

# **Scheidt-State-61N67W 16CSE**

NWSE Sec. 16-T1N-R67W

API #: 123-11541

Facility ID: 319599

Remediation Project #: 33983

Form 19 Data Package

May 2024

Prepared by Tasman, Inc.



On behalf of Crestone Peak Resources Operating, LLC



## **PHOTO LOG**

## Photographic Log

					
					
<b>Equipment ID:</b>		<b>Equipment Type:</b>		<b>Equipment ID:</b>	
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>
<b>Notes/Conditions:</b> Soil Screening and Sample Locations			<b>Notes/Conditions:</b> Soil Screening Location		





## Photographic Log

							
Equipment ID:		Equipment Type:		Equipment ID:		Equipment Type:	
Material:		Volume:		Material:		Volume:	
Contents:				Contents:			
Notes/Conditions: Soil Sample Location				Notes/Conditions: Soil Screening and Sample Locations			



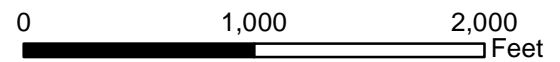
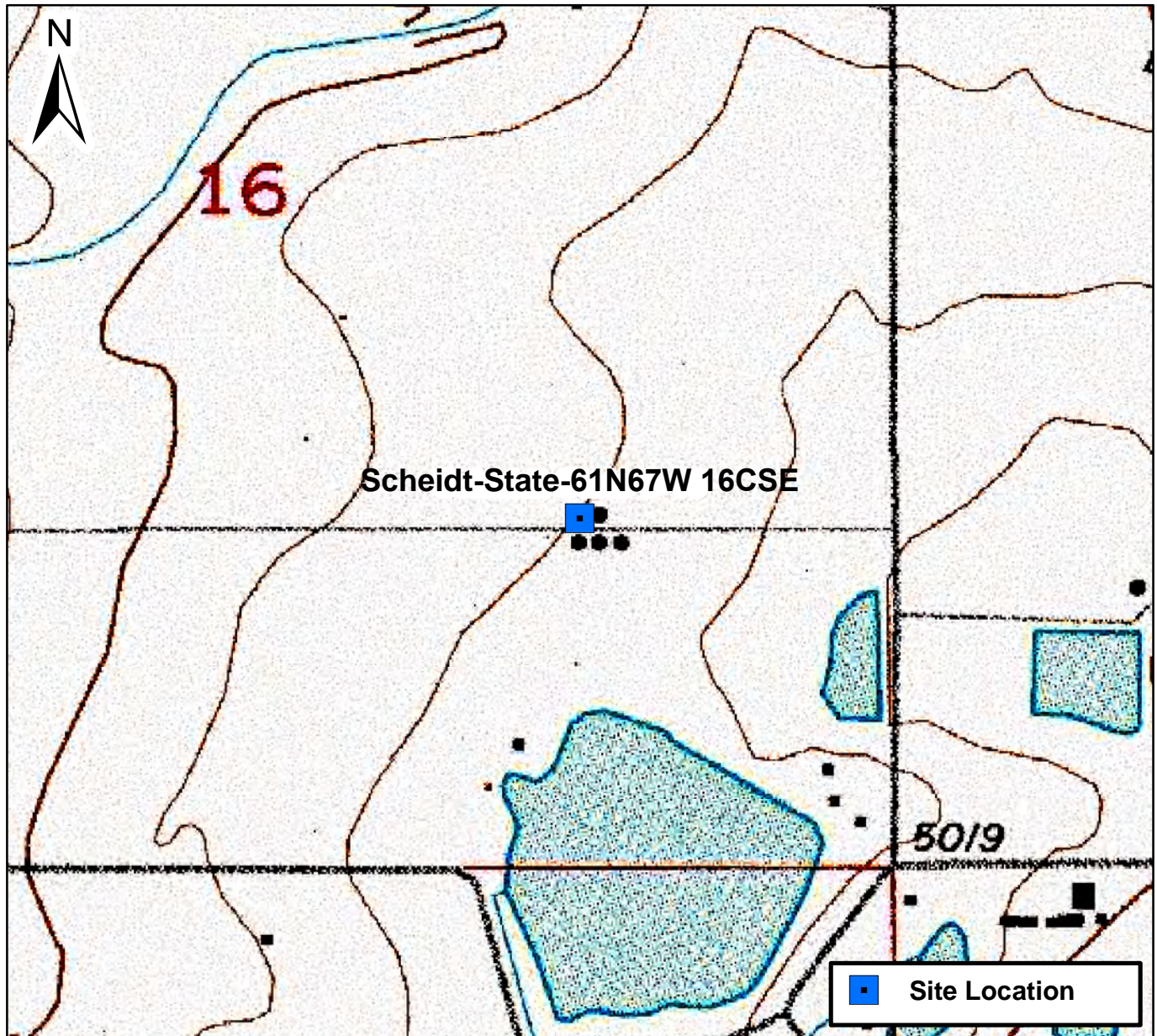
## Photographic Log

					
<p>Equipment ID: _____ Equipment Type: _____</p> <p>Material: _____ Volume: _____ Contents: _____</p> <p>Notes/Conditions: Soil Screening and Sample Locations</p>			<p>Equipment ID: _____ Equipment Type: _____</p> <p>Material: _____ Volume: _____ Contents: _____</p> <p>Notes/Conditions: Soil Sample Location</p>		

											
<b>Equipment ID:</b>		<b>Equipment Type:</b>		<b>Equipment ID:</b>		<b>Equipment Type:</b>					
<b>Material:</b>		<b>Volume:</b>		<b>Contents:</b>		<b>Material:</b>		<b>Volume:</b>		<b>Contents:</b>	
<b>Notes/Conditions:</b> Soil Sample Locations						<b>Notes/Conditions:</b>					

## **FIGURES**





## Figure 1

Site Location Map  
 Scheidt-State-61N67W 16CSE  
 NWSE Sec. 16-T1N-R67W  
 Weld County, Colorado







DATE:	June 10, 2024
DESIGNED BY:	S. Vogt
DRAWN BY:	L. Molson



**Tasman, Inc.**  
6855 W119th Ave.  
Broomfield, CO 80020

**Crestone Peak Resources Operating, LLC**  
**Scheidt-State-61N67W 16CSE**  
NWSE Sec. 16-T1N-R67W  
Weld County, Colorado

Soil Sample Location Map  
(05/16/2024)

Figure  
2A





DATE: June 10, 2024	 <b>TASMAN</b> Tasman, Inc. 6855 W119th Ave. Broomfield, CO 80020	Crestone Peak Resources Operating, LLC Scheidt-State-61N67W 16CSE NWSE Sec. 16-T1N-R67W Weld County, Colorado	Soil Sample Location Map (05/20/2024)	Figure 2B
DESIGNED BY: S. Vogt				
DRAWN BY: L. Molson				



# TABLES

**TABLE 1**  
**SCHEIDT-STATE-61N67W 16CSE**  
**SOIL SAMPLE LOCATIONS**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**



Soil Sample Location	Depth	Date	PID Reading (ppm)	Latitude	Longitude	GPS PDOP Value	Lab (Y/N)
WH-B01@6'	6'	05/16/2024	10.2	40.047642	-104.890998	1.6	Y
WH-N01@5'	5'	05/16/2024	9.1	40.047650	-104.890999	3	N
WH-S01@5'	5'	05/16/2024	7.1	40.047634	-104.891009	1.7	N
WH-E01@5'	5'	05/16/2024	6.9	40.047641	-104.890991	1.6	N
WH-W01@5'	5'	05/16/2024	8.3	40.047643	-104.891014	1.8	N
FL-B01@4'	4'	05/16/2024	12.9	40.047636	-104.891023	1.8	Y
SP-CS01	-	05/16/2024	14.3	-	-	-	Y
FL-B02@5'	5'	05/16/2024	7.6	40.047539	-104.891103	1.2	N
FL-B03@5'	5'	05/16/2024	8.2	40.047503	-104.891130	1.2	Y
SP-CS02	-	05/16/2024	6.1	-	-	-	Y
PW-B01@3'	3'	05/20/2024	4.8	40.047517	-104.890599	1.4	Y
PW-N01@2'	2'	05/20/2024	5.8	40.047530	-104.890600	1.4	N
PW-S01@2'	2'	05/20/2024	3.9	40.047499	-104.890600	1.5	N
PW-E01@2'	2'	05/20/2024	34.2	40.047517	-104.890582	1.5	Y
PW-W01@2'	2'	05/20/2024	2.1	40.047512	-104.890615	1.4	N
SP-CS03	-	05/20/2024	44.0	-	-	-	Y
AST1-B01@3"	3"	05/20/2024	3.8	40.047552	-104.890676	1.7	Y
SEP1-B01@3"	3"	05/20/2024	14.5	40.047480	-104.891174	1.1	Y
SEP1-B02@3"	3"	05/20/2024	25.1	40.047472	-104.891131	0.9	Y

**Notes:**

PID = Photoionization Detector

ppm = parts per million

GPS = Global Positioning System

PDOP = Position Dilution of Precision

- = Not Applicable



**TABLE 2**  
**SCHEIDT-STATE-61N67W 16CSE**  
**SOIL ANALYTICAL DATA - VOCs**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**

