

Well Name: PHILADELPHIA CR	Well Location: T2S / R101W / SEC 15 / NWSW /	County or Parish/State: RIO BLANCO / CO
Well Number: 18	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: COC19339	Unit or CA Name:	Unit or CA Number:
US Well Number: 051030806600X1	Well Status: Abandoned	Operator: ROBERT L BAYLESS PRODUCER LLC

Notice of Intent

Sundry ID: 2637448
Type of Submission: Notice of Intent
Date Sundry Submitted: 10/05/2021
Date proposed operation will begin: 10/05/2021
Type of Action: Variance
Time Sundry Submitted: 03:01
Procedure Description: Please see attached.

NOI Attachments

- Procedure Description**
- Bayless__PC_18__BKGD_Data__L1374154__20211005150100.pdf
 - Bayless__PC_18_Pit_Data__L1374151__20211005150100.pdf
 - Bayless__PC_18__Sample_Location_Map_20211005150059.pdf
 - Bayless__PC_18_Pit__Data_Tracker_20211005150059.pdf
 - 2021.10.05_BLM_SN_procedure_attachment_20211005150027.pdf

Well Name: PHILADELPHIA CR	Well Location: T2S / R101W / SEC 15 / NWSW /	County or Parish/State: RIO BLANCO / CO
Well Number: 18	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: COC19339	Unit or CA Name:	Unit or CA Number:
US Well Number: 051030806600X1	Well Status: Abandoned	Operator: ROBERT L BAYLESS PRODUCER LLC

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: HELEN TRUJILLO	Signed on: OCT 05, 2021 02:57 PM
Name: ROBERT L BAYLESS PRODUCER LLC	
Title: Office Manager	
Street Address: NOT ENTERED	
City: Farmington	State: NM
Phone: (505) 326-2659	
Email address: notices@rlbayless.com	

Field Representative

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		



Robert L. Bayless, Producer LLC

Philadelphia Creek 18

API 05-103-08066

10/05/2021

BLM Sundry ID 2637448

Procedure Description Attachment

Robert L. Bayless (Bayless) is submitting this Sundry Notice to the Bureau of Land Management (BLM) for the purposes of requesting a variance/allowance to the inorganic analytical exceedances at the Philadelphia Creek #18 (PC #18) location. Bayless is in the process of closing the location and completing final reclamation of the site.

In order to complete the final reclamation, a site investigation of the old earthen blow pit (Facility ID 117165) was necessary as the COGCC database still showed the pit was active (AC). A Site Investigation and Remediation Workplan (Form 27) was submitted to the COGCC on 5/11/2021 and approved by Kris Neidel on 6/21/2021 (Doc# 402684507, REM# 18652). Within the Form 27, it was outlined that a third-party contactor (HRL Compliance Solutions) would be utilized to conduct the site investigation, which consisted of vertical and horizontal delineation via hand auger. Samples would be collected from the pit bottom and side walls in 1-foot increments to a depth of 5-feet, which is the maximum depth the hand auger can reach. Each interval would be field screened using a Photoionizing Detection (PID) unit and samples would be collected from the interval that field screened the highest. It was requested within the Form 27 for a reduced analyte suite to consist of TPH (DRO/GRO/ORO), BTEX and inorganics on the side walls on the condition that a sample from the pit bottom was analyzed for full Table 915-1 and the PAH & metal concentrations did not exceed within that pit bottom sample.

Sample results indicated no hydrocarbon and metal detections are present within the pit bottom and side walls exceeding COGCC Table 915-1 thresholds (see attached data tracker and sample location map). Arsenic concentrations, although exceeding Table 915-1, are consistent with background levels and below the 1.25x allowance per COGCC Table 915-1 footnote 11. Inorganic exceedances are present within the pit bottom and side wall at a depth of 3-feet or greater. Bayless is requesting a variance/allowance to the inorganic exceedances based on the following information:

- Inorganic exceedances are at 3-feet or greater in depth, preventing root zone interference.
- The pit depression will be backfilled with clean native material, further reducing any root zone interference
- Nearest water well is located ~6,110 feet to the south and indicates slotted casing from 30-190 feet, suggesting that groundwater is deeper than 30 feet.
- Clay soil type will act as a protection liner, preventing downward percolation and migration.

