3, PT 250mlHDPE-H2SO4	RSK175 40mlAmb HCl	TDS 1L-HDPE NoPres	V8260BTEX 40mlAmb-HCl	2

Chain of Custody Page ___ of ___

Pace
 PEOPLE ADVANCING SCIENCE

MT JULIET, TN
 12065 Lebanon Rd Mount Juliet, TN 37122
 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubs/gas-standard-terms.pdf>

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK, Bi/Ca/OH, pH, COND 250mlHDPE-NoPres	BART Microbiological	Br, Cl, F, NO2, NO3, SO4 125mlHDPE-NoPres	DRONMLVI 40mlAmb-HCl-BT	Diss Metals 250mlHDPE-NoPres	GRO 40mlAmb HCl	NO2NO3, PT 250mlHDPE-H2SO4	RSK175 40mlAmb HCl	TDS 1L-HDPE NoPres	V8260BTEX 40mlAmb-HCl	Remarks	Sample # (lab only)
Rinehart #1	G	GW		6-12-24	1030	15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		-01
Rinehart #2	G	SW		6-12-24	1050	15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		-02
HLS Tank	G	GW		6-12-24	1130	15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		-03
Fischer 314384	G	GW		6-12-24	1315	15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		-04
Trip Blank																✓		-05

SDG # **U746290**
J038

Acctnum: **TERENGPCO**
 Template: **T246585**
 Prelogin: **P1054250**
 PM: **824 - Chris Ward**
 PB: _____

Shipped Via: **FedEx Ground**

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

Remarks: **Diss Metals - Ba, B, Ca, Fe, K, Mg, Mn, Na, Se, Sr**
All samples collected on 6-12-24

pH _____ Temp _____
 Flow _____ Other _____

Samples returned via: ___ UPS ___ FedEx ___ Courier _____ Tracking # **6426 8306 6411**

Relinquished by: (Signature) **Alex Kubala** Date: **6-12-24** Time: **1600** Received by: (Signature) _____ Trip Blank Received: **1** (Yes/No) (HCl/MeOH/TBR)

Relinquished by: (Signature) _____ Date: _____ Time: _____ Received by: (Signature) _____ Temp: _____ °C Bottles Received: _____ If preservation required by Login: Date/Time

Relinquished by: (Signature) _____ Date: _____ Time: _____ Received for lab by: (Signature) **Jannem** Date: **6-13-24** Time: **0900** Hold: _____ Condition: **NCF / OK**

Sample Receipt Checklist
 COC Seal Present/Intact: **NP** ✓ N
 COC Signed/Accurate: ✓ N
 Bottles arrive intact: ✓ N
 Correct bottles used: ✓ N
 Sufficient volume sent: ✓ N
 If Applicable
 VOA Zero Headspace: ✓ N
 Preservation Correct/Checked: ✓ N
 RAD Screen <0.5 mR/hr: ✓ N