Soil Sample Location	Depth	Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TVPH-GRO (mg/kg)	TEPH-DRO (mg/kg)	TEPH-ORO (mg/kg)	1,2,4-TMB (mg/kg)	1,3,5-TMB (mg/kg)
ECMC Organic Compounds in Soils - GSSL <sup>(1)</sup>			0.0026	0.69	0.78	9.9	0.0038	500			0.0081	0.0087
ECMC Organic Compounds in Soils - RSL <sup>(2)</sup>			1.2	490	5.8	58	2	500			30	27
WH-B01@6'	6'	05/16/2024	<0.000467	<0.00130	<0.000737	<0.000880	<0.00408	0.0223	2.64	6.67	<0.00158	<0.00200
FL-B01@4'	4'	05/16/2024	<0.000467	<0.00130	<0.000737	<0.000880	<0.00408	<0.0217	5.25	16.1	<0.00158	<0.00200
SP-CS01	-	05/16/2024	<0.000467	<0.00130	<0.000737	<0.000880	<0.00408	<0.0217	7.05	26.3	<0.00158	<0.00200
FL-B03@5'	5'	05/16/2024	<0.000467	<0.00130	<0.000737	<0.000880	<0.00408	<0.0217	<1.61	<0.274	<0.00158	<0.00200
SP-CS02	-	05/16/2024	<0.000467	<0.00130	<0.000737	<0.000880	<0.00408	<0.0217	2.10	3.76	<0.00158	<0.00200
PW-B01@3'	3'	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
PW-E01@2'	2'	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SP-CS03	-	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
AST1-B01@3"	3"	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SEP1-B01@3"	3"	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SEP1-B02@3"	3"	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending

**Notes:**

VOCs = Volatile Organic Compounds

(1) Standards for soil are taken from ECMC Table 915-1: Organic Compounds in Soils - Protection of Groundwater Soil Screening Level Concentrations (Effective January 15, 2021)

(2) Standards for soil are taken from ECMC Table 915-1: Organic Compounds in Soils - Residential Soil Screening Level Concentrations (Effective January 15, 2021)

ECMC = Colorado Energy & Carbon Management Commission

GSSL = Protection of Groundwater Screening Level

RSL = Residential Soil Screening Level

(<) = Analytical result is less than the indicated laboratory reporting limit

mg/kg = milligrams per kilogram

TVPH - GRO = Total Volatile Petroleum Hydrocarbons - Gasoline Range Organics

TEPH - DRO = Total Extractable Petroleum Hydrocarbons - Diesel Range Organics

TEPH - ORO = Total Extractable Petroleum Hydrocarbons - Oil Range Organics

1,2,4 - TMB = 1,2,4 - Trimethylbenzene

1,3,5 - TMB = 1,3,5 - Trimethylbenzene

**BOLD** = Analytical result is in exceedance of ECMC Table 915-1: Organic Compounds in Soils - Protection of Groundwater Soil Screening Level Concentrations

**BOLD** = Analytical result is in exceedance of ECMC Table 915-1: Organic Compounds in Soils - Residential Soil Screening Level Concentrations

*Italics* = Laboratory minimum detection limit exceeds the ECMC Table 915-1 standard

Pending = Analytical results pending final laboratory reporting

**TABLE 3**  
**SCHEIDT-STATE-61N67W 16CSE**  
**SOIL ANALYTICAL DATA - PAHs**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**

Soil Sample Location	Depth	Date	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo(a)A (mg/kg)	Benzo(b)F (mg/kg)	Benzo(k)F (mg/kg)	Benzo(a)P (mg/kg)	Chrysene (mg/kg)	D (a,h) A (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	1,2,3-CD (mg/kg)	1-M (mg/kg)	2-M (mg/kg)	Pyrene (mg/kg)
ECMC Organic Compounds in Soils - GSSL <sup>(1)</sup>			0.55	5.8	0.011	0.3	2.9	0.24	9	0.96	8.9	0.54	0.98	0.006	0.019	1.3
ECMC Organic Compounds in Soils - RSL <sup>(2)</sup>			360	1,800	1.1	1.1	11	0.11	110	0.11	240	240	1.1	18	24	180
WH-B01@6'	6'	05/16/2024	<0.00209	<0.00230	<0.00173	<0.00153	<0.00215	<0.00179	<0.00232	<0.00172	<0.00227	<0.00205	<0.00181	<0.00449	<0.00427	<0.00200
FL-B01@4'	4'	05/16/2024	0.00277	0.00452	0.00587	0.00588	<0.00215	0.00427	0.00718	<0.00172	0.0249	0.00286	0.00337	<0.00449	<0.00427	0.0192
SP-CS01	-	05/16/2024	<0.00209	<0.00230	0.00222	0.00242	<0.00215	<0.00179	<0.00232	<0.00172	0.00648	<0.00205	<0.00181	<0.00449	<0.00427	0.00589
FL-B03@5'	5'	05/16/2024	<0.00209	<0.00230	<0.00173	<0.0306	<0.0430	<0.0358	<0.00232	<0.0344	0.00352	<0.00205	<0.0362	<b>0.00679</b>	0.0177	0.00228
SP-CS02	-	05/16/2024	<0.00209	<0.00230	0.00328	0.00488	<0.00215	0.00303	0.00543	<0.00172	0.00998	<0.00205	0.00349	<0.00449	<0.00427	0.00836
PW-B01@3'	3'	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
PW-E01@2'	2'	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SP-CS03	-	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
AST1-B01@3"	3"	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SEP1-B01@3"	3"	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SEP1-B02@3"	3"	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending

**Notes:**

PAHs = Polycyclic Aromatic Hydrocarbons

(1) Standards for soil are taken from ECMC Table 915-1: Organic Compounds in Soils - Protection of Groundwater Soil Screening Level Concentrations (Effective January 15, 2021)

(2) Standards for soil are taken from ECMC Table 915-1: Organic Compounds in Soils - Residential Soil Screening Level Concentrations (Effective January 15, 2021)

ECMC = Colorado Energy & Carbon Management Commission

GSSL = Protection of Groundwater Screening Level

RSL = Residential Soil Screening Level

(<) = Analytical result is less than the indicated laboratory reporting limit

mg/kg = milligrams per kilogram

Benzo(a)A = Benzo(a)Anthracene

Benzo(b)F = Benzo(b)Fluoranthene

Benzo(k)F = Benzo(k)Fluoranthene

Benzo(a)P = Benzo(a)Pyrene

D (a,h) A = Dibenzo(a,h)Anthracene

1,2,3-CD = Indeno(1,2,3-cd)Pyrene

1-M = 1-Methylnaphthalene

2-M = 2-Methylnaphthalene

**BOLD** = Analytical result is in exceedance of ECMC Table 915-1: Organic Compounds in Soils - Protection of Groundwater Soil Screening Level Concentrations

**BOLD** = Analytical result is in exceedance of ECMC Table 915-1: Organic Compounds in Soils - Residential Soil Screening Level Concentrations



**TABLE 3**  
**SCHEIDT-STATE-61N67W 16CSE**  
**SOIL ANALYTICAL DATA - PAHs**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**

Soil Sample Location	Depth	Date	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo(a)A (mg/kg)	Benzo(b)F (mg/kg)	Benzo(k)F (mg/kg)	Benzo(a)P (mg/kg)	Chrysene (mg/kg)	D (a,h) A (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	1,2,3-CD (mg/kg)	1-M (mg/kg)	2-M (mg/kg)	Pyrene (mg/kg)
ECMC Organic Compounds in Soils - GSSL <sup>(1)</sup>			0.55	5.8	0.011	0.3	2.9	0.24	9	0.96	8.9	0.54	0.98	0.006	0.019	1.3
ECMC Organic Compounds in Soils - RSL <sup>(2)</sup>			360	1,800	1.1	1.1	11	0.11	110	0.11	240	240	1.1	18	24	180

Pending = Analytical results pending final laboratory reporting

**TABLE 4**  
**SCHEIDT-STATE-61N67W 16CSE**  
**SOIL ANALYTICAL DATA - METALS**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**

Soil Sample Location	Depth	Date	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
ECMC Metals in Soils - GSSL <sup>(1)</sup>			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
ECMC Metals in Soils - RSL <sup>(2)</sup>			0.68	15,000	71	0.3	3,100	400	1,500	390	390	23,000
WH-B01@6'	6'	05/16/2024	<b>2.91</b>	<b>170</b>	0.368	<b>0.258</b>	12.3	<b>28.9</b>	11.1	0.199	<0.0865	48.0
FL-B01@4'	4'	05/16/2024	<b>6.02</b>	<b>154</b>	0.309	<0.255	14.7	<b>23.9</b>	14.8	<b>0.315</b>	<0.0865	71.7
SP-CS01	-	05/16/2024	<b>5.17</b>	<b>252</b>	0.272	<0.255	13.6	<b>21.2</b>	12.8	<b>0.295</b>	<0.0865	62.1
FL-B03@5'	5'	05/16/2024	<b>5.06</b>	<b>218</b>	0.213	<0.255	10.5	8.87	11.1	<b>0.315</b>	<0.0865	35.7
SP-CS02	-	05/16/2024	<b>3.80</b>	<b>166</b>	0.189	<0.255	8.71	8.16	8.80	<b>0.281</b>	<0.0865	30.7
PW-B01@3'	3'	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
PW-E01@2'	2'	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SP-CS03	-	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
AST1-B01@3"	3"	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SEP1-B01@3"	3"	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SEP1-B02@3"	3"	05/20/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending