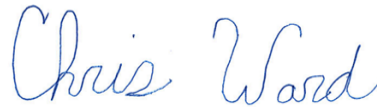
- Ephemeral drainage located ~100 feet to the south/southwest does not contain any live water and the slope on the well pad directs surface flow away from the drainage, preventing surface flow to the ephemeral drainage.
- Nearest surface water is Douglas Creek located ~1,800 feet to the west and is separated by varying vegetation, access road and sloping terrain, which greatly reducing the risk of any surface water flow reaching Douglas Creek
- Onsite and nearby vegetation do not currently show signs of stress or interference with inorganics constituents at their current concentration, including the vegetation growing on the pit bottom and side walls.

It is those reasons outlined above that Bayless is requesting a variance/allowance to inorganic exceedances and approval to move forward with the closure of this pit and final reclamation of the pad.

HRL Compliance Solutions- CO

Sample Delivery Group: L1374151
Samples Received: 07/02/2021
Project Number: RL BAYLESS
Description: RL Bayless-Philidelphia Creek #18-Pit Closure
Site: PC 18-PIT CLOSURE
Report To: Kris Rowe
2385 F ½ Road
Grand Junction, CO 81505

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

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

SAMPLE SUMMARY

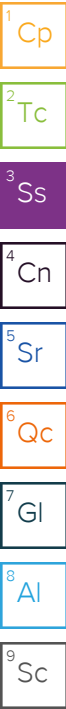
PIT BOTTOM @5FT L1374151-01 Solid

Collected by
Nick Cholas

Collected date/time
07/01/21 09:15

Received date/time
07/02/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1700073	1	07/08/21 00:39	07/08/21 00:39	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1700335	1	07/08/21 11:46	07/09/21 16:42	MCG	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1703135	1	07/10/21 11:00	07/11/21 15:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1701051	1	07/08/21 03:00	07/08/21 06:11	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1703135	1	07/10/21 11:00	07/11/21 15:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1701051	1	07/08/21 03:00	07/08/21 06:11	ARD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1701955	1	07/08/21 16:22	07/09/21 17:14	KMG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1700069	5	07/05/21 14:43	07/10/21 18:53	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1701948	5	07/08/21 16:20	07/09/21 14:37	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1702550	1	07/07/21 10:52	07/10/21 09:08	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1701862	1	07/07/21 10:52	07/08/21 11:03	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1706787	1	07/09/21 06:39	07/10/21 17:06	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1702146	1	07/08/21 22:30	07/09/21 15:52	AAT	Mt. Juliet, TN



NORTH SIDE WALL @ 3FT L1374151-02 Solid

Collected by
Nick Cholas

Collected date/time
07/01/21 09:30

Received date/time
07/02/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1700073	1	07/08/21 00:41	07/08/21 00:41	CCE	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1703135	1	07/10/21 11:00	07/11/21 15:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1701051	1	07/08/21 03:00	07/08/21 06:11	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1703135	1	07/10/21 11:00	07/11/21 15:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1701051	1	07/08/21 03:00	07/08/21 06:11	ARD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1703082	1	07/07/21 10:52	07/11/21 00:04	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1707666	1	07/09/21 06:39	07/11/21 04:38	CLG	Mt. Juliet, TN

EAST SIDE WALL @ 3FT L1374151-03 Solid

Collected by
Nick Cholas

Collected date/time
07/01/21 10:00

Received date/time
07/02/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1700073	1	07/08/21 00:44	07/08/21 00:44	CCE	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1703135	1	07/10/21 11:00	07/11/21 15:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1701051	1	07/08/21 03:00	07/08/21 06:11	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1703135	1	07/10/21 11:00	07/11/21 15:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1701051	1	07/08/21 03:00	07/08/21 06:11	ARD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1703082	1	07/07/21 10:52	07/11/21 00:28	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1707666	1	07/09/21 06:39	07/11/21 03:33	CLG	Mt. Juliet, TN