**Notes:**

(1) Standards for soil are taken from ECMC Table 915-1: Metals in Soils - Protection of Groundwater Soil Screening Level Concentrations (Effective January 15, 2021)

(2) Standards for soil are taken from ECMC Table 915-1: Metals in Soils - Residential Soil Screening Level Concentrations (Effective January 15, 2021)

ECMC = Colorado Energy & Carbon Management Commission

GSSL = Protection of Groundwater Screening Level

RSL = Residential Soil Screening Level

(<) = Analytical result is less than the indicated laboratory minimum detection limit

mg/kg = milligrams per kilogram

**BOLD** = Analytical result is in exceedance of ECMC Table 915-1: Metals in Soils - Protection of Groundwater Soil Screening Level Concentrations

**BOLD** = Analytical result is in exceedance of ECMC Table 915-1: Metals in Soils - Residential Soil Screening Level Concentrations

*Italics* = Laboratory minimum detection limit exceeds the ECMC Table 915-1 Standard

Pending = Analytical results pending final laboratory reporting

**TABLE 5**  
**SCHEIDT-STATE-61N67W 16CSE**  
**SOIL ANALYTICAL DATA - SOIL RECLAMATION**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**



Soil Sample Location	Depth	Date	pH	SAR	EC (mmhos/cm)	Boron (mg/L)
<b>ECMC Soil Suitability for Reclamation<sup>(1)</sup></b>			<b>6 - 8.3</b>	<b>&lt; 6</b>	<b>&lt; 4</b>	<b>2</b>
WH-B01@6'	6'	05/16/2024	<b>8.40</b>	0.451	0.361	0.265
FL-B01@4'	4'	05/16/2024	8.14	0.372	0.307	0.31
SP-CS01	-	05/16/2024	7.97	0.415	0.324	0.305
FL-B03@5'	5'	05/16/2024	8.11	0.541	0.444	0.772
SP-CS02	-	05/16/2024	7.75	1.33	1.43	0.465
PW-B01@3'	3'	05/20/2024	Pending	Pending	Pending	Pending
PW-E01@2'	2'	05/20/2024	Pending	Pending	Pending	Pending
SP-CS03	-	05/20/2024	Pending	Pending	Pending	Pending
AST1-B01@3"	3"	05/20/2024	Pending	Pending	Pending	Pending
SEP1-B01@3"	3"	05/20/2024	Pending	Pending	Pending	Pending
SEP1-B02@3"	3"	05/20/2024	Pending	Pending	Pending	Pending

**Notes:**

(1) Standards for soil are taken from ECMC Table 915-1: Soil Suitability for Reclamation (Effective January 15, 2021)

ECMC = Colorado Energy & Carbon Management Commission

(<) = Analytical result is less than the indicated laboratory reporting limit

mmhos/cm = millimhos per centimeter

mg/L = milligrams per liter

pH = Potential of Hydrogen

SAR = Sodium Adsorption Ratio

EC = Electrical Conductivity

**BOLD** = Analytical result is in exceedance of ECMC Table 915-1: Soil Suitability for Reclamation Concentrations

Pending = Analytical results pending final laboratory reporting



## **LABORATORY ANALYTICAL DATA**



# ANALYTICAL REPORT

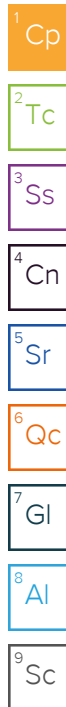
June 10, 2024

Revised Report

## Civitas - CO

Sample Delivery Group: L1738167  
Samples Received: 05/18/2024  
Project Number: 23682  
Description: Scheidt State 3-16J

Report To: Sam Vogt / Jacob Evans  
6855 W. 118th Ave  
Broomfield, CO 80020



Entire Report Reviewed By:

*Chris Ward*

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](http://mydata.pacelabs.com)

ACCOUNT:  
Civitas - CO

PROJECT:  
23682

SDG:  
L1738167

DATE/TIME:  
06/10/24 12:29

PAGE:  
1 of 33

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



# SAMPLE SUMMARY

## WH-B01@6' L1738167-01 Solid

Collected by  
Sean Clarke

Collected date/time  
05/16/24 11:10

Received date/time  
05/18/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2292095	1	05/29/24 20:22	05/29/24 20:22	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2289719	1	05/22/24 07:54	05/22/24 18:56	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2295014	1	05/29/24 14:48	05/29/24 22:15	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2295018	1	05/29/24 14:50	05/29/24 23:40	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2292101	1	05/30/24 12:05	05/31/24 10:09	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2290410	5	05/21/24 12:51	06/04/24 20:37	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2291133	1	05/21/24 22:36	05/22/24 17:00	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2293117	1	05/21/24 22:36	05/25/24 12:17	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2293170	1	05/27/24 02:32	05/27/24 12:18	KKS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2294364	1	05/28/24 15:51	05/29/24 07:19	DSH	Mt. Juliet, TN

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

## FL-B01@4' L1738167-02 Solid

Collected by  
Sean Clarke

Collected date/time  
05/16/24 11:20

Received date/time  
05/18/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2292095	1	05/29/24 20:25	05/29/24 20:25	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2289719	1	05/22/24 07:54	05/22/24 19:15	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2295014	1	05/29/24 14:48	05/29/24 22:15	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2295018	1	05/29/24 14:50	05/29/24 23:40	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2292101	1	05/30/24 12:05	05/31/24 10:14	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2290359	5	05/28/24 10:14	05/28/24 19:29	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2291133	1	05/21/24 22:36	05/22/24 17:19	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2293117	1	05/21/24 22:36	05/25/24 12:37	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2293560	1	05/27/24 08:19	05/27/24 23:16	KKS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2294364	1	05/28/24 15:51	05/29/24 07:37	DSH	Mt. Juliet, TN

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## SP-CS01 L1738167-03 Solid

Collected by  
Sean Clarke

Collected date/time  
05/16/24 11:22

Received date/time  
05/18/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2292095	1	05/29/24 20:35	05/29/24 20:35	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2289719	1	05/22/24 07:54	05/22/24 19:46	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2295014	1	05/29/24 14:48	05/29/24 22:15	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2295018	1	05/29/24 14:50	05/29/24 23:40	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2292101	1	05/30/24 12:05	05/31/24 10:15	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2290359	5	05/28/24 10:14	05/28/24 19:33	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2291657	1	05/21/24 22:36	05/23/24 04:13	WHS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2293117	1	05/21/24 22:36	05/25/24 12:56	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2293560	1	05/27/24 08:19	05/27/24 23:29	KKS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2294364	1	05/28/24 15:51	05/29/24 08:30	DSH	Mt. Juliet, TN

Collected by  
Sean Clarke

Collected date/time  
05/16/24 11:26

Received date/time  
05/18/24 09:00

## FL-B03@5' L1738167-04 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2292111	1	05/29/24 16:01	05/29/24 16:01	JTM	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2289719	1	05/22/24 07:54	05/22/24 19:52	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2295014	1	05/29/24 14:48	05/29/24 22:15	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2295018	1	05/29/24 14:50	05/29/24 23:40	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2292109	1	05/29/24 07:52	05/29/24 13:10	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2290359	5	05/28/24 10:14	05/28/24 19:36	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2291657	1	05/21/24 22:36	05/23/24 04:33	WHS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2293117	1	05/21/24 22:36	05/25/24 13:15	JBE	Mt. Juliet, TN

# SAMPLE SUMMARY

FL-B03@5' L1738167-04 Solid

Collected by  
Sean Clarke

Collected date/time  
05/16/24 11:26

Received date/time  
05/18/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2293560	1	05/27/24 08:19	05/27/24 21:31	KKS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2294364	1	05/28/24 15:51	05/29/24 08:47	DSH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2294364	20	05/28/24 15:51	06/06/24 01:16	JCH	Mt. Juliet, TN

SP-CS02 L1738167-05 Solid

Collected by  
Sean Clarke

Collected date/time  
05/16/24 11:28

Received date/time  
05/18/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2292095	1	05/29/24 20:39	05/29/24 20:39	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2289719	1	05/22/24 07:54	05/22/24 19:58	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2295014	1	05/29/24 14:48	05/29/24 22:15	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2295018	1	05/29/24 14:50	05/29/24 23:40	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2292101	1	05/30/24 12:05	05/31/24 10:17	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2290359	5	05/28/24 10:14	05/28/24 18:53	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2291657	1	05/21/24 22:36	05/23/24 04:52	WHS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2293117	1	05/21/24 22:36	05/25/24 13:35	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2293560	1	05/27/24 08:19	05/27/24 23:42	KKS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2294364	1	05/28/24 15:51	05/29/24 09:05	DSH	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

## Report Revision History

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Level II Report - Version 1: 06/07/24 10:48  
Level II Report - Version 2: 06/07/24 13:42

## Project Narrative

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Sample reissued 6/10 for data review followup





Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.451		1	05/29/2024 20:22	WG2292095

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.258	J	0.255	1.00	1	05/22/2024 18:56	WG2289719

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.40	T8	1	05/29/2024 22:15	WG2295014

Sample Narrative:

L1738167-01 WG2295014: 8.4 at 21.1C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	361		10.0	1	05/29/2024 23:40	WG2295018

Sample Narrative:

L1738167-01 WG2295018: at 25C

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.265		0.0167	0.200	1	05/31/2024 10:09	WG2292101

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.91		0.100	1.00	5	06/04/2024 20:37	WG2290410
Barium	170		0.152	2.50	5	06/04/2024 20:37	WG2290410
Cadmium	0.368	J	0.0855	1.00	5	06/04/2024 20:37	WG2290410
Copper	12.3		0.132	5.00	5	06/04/2024 20:37	WG2290410
Lead	28.9		0.0990	2.00	5	06/04/2024 20:37	WG2290410
Nickel	11.1		0.197	2.50	5	06/04/2024 20:37	WG2290410
Selenium	0.199	J	0.180	2.50	5	06/04/2024 20:37	WG2290410
Silver	U		0.0865	0.500	5	06/04/2024 20:37	WG2290410
Zinc	48.0		0.740	25.0	5	06/04/2024 20:37	WG2290410

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0223	J	0.0217	0.100	1	05/22/2024 17:00	WG2291133
(S) a,a,a-Trifluorotoluene(FID)	89.2			77.0-120		05/22/2024 17:00	WG2291133

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	05/25/2024 12:17	<a href="#">WG2293117</a>
Toluene	U		0.00130	0.00500	1	05/25/2024 12:17	<a href="#">WG2293117</a>
Ethylbenzene	U		0.000737	0.00250	1	05/25/2024 12:17	<a href="#">WG2293117</a>
Xylenes, Total	U		0.000880	0.00650	1	05/25/2024 12:17	<a href="#">WG2293117</a>
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	05/25/2024 12:17	<a href="#">WG2293117</a>
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	05/25/2024 12:17	<a href="#">WG2293117</a>
(S) Toluene-d8	107			75.0-131		05/25/2024 12:17	<a href="#">WG2293117</a>
(S) 4-Bromofluorobenzene	101			67.0-138		05/25/2024 12:17	<a href="#">WG2293117</a>
(S) 1,2-Dichloroethane-d4	100			70.0-130		05/25/2024 12:17	<a href="#">WG2293117</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.64	J	1.61	4.00	1	05/27/2024 12:18	<a href="#">WG2293170</a>
C28-C36 Motor Oil Range	6.67		0.274	4.00	1	05/27/2024 12:18	<a href="#">WG2293170</a>
(S) o-Terphenyl	28.5			18.0-148		05/27/2024 12:18	<a href="#">WG2293170</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	05/29/2024 07:19	<a href="#">WG2294364</a>
Anthracene	U		0.00230	0.00600	1	05/29/2024 07:19	<a href="#">WG2294364</a>
Benzo(a)anthracene	U		0.00173	0.00600	1	05/29/2024 07:19	<a href="#">WG2294364</a>
Benzo(b)fluoranthene	U		0.00153	0.00600	1	05/29/2024 07:19	<a href="#">WG2294364</a>
Benzo(k)fluoranthene	U		0.00215	0.00600	1	05/29/2024 07:19	<a href="#">WG2294364</a>
Benzo(a)pyrene	U		0.00179	0.00600	1	05/29/2024 07:19	<a href="#">WG2294364</a>
Chrysene	U		0.00232	0.00600	1	05/29/2024 07:19	<a href="#">WG2294364</a>
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	05/29/2024 07:19	<a href="#">WG2294364</a>
Fluoranthene	U		0.00227	0.00600	1	05/29/2024 07:19	<a href="#">WG2294364</a>
Fluorene	U		0.00205	0.00600	1	05/29/2024 07:19	<a href="#">WG2294364</a>
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	05/29/2024 07:19	<a href="#">WG2294364</a>
1-Methylnaphthalene	U		0.00449	0.0200	1	05/29/2024 07:19	<a href="#">WG2294364</a>
2-Methylnaphthalene	U		0.00427	0.0200	1	05/29/2024 07:19	<a href="#">WG2294364</a>
Naphthalene	U		0.00408	0.0200	1	05/29/2024 07:19	<a href="#">WG2294364</a>
Pyrene	U		0.00200	0.00600	1	05/29/2024 07:19	<a href="#">WG2294364</a>
(S) p-Terphenyl-d14	63.3			23.0-120		05/29/2024 07:19	<a href="#">WG2294364</a>
(S) Nitrobenzene-d5	69.2			14.0-149		05/29/2024 07:19	<a href="#">WG2294364</a>
(S) 2-Fluorobiphenyl	69.5			34.0-125		05/29/2024 07:19	<a href="#">WG2294364</a>

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.372		1	05/29/2024 20:25	WG2292095

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	05/22/2024 19:15	<a href="#">WG2289719</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.14	<a href="#">T8</a>	1	05/29/2024 22:15	<a href="#">WG2295014</a>

Sample Narrative:

L1738167-02 WG2295014: 8.14 at 21.1C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	307		10.0	1	05/29/2024 23:40	<a href="#">WG2295018</a>

Sample Narrative:

L1738167-02 WG2295018: at 25C

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.310		0.0167	0.200	1	05/31/2024 10:14	<a href="#">WG2292101</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.02		0.100	1.00	5	05/28/2024 19:29	<a href="#">WG2290359</a>
Barium	154		0.152	2.50	5	05/28/2024 19:29	<a href="#">WG2290359</a>
Cadmium	0.309	<a href="#">J</a>	0.0855	1.00	5	05/28/2024 19:29	<a href="#">WG2290359</a>
Copper	14.7		0.132	5.00	5	05/28/2024 19:29	<a href="#">WG2290359</a>
Lead	23.9		0.0990	2.00	5	05/28/2024 19:29	<a href="#">WG2290359</a>
Nickel	14.8		0.197	2.50	5	05/28/2024 19:29	<a href="#">WG2290359</a>
Selenium	0.315	<a href="#">J</a>	0.180	2.50	5	05/28/2024 19:29	<a href="#">WG2290359</a>
Silver	U		0.0865	0.500	5	05/28/2024 19:29	<a href="#">WG2290359</a>
Zinc	71.7		0.740	25.0	5	05/28/2024 19:29	<a href="#">WG2290359</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	05/22/2024 17:19	<a href="#">WG2291133</a>
(S) a,a,a-Trifluorotoluene(FID)	86.7			77.0-120		05/22/2024 17:19	<a href="#">WG2291133</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	05/25/2024 12:37	<a href="#">WG2293117</a>
Toluene	U		0.00130	0.00500	1	05/25/2024 12:37	<a href="#">WG2293117</a>
Ethylbenzene	U		0.000737	0.00250	1	05/25/2024 12:37	<a href="#">WG2293117</a>
Xylenes, Total	U		0.000880	0.00650	1	05/25/2024 12:37	<a href="#">WG2293117</a>
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	05/25/2024 12:37	<a href="#">WG2293117</a>
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	05/25/2024 12:37	<a href="#">WG2293117</a>
(S) Toluene-d8	107			75.0-131		05/25/2024 12:37	<a href="#">WG2293117</a>
(S) 4-Bromofluorobenzene	100			67.0-138		05/25/2024 12:37	<a href="#">WG2293117</a>
(S) 1,2-Dichloroethane-d4	103			70.0-130		05/25/2024 12:37	<a href="#">WG2293117</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	5.25		1.61	4.00	1	05/27/2024 23:16	<a href="#">WG2293560</a>
C28-C36 Motor Oil Range	16.1		0.274	4.00	1	05/27/2024 23:16	<a href="#">WG2293560</a>
(S) o-Terphenyl	33.8			18.0-148		05/27/2024 23:16	<a href="#">WG2293560</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	0.00277	UL	0.00209	0.00600	1	05/29/2024 07:37	<a href="#">WG2294364</a>
Anthracene	0.00452	UL	0.00230	0.00600	1	05/29/2024 07:37	<a href="#">WG2294364</a>
Benzo(a)anthracene	0.00587	UL	0.00173	0.00600	1	05/29/2024 07:37	<a href="#">WG2294364</a>
Benzo(b)fluoranthene	0.00588	UL	0.00153	0.00600	1	05/29/2024 07:37	<a href="#">WG2294364</a>
Benzo(k)fluoranthene	U		0.00215	0.00600	1	05/29/2024 07:37	<a href="#">WG2294364</a>
Benzo(a)pyrene	0.00427	UL	0.00179	0.00600	1	05/29/2024 07:37	<a href="#">WG2294364</a>
Chrysene	0.00718		0.00232	0.00600	1	05/29/2024 07:37	<a href="#">WG2294364</a>
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	05/29/2024 07:37	<a href="#">WG2294364</a>
Fluoranthene	0.0249		0.00227	0.00600	1	05/29/2024 07:37	<a href="#">WG2294364</a>
Fluorene	0.00286	UL	0.00205	0.00600	1	05/29/2024 07:37	<a href="#">WG2294364</a>
Indeno(1,2,3-cd)pyrene	0.00337	UL	0.00181	0.00600	1	05/29/2024 07:37	<a href="#">WG2294364</a>
1-Methylnaphthalene	U		0.00449	0.0200	1	05/29/2024 07:37	<a href="#">WG2294364</a>
2-Methylnaphthalene	U		0.00427	0.0200	1	05/29/2024 07:37	<a href="#">WG2294364</a>
Naphthalene	U		0.00408	0.0200	1	05/29/2024 07:37	<a href="#">WG2294364</a>
Pyrene	0.0192		0.00200	0.00600	1	05/29/2024 07:37	<a href="#">WG2294364</a>
(S) p-Terphenyl-d14	63.8			23.0-120		05/29/2024 07:37	<a href="#">WG2294364</a>
(S) Nitrobenzene-d5	78.5			14.0-149		05/29/2024 07:37	<a href="#">WG2294364</a>
(S) 2-Fluorobiphenyl	76.9			34.0-125		05/29/2024 07:37	<a href="#">WG2294364</a>