SOUTH SIDE WALL @ 3FT L1374151-04 Solid

Collected by
Nick Cholas

Collected date/time
07/01/21 09:45

Received date/time
07/02/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1700073	1	07/08/21 00:47	07/08/21 00:47	CCE	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1703135	1	07/10/21 11:00	07/11/21 15:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1701051	1	07/08/21 03:00	07/08/21 06:11	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1703135	1	07/10/21 11:00	07/11/21 15:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1701051	1	07/08/21 03:00	07/08/21 06:11	ARD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1703082	1	07/07/21 10:52	07/11/21 00:52	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1707666	1	07/09/21 06:39	07/11/21 03:46	CLG	Mt. Juliet, TN

SAMPLE SUMMARY

WEST SIDE WALL @ 3FT L1374151-05 Solid

Collected by
Nick Cholas

Collected date/time
07/01/21 10:15

Received date/time
07/02/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1700073	1	07/08/21 00:55	07/08/21 00:55	CCE	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1703135	1	07/10/21 11:00	07/11/21 15:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1701051	1	07/08/21 03:00	07/08/21 06:11	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1703135	1	07/10/21 11:00	07/11/21 15:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1701051	1	07/08/21 03:00	07/08/21 06:11	ARD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1703082	1	07/07/21 10:52	07/11/21 01:16	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1707666	1	07/09/21 06:39	07/11/21 03:59	CLG	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

ACCOUNT:

HRL Compliance Solutions- CO

PROJECT:

RL BAYLESS

SDG:

L1374151

DATE/TIME:

07/19/21 11:22

PAGE:

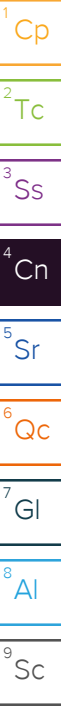
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CASE NARRATIVE

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



PIT BOTTOM @5FT

Collected date/time: 07/01/21 09:15

SAMPLE RESULTS - 01

L1374151

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	51.2		1	07/08/2021 00:39	WG1700073

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	07/09/2021 16:42	WG1700335

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.89	T8	1	07/11/2021 15:00	WG1703135

Sample Narrative:

L1374151-01 WG1703135: 8.89 at 21.5C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	4490		10.0	1	07/08/2021 06:11	WG1701051

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	84.7		0.0852	0.500	1	07/09/2021 17:14	WG1701955
Cadmium	0.147	J	0.0471	0.500	1	07/09/2021 17:14	WG1701955
Copper	7.46		0.400	2.00	1	07/09/2021 17:14	WG1701955
Lead	7.90		0.208	0.500	1	07/09/2021 17:14	WG1701955
Nickel	8.61		0.132	2.00	1	07/09/2021 17:14	WG1701955
Selenium	U		0.764	2.00	1	07/09/2021 17:14	WG1701955
Silver	U		0.127	1.00	1	07/09/2021 17:14	WG1701955
Zinc	39.0		0.832	5.00	1	07/09/2021 17:14	WG1701955

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

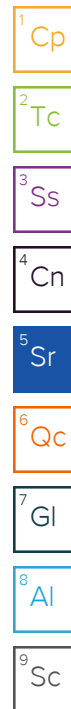
Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.499	J	0.0835	1.00	5	07/10/2021 18:53	WG1700069

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.86		0.100	1.00	5	07/09/2021 14:37	WG1701948

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	0.0850	J	0.0217	0.100	1	07/10/2021 09:08	WG1702550
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	102			77.0-120		07/10/2021 09:08	WG1702550



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	07/08/2021 11:03	WG1701862
Toluene	U		0.00130	0.00500	1	07/08/2021 11:03	WG1701862
Ethylbenzene	U		0.000737	0.00250	1	07/08/2021 11:03	WG1701862
Xylenes, Total	0.00793		0.000880	0.00650	1	07/08/2021 11:03	WG1701862
1,2,4-Trimethylbenzene	0.0107	<u>B</u>	0.00158	0.00500	1	07/08/2021 11:03	WG1701862
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	07/08/2021 11:03	WG1701862
(S) Toluene-d8	103			75.0-131		07/08/2021 11:03	WG1701862
(S) 4-Bromofluorobenzene	104			67.0-138		07/08/2021 11:03	WG1701862
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/08/2021 11:03	WG1701862