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.415		1	05/29/2024 20:35	WG2292095

1  
Cp

2  
Tc

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	05/22/2024 19:46	<a href="#">WG2289719</a>

3  
Ss

4  
Cn

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.97	<a href="#">T8</a>	1	05/29/2024 22:15	<a href="#">WG2295014</a>

5  
Sr

6  
Qc

Sample Narrative:

L1738167-03 WG2295014: 7.97 at 21.1C

7  
Gl

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	324		10.0	1	05/29/2024 23:40	<a href="#">WG2295018</a>

8  
Al

9  
Sc

Sample Narrative:

L1738167-03 WG2295018: at 25C

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.305		0.0167	0.200	1	05/31/2024 10:15	<a href="#">WG2292101</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.17		0.100	1.00	5	05/28/2024 19:33	<a href="#">WG2290359</a>
Barium	252		0.152	2.50	5	05/28/2024 19:33	<a href="#">WG2290359</a>
Cadmium	0.272	<a href="#">J</a>	0.0855	1.00	5	05/28/2024 19:33	<a href="#">WG2290359</a>
Copper	13.6		0.132	5.00	5	05/28/2024 19:33	<a href="#">WG2290359</a>
Lead	21.2		0.0990	2.00	5	05/28/2024 19:33	<a href="#">WG2290359</a>
Nickel	12.8		0.197	2.50	5	05/28/2024 19:33	<a href="#">WG2290359</a>
Selenium	0.295	<a href="#">J</a>	0.180	2.50	5	05/28/2024 19:33	<a href="#">WG2290359</a>
Silver	U		0.0865	0.500	5	05/28/2024 19:33	<a href="#">WG2290359</a>
Zinc	62.1		0.740	25.0	5	05/28/2024 19:33	<a href="#">WG2290359</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	05/23/2024 04:13	<a href="#">WG2291657</a>
(S) a,a,a-Trifluorotoluene(FID)	88.7			77.0-120		05/23/2024 04:13	<a href="#">WG2291657</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	05/25/2024 12:56	<a href="#">WG2293117</a>
Toluene	U		0.00130	0.00500	1	05/25/2024 12:56	<a href="#">WG2293117</a>
Ethylbenzene	U		0.000737	0.00250	1	05/25/2024 12:56	<a href="#">WG2293117</a>
Xylenes, Total	U		0.000880	0.00650	1	05/25/2024 12:56	<a href="#">WG2293117</a>
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	05/25/2024 12:56	<a href="#">WG2293117</a>
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	05/25/2024 12:56	<a href="#">WG2293117</a>
(S) Toluene-d8	111			75.0-131		05/25/2024 12:56	<a href="#">WG2293117</a>
(S) 4-Bromofluorobenzene	97.6			67.0-138		05/25/2024 12:56	<a href="#">WG2293117</a>
(S) 1,2-Dichloroethane-d4	98.6			70.0-130		05/25/2024 12:56	<a href="#">WG2293117</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	7.05		1.61	4.00	1	05/27/2024 23:29	<a href="#">WG2293560</a>
C28-C36 Motor Oil Range	26.3		0.274	4.00	1	05/27/2024 23:29	<a href="#">WG2293560</a>
(S) o-Terphenyl	39.2			18.0-148		05/27/2024 23:29	<a href="#">WG2293560</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	05/29/2024 08:30	<a href="#">WG2294364</a>
Anthracene	U		0.00230	0.00600	1	05/29/2024 08:30	<a href="#">WG2294364</a>
Benzo(a)anthracene	0.00222	U	0.00173	0.00600	1	05/29/2024 08:30	<a href="#">WG2294364</a>
Benzo(b)fluoranthene	0.00242	U	0.00153	0.00600	1	05/29/2024 08:30	<a href="#">WG2294364</a>
Benzo(k)fluoranthene	U		0.00215	0.00600	1	05/29/2024 08:30	<a href="#">WG2294364</a>
Benzo(a)pyrene	U		0.00179	0.00600	1	05/29/2024 08:30	<a href="#">WG2294364</a>
Chrysene	U		0.00232	0.00600	1	05/29/2024 08:30	<a href="#">WG2294364</a>
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	05/29/2024 08:30	<a href="#">WG2294364</a>
Fluoranthene	0.00648		0.00227	0.00600	1	05/29/2024 08:30	<a href="#">WG2294364</a>
Fluorene	U		0.00205	0.00600	1	05/29/2024 08:30	<a href="#">WG2294364</a>
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	05/29/2024 08:30	<a href="#">WG2294364</a>
1-Methylnaphthalene	U		0.00449	0.0200	1	05/29/2024 08:30	<a href="#">WG2294364</a>
2-Methylnaphthalene	U		0.00427	0.0200	1	05/29/2024 08:30	<a href="#">WG2294364</a>
Naphthalene	U		0.00408	0.0200	1	05/29/2024 08:30	<a href="#">WG2294364</a>
Pyrene	0.00589	U	0.00200	0.00600	1	05/29/2024 08:30	<a href="#">WG2294364</a>
(S) p-Terphenyl-d14	70.1			23.0-120		05/29/2024 08:30	<a href="#">WG2294364</a>
(S) Nitrobenzene-d5	75.9			14.0-149		05/29/2024 08:30	<a href="#">WG2294364</a>
(S) 2-Fluorobiphenyl	80.3			34.0-125		05/29/2024 08:30	<a href="#">WG2294364</a>

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.541		1	05/29/2024 16:01	WG2292111

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	05/22/2024 19:52	<a href="#">WG2289719</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.11	<a href="#">T8</a>	1	05/29/2024 22:15	<a href="#">WG2295014</a>

Sample Narrative:

L1738167-04 WG2295014: 8.11 at 20.8C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	444		10.0	1	05/29/2024 23:40	<a href="#">WG2295018</a>

Sample Narrative:

L1738167-04 WG2295018: at 25C

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.772		0.0167	0.200	1	05/29/2024 13:10	<a href="#">WG2292109</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.06		0.100	1.00	5	05/28/2024 19:36	<a href="#">WG2290359</a>
Barium	218		0.152	2.50	5	05/28/2024 19:36	<a href="#">WG2290359</a>
Cadmium	0.213	<a href="#">J</a>	0.0855	1.00	5	05/28/2024 19:36	<a href="#">WG2290359</a>
Copper	10.5		0.132	5.00	5	05/28/2024 19:36	<a href="#">WG2290359</a>
Lead	8.87		0.0990	2.00	5	05/28/2024 19:36	<a href="#">WG2290359</a>
Nickel	11.1		0.197	2.50	5	05/28/2024 19:36	<a href="#">WG2290359</a>
Selenium	0.315	<a href="#">J</a>	0.180	2.50	5	05/28/2024 19:36	<a href="#">WG2290359</a>
Silver	U		0.0865	0.500	5	05/28/2024 19:36	<a href="#">WG2290359</a>
Zinc	35.7		0.740	25.0	5	05/28/2024 19:36	<a href="#">WG2290359</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	05/23/2024 04:33	<a href="#">WG2291657</a>
(S) a,a,a-Trifluorotoluene(FID)	88.9			77.0-120		05/23/2024 04:33	<a href="#">WG2291657</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	05/25/2024 13:15	<a href="#">WG2293117</a>
Toluene	U		0.00130	0.00500	1	05/25/2024 13:15	<a href="#">WG2293117</a>
Ethylbenzene	U		0.000737	0.00250	1	05/25/2024 13:15	<a href="#">WG2293117</a>
Xylenes, Total	U		0.000880	0.00650	1	05/25/2024 13:15	<a href="#">WG2293117</a>
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	05/25/2024 13:15	<a href="#">WG2293117</a>
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	05/25/2024 13:15	<a href="#">WG2293117</a>
(S) Toluene-d8	105			75.0-131		05/25/2024 13:15	<a href="#">WG2293117</a>
(S) 4-Bromofluorobenzene	102			67.0-138		05/25/2024 13:15	<a href="#">WG2293117</a>
(S) 1,2-Dichloroethane-d4	102			70.0-130		05/25/2024 13:15	<a href="#">WG2293117</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	05/27/2024 21:31	<a href="#">WG2293560</a>
C28-C36 Motor Oil Range	U		0.274	4.00	1	05/27/2024 21:31	<a href="#">WG2293560</a>
(S) o-Terphenyl	25.6			18.0-148		05/27/2024 21:31	<a href="#">WG2293560</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	05/29/2024 08:47	<a href="#">WG2294364</a>
Anthracene	U		0.00230	0.00600	1	05/29/2024 08:47	<a href="#">WG2294364</a>
Benzo(a)anthracene	U		0.00173	0.00600	1	05/29/2024 08:47	<a href="#">WG2294364</a>
Benzo(b)fluoranthene	U		0.0306	0.120	20	06/06/2024 01:16	<a href="#">WG2294364</a>
Benzo(k)fluoranthene	U		0.0430	0.120	20	06/06/2024 01:16	<a href="#">WG2294364</a>
Benzo(a)pyrene	U		0.0358	0.120	20	06/06/2024 01:16	<a href="#">WG2294364</a>
Chrysene	U		0.00232	0.00600	1	05/29/2024 08:47	<a href="#">WG2294364</a>
Dibenz(a,h)anthracene	U		0.0344	0.120	20	06/06/2024 01:16	<a href="#">WG2294364</a>
Fluoranthene	0.00352	<a href="#">J</a>	0.00227	0.00600	1	05/29/2024 08:47	<a href="#">WG2294364</a>
Fluorene	U		0.00205	0.00600	1	05/29/2024 08:47	<a href="#">WG2294364</a>
Indeno(1,2,3-cd)pyrene	U		0.0362	0.120	20	06/06/2024 01:16	<a href="#">WG2294364</a>
1-Methylnaphthalene	0.00679	<a href="#">J</a>	0.00449	0.0200	1	05/29/2024 08:47	<a href="#">WG2294364</a>
2-Methylnaphthalene	0.0177	<a href="#">J</a>	0.00427	0.0200	1	05/29/2024 08:47	<a href="#">WG2294364</a>
Naphthalene	U		0.00408	0.0200	1	05/29/2024 08:47	<a href="#">WG2294364</a>
Pyrene	0.00228	<a href="#">J</a>	0.00200	0.00600	1	05/29/2024 08:47	<a href="#">WG2294364</a>
(S) p-Terphenyl-d14	99.8	<a href="#">J7</a>		23.0-120		06/06/2024 01:16	<a href="#">WG2294364</a>
(S) p-Terphenyl-d14	42.8			23.0-120		05/29/2024 08:47	<a href="#">WG2294364</a>
(S) Nitrobenzene-d5	102	<a href="#">J7</a>		14.0-149		06/06/2024 01:16	<a href="#">WG2294364</a>
(S) Nitrobenzene-d5	66.9			14.0-149		05/29/2024 08:47	<a href="#">WG2294364</a>
(S) 2-Fluorobiphenyl	97.6	<a href="#">J7</a>		34.0-125		06/06/2024 01:16	<a href="#">WG2294364</a>
(S) 2-Fluorobiphenyl	57.7			34.0-125		05/29/2024 08:47	<a href="#">WG2294364</a>

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.33		1	05/29/2024 20:39	WG2292095

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	05/22/2024 19:58	<a href="#">WG2289719</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.75	<a href="#">T8</a>	1	05/29/2024 22:15	<a href="#">WG2295014</a>

Sample Narrative:

L1738167-05 WG2295014: 7.75 at 20.9C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1430		10.0	1	05/29/2024 23:40	<a href="#">WG2295018</a>

Sample Narrative:

L1738167-05 WG2295018: at 25C

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.465		0.0167	0.200	1	05/31/2024 10:17	<a href="#">WG2292101</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.80		0.100	1.00	5	05/28/2024 18:53	<a href="#">WG2290359</a>
Barium	166		0.152	2.50	5	05/28/2024 18:53	<a href="#">WG2290359</a>
Cadmium	0.189	<a href="#">J</a>	0.0855	1.00	5	05/28/2024 18:53	<a href="#">WG2290359</a>
Copper	8.71		0.132	5.00	5	05/28/2024 18:53	<a href="#">WG2290359</a>
Lead	8.16		0.0990	2.00	5	05/28/2024 18:53	<a href="#">WG2290359</a>
Nickel	8.80		0.197	2.50	5	05/28/2024 18:53	<a href="#">WG2290359</a>
Selenium	0.281	<a href="#">J</a>	0.180	2.50	5	05/28/2024 18:53	<a href="#">WG2290359</a>
Silver	U		0.0865	0.500	5	05/28/2024 18:53	<a href="#">WG2290359</a>
Zinc	30.7		0.740	25.0	5	05/28/2024 18:53	<a href="#">WG2290359</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	05/23/2024 04:52	<a href="#">WG2291657</a>
(S) a,a,a-Trifluorotoluene(FID)	88.7			77.0-120		05/23/2024 04:52	<a href="#">WG2291657</a>

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	05/25/2024 13:35	<a href="#">WG2293117</a>
Toluene	U		0.00130	0.00500	1	05/25/2024 13:35	<a href="#">WG2293117</a>
Ethylbenzene	U		0.000737	0.00250	1	05/25/2024 13:35	<a href="#">WG2293117</a>
Xylenes, Total	U		0.000880	0.00650	1	05/25/2024 13:35	<a href="#">WG2293117</a>
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	05/25/2024 13:35	<a href="#">WG2293117</a>
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	05/25/2024 13:35	<a href="#">WG2293117</a>
(S) Toluene-d8	109			75.0-131		05/25/2024 13:35	<a href="#">WG2293117</a>
(S) 4-Bromofluorobenzene	96.8			67.0-138		05/25/2024 13:35	<a href="#">WG2293117</a>
(S) 1,2-Dichloroethane-d4	99.1			70.0-130		05/25/2024 13:35	<a href="#">WG2293117</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.10	<a href="#">U</a>	1.61	4.00	1	05/27/2024 23:42	<a href="#">WG2293560</a>
C28-C36 Motor Oil Range	3.76	<a href="#">B</a> <a href="#">J</a>	0.274	4.00	1	05/27/2024 23:42	<a href="#">WG2293560</a>
(S) o-Terphenyl	35.4			18.0-148		05/27/2024 23:42	<a href="#">WG2293560</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	05/29/2024 09:05	<a href="#">WG2294364</a>
Anthracene	U		0.00230	0.00600	1	05/29/2024 09:05	<a href="#">WG2294364</a>
Benzo(a)anthracene	0.00328	<a href="#">U</a>	0.00173	0.00600	1	05/29/2024 09:05	<a href="#">WG2294364</a>
Benzo(b)fluoranthene	0.00488	<a href="#">U</a>	0.00153	0.00600	1	05/29/2024 09:05	<a href="#">WG2294364</a>
Benzo(k)fluoranthene	U		0.00215	0.00600	1	05/29/2024 09:05	<a href="#">WG2294364</a>
Benzo(a)pyrene	0.00303	<a href="#">U</a>	0.00179	0.00600	1	05/29/2024 09:05	<a href="#">WG2294364</a>
Chrysene	0.00543	<a href="#">U</a>	0.00232	0.00600	1	05/29/2024 09:05	<a href="#">WG2294364</a>
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	05/29/2024 09:05	<a href="#">WG2294364</a>
Fluoranthene	0.00998		0.00227	0.00600	1	05/29/2024 09:05	<a href="#">WG2294364</a>
Fluorene	U		0.00205	0.00600	1	05/29/2024 09:05	<a href="#">WG2294364</a>
Indeno(1,2,3-cd)pyrene	0.00349	<a href="#">U</a>	0.00181	0.00600	1	05/29/2024 09:05	<a href="#">WG2294364</a>
1-Methylnaphthalene	U		0.00449	0.0200	1	05/29/2024 09:05	<a href="#">WG2294364</a>
2-Methylnaphthalene	U		0.00427	0.0200	1	05/29/2024 09:05	<a href="#">WG2294364</a>
Naphthalene	U		0.00408	0.0200	1	05/29/2024 09:05	<a href="#">WG2294364</a>
Pyrene	0.00836		0.00200	0.00600	1	05/29/2024 09:05	<a href="#">WG2294364</a>
(S) p-Terphenyl-d14	85.2			23.0-120		05/29/2024 09:05	<a href="#">WG2294364</a>
(S) Nitrobenzene-d5	85.9			14.0-149		05/29/2024 09:05	<a href="#">WG2294364</a>
(S) 2-Fluorobiphenyl	89.5			34.0-125		05/29/2024 09:05	<a href="#">WG2294364</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4072994-1 05/22/24 17:58

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

L1738166-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1738166-02 05/22/24 18:38 • (DUP) R4072994-3 05/22/24 18:44

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

L1738196-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1738196-02 05/22/24 20:42 • (DUP) R4072994-8 05/22/24 20:48

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

Laboratory Control Sample (LCS)

(LCS) R4072994-2 05/22/24 18:07

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Hexavalent Chromium	10.0	10.5	105	80.0-120	

L1738167-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1738167-02 05/22/24 19:15 • (MS) R4072994-4 05/22/24 19:21 • (MSD) R4072994-5 05/22/24 19:27