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	2.97	<u>J</u>	1.61	4.00	1	07/10/2021 17:06	WG1706787
C28-C36 Motor Oil Range	5.69		0.274	4.00	1	07/10/2021 17:06	WG1706787
(S) o-Terphenyl	60.4			18.0-148		07/10/2021 17:06	WG1706787

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
Anthracene	U		0.00230	0.00600	1	07/09/2021 15:52	WG1702146
Acenaphthene	U		0.00209	0.00600	1	07/09/2021 15:52	WG1702146
Acenaphthylene	U		0.00216	0.00600	1	07/09/2021 15:52	WG1702146
Benzo(a)anthracene	U		0.00173	0.00600	1	07/09/2021 15:52	WG1702146
Benzo(a)pyrene	U		0.00179	0.00600	1	07/09/2021 15:52	WG1702146
Benzo(b)fluoranthene	U		0.00153	0.00600	1	07/09/2021 15:52	WG1702146
Benzo(g,h,i)perylene	U		0.00177	0.00600	1	07/09/2021 15:52	WG1702146
Benzo(k)fluoranthene	U		0.00215	0.00600	1	07/09/2021 15:52	WG1702146
Chrysene	U		0.00232	0.00600	1	07/09/2021 15:52	WG1702146
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	07/09/2021 15:52	WG1702146
Fluoranthene	U		0.00227	0.00600	1	07/09/2021 15:52	WG1702146
Fluorene	U		0.00205	0.00600	1	07/09/2021 15:52	WG1702146
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	07/09/2021 15:52	WG1702146
Naphthalene	U		0.00408	0.0200	1	07/09/2021 15:52	WG1702146
Phenanthrene	U		0.00231	0.00600	1	07/09/2021 15:52	WG1702146
Pyrene	U		0.00200	0.00600	1	07/09/2021 15:52	WG1702146
1-Methylnaphthalene	U		0.00449	0.0200	1	07/09/2021 15:52	WG1702146
2-Methylnaphthalene	U		0.00427	0.0200	1	07/09/2021 15:52	WG1702146
2-Chloronaphthalene	U		0.00466	0.0200	1	07/09/2021 15:52	WG1702146
(S) p-Terphenyl-d14	98.4			23.0-120		07/09/2021 15:52	WG1702146
(S) Nitrobenzene-d5	90.6			14.0-149		07/09/2021 15:52	WG1702146
(S) 2-Fluorobiphenyl	80.0			34.0-125		07/09/2021 15:52	WG1702146

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	70.3		1	07/08/2021 00:41	WG1700073

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	9.05	T8	1	07/11/2021 15:00	WG1703135

Sample Narrative:

L1374151-02 WG1703135: 9.05 at 21.5C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	umhos/cm		umhos/cm			
Specific Conductance	5540		10.0	1	07/08/2021 06:11	WG1701051

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	mg/kg		mg/kg			
Benzene	0.00161		0.000500	1	07/11/2021 00:04	WG1703082
Toluene	ND		0.00500	1	07/11/2021 00:04	WG1703082
Ethylbenzene	ND		0.000500	1	07/11/2021 00:04	WG1703082
Total Xylene	ND		0.00150	1	07/11/2021 00:04	WG1703082
TPH (GC/FID) Low Fraction	ND		0.100	1	07/11/2021 00:04	WG1703082
(S) a,a,a-Trifluorotoluene(FID)	106		77.0-120		07/11/2021 00:04	WG1703082
(S) a,a,a-Trifluorotoluene(PID)	105		72.0-128		07/11/2021 00:04	WG1703082

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	mg/kg		mg/kg			
C10-C28 Diesel Range	9.09		4.00	1	07/11/2021 04:38	WG1707666
C28-C40 Oil Range	22.6		4.00	1	07/11/2021 04:38	WG1707666
(S) o-Terphenyl	58.0		18.0-148		07/11/2021 04:38	WG1707666

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	7.01		1	07/08/2021 00:44	WG1700073

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	9.56	T8	1	07/11/2021 15:00	WG1703135

Sample Narrative:

L1374151-03 WG1703135: 9.56 at 21.5C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	umhos/cm		umhos/cm			
Specific Conductance	919		10.0	1	07/08/2021 06:11	WG1701051

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	0.00218		0.000500	1	07/11/2021 00:28	WG1703082
Toluene	ND		0.00500	1	07/11/2021 00:28	WG1703082
Ethylbenzene	ND		0.000500	1	07/11/2021 00:28	WG1703082
Total Xylene	ND		0.00150	1	07/11/2021 00:28	WG1703082
TPH (GC/FID) Low Fraction	ND		0.100	1	07/11/2021 00:28	WG1703082
(S) a,a,a-Trifluorotoluene(FID)	105		77.0-120		07/11/2021 00:28	WG1703082
(S) a,a,a-Trifluorotoluene(PID)	104		72.0-128		07/11/2021 00:28	WG1703082

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	07/11/2021 03:33	WG1707666
C28-C40 Oil Range	6.98		4.00	1	07/11/2021 03:33	WG1707666
(S) o-Terphenyl	55.9		18.0-148		07/11/2021 03:33	WG1707666

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	7.01		1	07/08/2021 00:47	WG1700073

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	9.61	T8	1	07/11/2021 15:00	WG1703135

Sample Narrative:

L1374151-04 WG1703135: 9.61 at 21.4C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	umhos/cm		umhos/cm			
	785		10.0	1	07/08/2021 06:11	WG1701051

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	0.00301		0.000500	1	07/11/2021 00:52	WG1703082
Toluene	ND		0.00500	1	07/11/2021 00:52	WG1703082
Ethylbenzene	ND		0.000500	1	07/11/2021 00:52	WG1703082
Total Xylene	ND		0.00150	1	07/11/2021 00:52	WG1703082
TPH (GC/FID) Low Fraction	ND		0.100	1	07/11/2021 00:52	WG1703082
(S) a,a,a-Trifluorotoluene(FID)	105		77.0-120		07/11/2021 00:52	WG1703082
(S) a,a,a-Trifluorotoluene(PID)	105		72.0-128		07/11/2021 00:52	WG1703082

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	07/11/2021 03:46	WG1707666
C28-C40 Oil Range	6.09		4.00	1	07/11/2021 03:46	WG1707666
(S) o-Terphenyl	67.9		18.0-148		07/11/2021 03:46	WG1707666

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	44.6		1	07/08/2021 00:55	WG1700073

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.64	T8	1	07/11/2021 15:00	WG1703135

Sample Narrative:

L1374151-05 WG1703135: 8.64 at 21.6C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	umhos/cm		umhos/cm			
	4240		10.0	1	07/08/2021 06:11	WG1701051

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	mg/kg		mg/kg			
	0.00201		0.000500	1	07/11/2021 01:16	WG1703082
Toluene	ND		0.00500	1	07/11/2021 01:16	WG1703082
Ethylbenzene	ND		0.000500	1	07/11/2021 01:16	WG1703082
Total Xylene	ND		0.00150	1	07/11/2021 01:16	WG1703082
TPH (GC/FID) Low Fraction	ND		0.100	1	07/11/2021 01:16	WG1703082
(S) a,a,a-Trifluorotoluene(FID)	106		77.0-120		07/11/2021 01:16	WG1703082
(S) a,a,a-Trifluorotoluene(PID)	105		72.0-128		07/11/2021 01:16	WG1703082

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	mg/kg		mg/kg			
	ND		4.00	1	07/11/2021 03:59	WG1707666
C28-C40 Oil Range	8.00		4.00	1	07/11/2021 03:59	WG1707666
(S) o-Terphenyl	68.1		18.0-148		07/11/2021 03:59	WG1707666

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3677717-1 07/09/21 14:25

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

L1372240-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1372240-02 07/09/21 14:43 • (DUP) R3677717-3 07/09/21 14:48

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Hexavalent Chromium	0.376	0.371	1	1.34	⌵	20

L1372494-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1372494-03 07/09/21 16:32 • (DUP) R3677717-4 07/09/21 16:37

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Hexavalent Chromium	1.08	1.07	1	0.440		20

Laboratory Control Sample (LCS)

(LCS) R3677717-2 07/09/21 14:33

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Hexavalent Chromium	10.0	10.7	107	80.0-120	