	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	U	19.6	20.3	97.8	101	1	75.0-125			3.72	20

L1738196-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1738196-03 05/22/24 20:54 • (MS) R4072994-9 05/22/24 21:00 • (MSD) R4072994-10 05/22/24 21:06

	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	U	20.6	20.4	103	102	1	75.0-125			0.528	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1738167-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1738167-02 05/22/24 19:15 • (MS) R4072994-6 05/22/24 19:34

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Hexavalent Chromium	638	U	630	98.8	50	75.0-125	

L1738196-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1738196-03 05/22/24 20:54 • (MS) R4072994-11 05/22/24 21:12

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Hexavalent Chromium	654	U	699	107	50	75.0-125	



L1738161-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1738161-01 05/29/24 22:15 • (DUP) R4075129-2 05/29/24 22:15

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	pH	su		%		%
pH	7.87	7.84	1	0.382		1

Sample Narrative:

OS: 7.87 at 21.1C

DUP: 7.84 at 21.1C

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1738712-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1738712-03 05/29/24 22:15 • (DUP) R4075129-3 05/29/24 22:15

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	pH	su		%		%
pH	8.81	8.81	1	0.000		1

Sample Narrative:

OS: 8.81 at 21.2C

DUP: 8.81 at 21.2C

Laboratory Control Sample (LCS)

(LCS) R4075129-1 05/29/24 22:15

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	su	su	%	%	
pH	10.0	9.97	99.7	99.0-101	

Sample Narrative:

LCS: 9.97 at 20.8C

Method Blank (MB)

(MB) R4075138-1 05/29/24 23:40

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

L1738161-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1738161-02 05/29/24 23:40 • (DUP) R4075138-3 05/29/24 23:40

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	192	193	1	0.467		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1738712-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1738712-02 05/29/24 23:40 • (DUP) R4075138-4 05/29/24 23:40

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	201	199	1	1.00		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4075138-2 05/29/24 23:40

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	733	749	102	85.0-115	

Sample Narrative:

LCS: at 25C

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) R4075773-1 05/31/24 09:54

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) R4075773-2 05/31/24 09:56 • (LCSD) R4075773-3 05/31/24 09:57

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	1.00	1.01	100	101	80.0-120			0.116	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R4074972-1 05/29/24 13:00

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) R4074972-2 05/29/24 13:03 • (LCSD) R4074972-3 05/29/24 13:06

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	1.13	1.15	113	115	80.0-120			1.45	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R4074723-1 05/28/24 18:46

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	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) R4074723-2 05/28/24 18:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	88.9	88.9	80.0-120	
Barium	100	91.9	91.9	80.0-120	
Cadmium	100	90.3	90.3	80.0-120	
Copper	100	92.2	92.2	80.0-120	
Lead	100	90.9	90.9	80.0-120	
Nickel	100	93.0	93.0	80.0-120	
Selenium	100	89.3	89.3	80.0-120	
Silver	20.0	18.6	93.2	80.0-120	
Zinc	100	87.6	87.6	80.0-120	

L1738167-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1738167-05 05/28/24 18:53 • (MS) R4074723-5 05/28/24 19:03 • (MSD) R4074723-6 05/28/24 19:06

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	3.80	88.3	93.2	84.5	89.4	5	75.0-125			5.35	20
Barium	100	166	273	258	107	91.7	5	75.0-125			5.70	20
Cadmium	100	0.189	88.1	95.4	87.9	95.2	5	75.0-125			8.01	20
Copper	100	8.71	89.9	98.4	81.2	89.7	5	75.0-125			9.02	20
Lead	100	8.16	94.2	103	86.0	94.5	5	75.0-125			8.68	20
Nickel	100	8.80	95.2	101	86.4	91.7	5	75.0-125			5.42	20
Selenium	100	0.281	86.6	90.8	86.3	90.5	5	75.0-125			4.79	20
Silver	20.0	U	17.9	19.1	89.7	95.7	5	75.0-125			6.49	20
Zinc	100	30.7	116	122	85.2	91.6	5	75.0-125			5.43	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4077223-1 06/04/24 18:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.100	1.00
Barium	0.194	J	0.152	2.50
Cadmium	U		0.0855	1.00
Copper	U		0.133	5.00
Lead	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) R4077223-2 06/04/24 18:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	91.5	91.5	80.0-120	
Barium	100	89.9	89.9	80.0-120	
Cadmium	100	93.1	93.1	80.0-120	
Copper	100	88.4	88.4	80.0-120	
Lead	100	91.1	91.1	80.0-120	
Nickel	100	94.7	94.7	80.0-120	
Selenium	100	98.2	98.2	80.0-120	
Silver	20.0	18.5	92.6	80.0-120	
Zinc	100	88.8	88.8	80.0-120	

L1735882-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1735882-01 06/04/24 18:49 • (MS) R4077223-5 06/04/24 18:59 • (MSD) R4077223-6 06/04/24 19:02

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 %
Arsenic	100	3.80	83.5	81.3	79.6	77.5	5	75.0-125			2.60	20
Barium	100	138	208	215	69.7	76.5	5	75.0-125	J6		3.20	20
Cadmium	100	0.128	90.2	89.8	90.1	89.7	5	75.0-125			0.492	20
Copper	100	16.7	96.6	96.1	79.9	79.4	5	75.0-125			0.493	20
Lead	100	14.4	96.5	99.5	82.1	85.1	5	75.0-125			3.04	20
Nickel	100	11.7	97.5	96.0	85.7	84.2	5	75.0-125			1.53	20
Selenium	100	0.292	83.9	84.6	83.6	84.3	5	75.0-125			0.813	20
Silver	20.0	U	18.0	18.0	90.1	89.8	5	75.0-125			0.270	20
Zinc	100	55.1	132	128	77.3	73.1	5	75.0-125		J6	3.18	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R4072979-3 05/22/24 10:58

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)	96.9			77.0-120

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

(LCS) R4072979-1 05/22/24 09:58 • (LCSD) R4072979-2 05/22/24 10:16

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	5.00	5.00	5.17	100	103	72.0-127			3.34	20
(S) a,a,a-Trifluorotoluene(FID)				106	106	77.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4073047-3 05/23/24 02:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0283	⬇	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	94.5			77.0-120

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

(LCS) R4073047-1 05/23/24 01:02 • (LCSD) R4073047-2 05/23/24 01:21

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	5.00	5.20	5.16	104	103	72.0-127			0.772	20
(S) a,a,a-Trifluorotoluene(FID)				104	104	77.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4074901-2 05/25/24 09:17

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
Ethylbenzene	U		0.000737	0.00250
Xylenes, Total	U		0.000880	0.00650
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
(S) Toluene-d8	110			75.0-131
(S) 4-Bromofluorobenzene	94.9			67.0-138
(S) 1,2-Dichloroethane-d4	97.6			70.0-130

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

(LCS) R4074901-1 05/25/24 08:00 • (LCSD) R4074901-3 05/25/24 13:54

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 %
Benzene	0.125	0.106	0.106	84.8	84.8	70.0-123			0.000	20
Toluene	0.125	0.121	0.120	96.8	96.0	75.0-121			0.830	20
Ethylbenzene	0.125	0.112	0.116	89.6	92.8	74.0-126			3.51	20
Xylenes, Total	0.375	0.339	0.353	90.4	94.1	72.0-127			4.05	20
1,2,4-Trimethylbenzene	0.125	0.118	0.122	94.4	97.6	70.0-126			3.33	20
1,3,5-Trimethylbenzene	0.125	0.115	0.117	92.0	93.6	73.0-127			1.72	20
(S) Toluene-d8				106	106	75.0-131				
(S) 4-Bromofluorobenzene				92.8	97.7	67.0-138				
(S) 1,2-Dichloroethane-d4				106	105	70.0-130				

L1738081-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1738081-03 05/25/24 15:11 • (MS) R4074901-4 05/25/24 17:25 • (MSD) R4074901-5 05/25/24 17:44

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.124	U	0.127	0.125	102	101	1	10.0-149			1.59	37
Toluene	0.124	0.00188	0.142	0.148	115	119	1	10.0-156			4.14	38
Ethylbenzene	0.124	U	0.134	0.138	108	111	1	10.0-160			2.94	38
Xylenes, Total	0.372	U	0.398	0.422	107	113	1	10.0-160			5.85	38
1,2,4-Trimethylbenzene	0.124	U	0.141	0.147	114	119	1	10.0-160			4.17	36
1,3,5-Trimethylbenzene	0.124	U	0.132	0.144	106	116	1	10.0-160			8.70	38
(S) Toluene-d8					105	109		75.0-131				
(S) 4-Bromofluorobenzene					97.1	96.9		67.0-138				
(S) 1,2-Dichloroethane-d4					112	101		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) R4074409-1 05/27/24 11:25

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	44.0			18.0-148

Laboratory Control Sample (LCS)

(LCS) R4074409-2 05/27/24 15:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	26.8	53.6	50.0-150	
(S) o-Terphenyl			41.9	18.0-148	

L1738265-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1738265-01 05/27/24 15:34 • (MS) R4074409-3 05/27/24 15:47 • (MSD) R4074409-4 05/27/24 16:00