L1374151-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1374151-01 07/09/21 16:42 • (MS) R3677717-5 07/09/21 16:48 • (MSD) R3677717-6 07/09/21 16:53

	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	20.8	21.3	104	107	1	75.0-125			2.35	20

L1374151-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1374151-01 07/09/21 16:42 • (MS) R3677717-7 07/09/21 16:58

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/kg	mg/kg	mg/kg	%		%	
Hexavalent Chromium	643	U	690	107	50	75.0-125	

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L1374031-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1374031-02 07/11/21 15:00 • (DUP) R3678049-2 07/11/21 15:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.93	8.94	1	0.112		1

Sample Narrative:

OS: 8.93 at 22C

DUP: 8.94 at 22.1C

L1374146-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1374146-01 07/11/21 15:00 • (DUP) R3678049-3 07/11/21 15:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	6.70	6.74	1	0.595		1

Sample Narrative:

OS: 6.7 at 21.6C

DUP: 6.74 at 21.4C

Laboratory Control Sample (LCS)

(LCS) R3678049-1 07/11/21 15:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	10.1	101	99.0-101	

Sample Narrative:

LCS: 10.06 at 21.5C

L1374031-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1374031-02 07/11/21 15:00 • (DUP) R3678049-2 07/11/21 15:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.93	8.94	1	0.112		1

Sample Narrative:

OS: 8.93 at 22C

DUP: 8.94 at 22.1C



L1374146-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1374146-01 07/11/21 15:00 • (DUP) R3678049-3 07/11/21 15:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	6.70	6.74	1	0.595		1

Sample Narrative:

OS: 6.7 at 21.6C

DUP: 6.74 at 21.4C

Laboratory Control Sample (LCS)

(LCS) R3678049-1 07/11/21 15:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	10.1	101	99.0-101	

Sample Narrative:

LCS: 10.06 at 21.5C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3676846-1 07/08/21 06:11

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

L1373412-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1373412-01 07/08/21 06:11 • (DUP) R3676846-3 07/08/21 06:11

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	735	720	1	2.06		20

L1374154-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1374154-01 07/08/21 06:11 • (DUP) R3676846-4 07/08/21 06:11

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	155	167	1	7.14		20

Laboratory Control Sample (LCS)

(LCS) R3676846-2 07/08/21 06:11

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	umhos/cm	umhos/cm	%	%	
Specific Conductance	899	884	98.3	85.0-115	

Method Blank (MB)

(MB) R3676846-1 07/08/21 06:11

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

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1373412-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1373412-01 07/08/21 06:11 • (DUP) R3676846-3 07/08/21 06:11

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	735	720	1	2.06		20

L1374154-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1374154-01 07/08/21 06:11 • (DUP) R3676846-4 07/08/21 06:11

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	155	167	1	7.14		20

Laboratory Control Sample (LCS)

(LCS) R3676846-2 07/08/21 06:11

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	umhos/cm	umhos/cm	%	%	
Specific Conductance	899	884	98.3	85.0-115	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3677795-1 07/09/21 16:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Lead	0.319	J	0.208	0.500
Nickel	U		0.132	2.00
Selenium	U		0.764	2.00
Silver	U		0.127	1.00
Zinc	U		0.832	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3677795-2 07/09/21 16:33

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	100	99.6	99.6	80.0-120	
Cadmium	100	95.4	95.4	80.0-120	
Copper	100	96.2	96.2	80.0-120	
Lead	100	96.0	96.0	80.0-120	
Nickel	100	98.7	98.7	80.0-120	
Selenium	100	94.0	94.0	80.0-120	
Silver	20.0	17.2	85.8	80.0-120	
Zinc	100	95.0	95.0	80.0-120	

L1373997-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1373997-01 07/09/21 16:36 • (MS) R3677795-5 07/09/21 16:45 • (MSD) R3677795-6 07/09/21 16:48

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 %
Barium	100	187	541	311	353	123	1	75.0-125	J5	J3	54.0	20
Cadmium	100	0.293	103	103	103	102	1	75.0-125			0.761	20
Copper	100	18.6	124	120	106	101	1	75.0-125			3.87	20
Lead	100	8.80	114	112	105	104	1	75.0-125			1.42	20
Nickel	100	20.7	131	127	110	107	1	75.0-125			2.53	20
Selenium	100	1.89	104	102	102	99.8	1	75.0-125			1.83	20
Silver	20.0	U	18.5	18.2	92.5	91.2	1	75.0-125			1.34	20
Zinc	100	41.8	138	136	96.4	94.4	1	75.0-125			1.44	20

Method Blank (MB)

(MB) R3678014-1 07/10/21 17:43

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) R3678014-2 07/10/21 17:46 • (LCSD) R3678014-3 07/10/21 17:48

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	0.988	0.998	98.8	99.8	80.0-120			1.04	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3677629-1 07/09/21 13:43

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Arsenic	U		0.100	1.00

Laboratory Control Sample (LCS)

(LCS) R3677629-2 07/09/21 13:46

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Arsenic	100	98.5	98.5	80.0-120	

L1373997-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1373997-01 07/09/21 13:50 • (MS) R3677629-5 07/09/21 14:00 • (MSD) R3677629-6 07/09/21 14:03

	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	%	%		%			%	%
Arsenic	100	20.8	132	120	111	99.0	5	75.0-125			9.68	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3678292-3 07/10/21 17:28

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	0.000167	U	0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	0.0348	U	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	109			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	112			72.0-128

Laboratory Control Sample (LCS)

(LCS) R3678292-1 07/10/21 14:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0483	96.6	76.0-121	
Toluene	0.0500	0.0493	98.6	80.0-120	
Ethylbenzene	0.0500	0.0520	104	80.0-124	
Total Xylene	0.150	0.157	105	37.0-160	
(S) a,a,a-Trifluorotoluene(FID)			108	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			106	72.0-128	

Laboratory Control Sample (LCS)

(LCS) R3678292-2 07/10/21 15:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.81	106	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			118	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			116	72.0-128	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1373986-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1373986-03 07/11/21 02:03 • (MS) R3678292-4 07/11/21 03:38 • (MSD) R3678292-5 07/11/21 04:02

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 %
TPH (GC/FID) Low Fraction	1100	280	945	1180	60.5	81.8	200	10.0-151			22.1	28
(S) a,a,a-Trifluorotoluene(FID)					111	115		77.0-120				
(S) a,a,a-Trifluorotoluene(PID)					112	114		72.0-128				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3677953-2 07/10/21 02:41

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)	109			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3677953-1 07/10/21 01:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.39	98.0	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			102	77.0-120	

L1373945-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1373945-02 07/10/21 03:45 • (MS) R3677953-3 07/10/21 10:56 • (MSD) R3677953-4 07/10/21 11:17

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 %
TPH (GC/FID) Low Fraction	136	U	52.5	53.6	48.2	49.2	25	10.0-151			2.07	28
(S) a,a,a-Trifluorotoluene(FID)					99.4	99.6		77.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3678018-2 07/08/21 06:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
1,2,4-Trimethylbenzene	0.00450	U	0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	106			75.0-131
(S) 4-Bromofluorobenzene	95.1			67.0-138
(S) 1,2-Dichloroethane-d4	102			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3678018-1 07/08/21 06:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.120	96.0	70.0-123	
Ethylbenzene	0.125	0.122	97.6	74.0-126	
Toluene	0.125	0.117	93.6	75.0-121	
1,2,4-Trimethylbenzene	0.125	0.148	118	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.126	101	73.0-127	
Xylenes, Total	0.375	0.367	97.9	72.0-127	
(S) Toluene-d8			98.9	75.0-131	
(S) 4-Bromofluorobenzene			96.2	67.0-138	
(S) 1,2-Dichloroethane-d4			110	70.0-130	

L1374151-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1374151-01 07/08/21 11:03 • (MS) R3678018-3 07/08/21 17:24 • (MSD) R3678018-4 07/08/21 17:43