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	49.2	U	33.9	U	68.9	0.000	20	50.0-150	J	J3 J6	200	20
(S) o-Terphenyl					28.2	28.6		18.0-148	J7	J7		

Sample Narrative:

OS: Cannot run at lower dilution due to viscosity of extract

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc



Method Blank (MB)

(MB) R4074461-2 05/27/24 21:05

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	0.492	⬇	0.274	4.00
(S) o-Terphenyl	40.7			18.0-148

Laboratory Control Sample (LCS)

(LCS) R4074461-1 05/27/24 20:52

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	31.0	62.0	50.0-150	
(S) o-Terphenyl			43.4	18.0-148	

L1738223-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1738223-01 05/27/24 21:44 • (MS) R4074461-3 05/27/24 21:58 • (MSD) R4074461-4 05/27/24 22:11

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	48.8	U	29.2	26.0	59.8	53.3	1	50.0-150			11.6	20
(S) o-Terphenyl					38.9	35.2		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4074833-2 05/28/24 23:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00209	0.00600
Anthracene	U		0.00230	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Benzo(a)pyrene	U		0.00179	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
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
Naphthalene	U		0.00408	0.0200
Pyrene	U		0.00200	0.00600
(S) p-Terphenyl-d14	79.4			23.0-120
(S) Nitrobenzene-d5	74.6			14.0-149
(S) 2-Fluorobiphenyl	83.2			34.0-125

1  
Cp

2  
Tc

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Ss

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Cn

5  
Sr

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Qc

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Gl

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Al

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Sc

Laboratory Control Sample (LCS)

(LCS) R4074833-1 05/28/24 23:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0681	85.1	50.0-120	
Anthracene	0.0800	0.0726	90.8	50.0-126	
Benzo(a)anthracene	0.0800	0.0681	85.1	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0715	89.4	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0671	83.9	49.0-125	
Benzo(a)pyrene	0.0800	0.0643	80.4	42.0-120	
Chrysene	0.0800	0.0728	91.0	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0668	83.5	47.0-125	
Fluoranthene	0.0800	0.0767	95.9	49.0-129	
Fluorene	0.0800	0.0758	94.8	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0644	80.5	46.0-125	
1-Methylnaphthalene	0.0800	0.0733	91.6	51.0-121	
2-Methylnaphthalene	0.0800	0.0691	86.4	50.0-120	
Naphthalene	0.0800	0.0697	87.1	50.0-120	
Pyrene	0.0800	0.0743	92.9	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R4074833-1 05/28/24 23:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) p-Terphenyl-d14			95.4	23.0-120	
(S) Nitrobenzene-d5			92.4	14.0-149	
(S) 2-Fluorobiphenyl			99.2	34.0-125	

L1738167-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1738167-02 05/29/24 07:37 • (MS) R4074833-3 05/29/24 07:55 • (MSD) R4074833-4 05/29/24 08:12

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 %
Acenaphthene	0.0800	0.00277	0.0608	0.0630	72.5	75.3	1	14.0-127			3.55	27
Anthracene	0.0800	0.00452	0.0654	0.0662	76.1	77.1	1	10.0-145			1.22	30
Benzo(a)anthracene	0.0800	0.00587	0.0653	0.0649	74.3	73.8	1	10.0-139			0.614	30
Benzo(b)fluoranthene	0.0800	0.00588	0.0580	0.0591	65.2	66.5	1	10.0-140			1.88	36
Benzo(k)fluoranthene	0.0800	U	0.0556	0.0579	69.5	72.4	1	10.0-137			4.05	31
Benzo(a)pyrene	0.0800	0.00427	0.0607	0.0613	70.5	71.3	1	10.0-141			0.984	31
Chrysene	0.0800	0.00718	0.0697	0.0692	78.2	77.5	1	10.0-145			0.720	30
Dibenz(a,h)anthracene	0.0800	U	0.0548	0.0573	68.5	71.6	1	10.0-132			4.46	31
Fluoranthene	0.0800	0.0249	0.0957	0.0843	88.5	74.2	1	10.0-153			12.7	33
Fluorene	0.0800	0.00286	0.0670	0.0714	80.2	85.7	1	11.0-130			6.36	29
Indeno(1,2,3-cd)pyrene	0.0800	0.00337	0.0540	0.0543	63.3	63.7	1	10.0-137			0.554	32
1-Methylnaphthalene	0.0800	U	0.0633	0.0657	79.1	82.1	1	10.0-142			3.72	28
2-Methylnaphthalene	0.0800	U	0.0597	0.0629	74.6	78.6	1	10.0-137			5.22	28
Naphthalene	0.0800	U	0.0608	0.0623	76.0	77.9	1	10.0-135			2.44	27
Pyrene	0.0800	0.0192	0.0832	0.0753	80.0	70.1	1	10.0-148			9.97	35
(S) p-Terphenyl-d14					65.9	69.9		23.0-120				
(S) Nitrobenzene-d5					75.1	78.5		14.0-149				
(S) 2-Fluorobiphenyl					79.0	84.1		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.

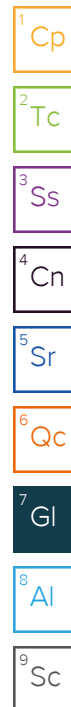
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

## Abbreviations and Definitions

MDL	Method Detection Limit.
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.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
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 <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	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 <sup>1 6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1 4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> 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.





Company Name/Address: <b>Civitas/Tasman - CO</b> 6855 W. 118th Ave Broomfield, CO 80020			Billing Information: <b>Accounts Payable</b> 650 Southgate Dr. Windsor, CO 80550			Analysis / Container / Preservative <div style="display: flex; justify-content: space-between;"> <div style="width: 15%;">Pres Chk</div> <div style="width: 85%;"></div> </div>			Chain of Custody Page <u>1</u> of <u>1</u>  <b>MT JULIET, TN</b> <small>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/pas-standard-terms.pdf</small> SDG # <u>1738167</u> <div style="border: 1px solid black; padding: 5px; display: inline-block;"><b>A090</b></div> Acctnum: <b>CIVTASBCO</b> Template: <b>T250702</b> Prelogin: <b>P1068185</b> PM: <b>824 - Chris Ward</b> PB: Shipped Via: <b>FedEX Ground</b>						
Project Manager: <b>Sam Vogt / Jacob Evans</b>			Email: <b>svogt@tasman-geo.com;</b> <b>jevans@civitasresources.com</b>			Full TABLE915 8ozClr-NoPres Background TABLE915 8ozClr-NoPres V8260 (GW TABLE915) 40mL Amb-HCl Chloride, Sulfate 125mL HDPE-NoPres TDS 1L-HDPE-NoPres									
Project Name: <u>Scheidt State 3-16J</u>			Please Circle: PT <input checked="" type="radio"/> (M) CT ET												
Phone: <b>610-405-9078</b>		Lab Project #: AFE# or C/C: <u>23682</u>		Billing Code #: <u>8523.197</u>											
Collected by (print): <u>Ben Long</u>		Site/Facility ID #: Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote # Date Results Needed <u>STD</u>											
Collected by (signature): <u>BL</u> Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>			# of Containers <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"></div> <div style="width: 45%;"></div> </div>												
Sample ID		Comp/Grab		Matrix *						Depth		Date		Time	
WH-B01E6'		Grab		SS						6'		5/16/24		1110	
FL-B01E4'		Grab		↓						4'		↓		1120	
SP-CS01		Comp.		↓		-		↓		1122					
FL-B03E5'		Grab		↓		5'		↓		1126					
SP-CS02		Comp.		↓		-		↓		1128					
* Matrix: SS - Soil   AIR - Air   F - Filter GW - Groundwater   B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks: pH, EC, SAR by saturated paste preparation method Boron by hot water soluble preparation method Table 915-1 Metals - As, Ba, Cd, Cu, Pb, Ni, Se, Ag, Zn, Cr VI Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier _____													
Relinquished by: (Signature) <u>BL</u>			Date: <u>5/16/24</u>		Time: <u>1745</u>		Received by: (Signature) <u>Base Carline</u>			Trip Blank Received: Yes/No HCL / MeOH TBR					
Relinquished by: (Signature) <u>Base Carline</u>			Date: <u>5/17/24</u>		Time: <u>1800</u>		Received by: (Signature) <u>FedEx</u>			Temp: °C   Bottles Received: <u>EOAB .9+/-1.0</u>					
Relinquished by: (Signature) <u>Base Carline</u>			Date: <u>5-18-24</u>		Time: <u>9:00</u>		Received for lab by: (Signature) <u>Base Carline</u>			Hold: Condition: NCF / OK					

**Sample Receipt Checklist**

COC Seal Present/Intact: ☒ NP ☐ N

COC Signed/Accurate: ☒ Y ☐ N

Bottles arrive intact: ☒ Y ☐ N

Correct bottles used: ☒ Y ☐ N

Sufficient volume sent: ☒ Y ☐ N

If Applicable

VOA Zero Headspace: ☒ Y ☐ N

Preservation Correct/Checked: ☒ Y ☐ N

RAD Screen <0.5 mR/hr: ☒ Y ☐ N