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	0.125	U	0.0861	0.117	68.9	93.6	1	10.0-149			30.4	37
Ethylbenzene	0.125	U	0.0822	0.111	65.8	88.8	1	10.0-160			29.8	38
Toluene	0.125	U	0.0813	0.114	65.0	91.2	1	10.0-156			33.5	38
1,2,4-Trimethylbenzene	0.125	0.0107	0.0982	0.121	70.0	88.2	1	10.0-160			20.8	36
1,3,5-Trimethylbenzene	0.125	U	0.0895	0.128	71.6	102	1	10.0-160			35.4	38
Xylenes, Total	0.375	0.00793	0.268	0.354	69.4	92.3	1	10.0-160			27.7	38
(S) Toluene-d8					100	102		75.0-131				
(S) 4-Bromofluorobenzene					99.3	95.1		67.0-138				
(S) 1,2-Dichloroethane-d4					104	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) R3680937-1 07/11/21 01:09

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-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	71.8			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3680937-2 07/11/21 01:22

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	39.4	78.8	50.0-150	
(S) o-Terphenyl			85.9	18.0-148	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3680446-1 07/11/21 01:09

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	71.8			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3680446-2 07/11/21 01:22

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	39.4	78.8	50.0-150	
(S) o-Terphenyl			85.9	18.0-148	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3678250-2 07/09/21 10:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	96.3			14.0-149
(S) 2-Fluorobiphenyl	86.1			34.0-125
(S) p-Terphenyl-d14	104			23.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3678250-1 07/09/21 09:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0773	96.6	50.0-126	
Acenaphthene	0.0800	0.0767	95.9	50.0-120	
Acenaphthylene	0.0800	0.0788	98.5	50.0-120	
Benzo(a)anthracene	0.0800	0.0759	94.9	45.0-120	
Benzo(a)pyrene	0.0800	0.0712	89.0	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0845	106	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0868	109	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0877	110	49.0-125	
Chrysene	0.0800	0.0825	103	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0861	108	47.0-125	
Fluoranthene	0.0800	0.0780	97.5	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3678250-1 07/09/21 09:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0780	97.5	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0844	105	46.0-125	
Naphthalene	0.0800	0.0752	94.0	50.0-120	
Phenanthrene	0.0800	0.0783	97.9	47.0-120	
Pyrene	0.0800	0.0824	103	43.0-123	
1-Methylnaphthalene	0.0800	0.0752	94.0	51.0-121	
2-Methylnaphthalene	0.0800	0.0720	90.0	50.0-120	
2-Chloronaphthalene	0.0800	0.0744	93.0	50.0-120	
(S) Nitrobenzene-d5			100	14.0-149	
(S) 2-Fluorobiphenyl			89.3	34.0-125	
(S) p-Terphenyl-d14			106	23.0-120	

L1373448-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1373448-05 07/09/21 11:23 • (MS) R3678250-3 07/09/21 11:41 • (MSD) R3678250-4 07/09/21 11:58

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0772	U	0.0487	0.0505	63.1	66.1	1	10.0-145			3.63	30
Acenaphthene	0.0772	U	0.0495	0.0529	64.1	69.2	1	14.0-127			6.64	27
Acenaphthylene	0.0772	U	0.0505	0.0535	65.4	70.0	1	21.0-124			5.77	25
Benzo(a)anthracene	0.0772	U	0.0482	0.0490	62.4	64.1	1	10.0-139			1.65	30
Benzo(a)pyrene	0.0772	U	0.0516	0.0528	66.8	69.1	1	10.0-141			2.30	31
Benzo(b)fluoranthene	0.0772	U	0.0543	0.0555	70.3	72.6	1	10.0-140			2.19	36
Benzo(g,h,i)perylene	0.0772	U	0.0594	0.0601	76.9	78.7	1	10.0-140			1.17	33
Benzo(k)fluoranthene	0.0772	U	0.0598	0.0609	77.5	79.7	1	10.0-137			1.82	31
Chrysene	0.0772	U	0.0574	0.0580	74.4	75.9	1	10.0-145			1.04	30
Dibenz(a,h)anthracene	0.0772	U	0.0572	0.0571	74.1	74.7	1	10.0-132			0.175	31
Fluoranthene	0.0772	U	0.0484	0.0504	62.7	66.0	1	10.0-153			4.05	33
Fluorene	0.0772	U	0.0491	0.0527	63.6	69.0	1	11.0-130			7.07	29
Indeno(1,2,3-cd)pyrene	0.0772	U	0.0517	0.0508	67.0	66.5	1	10.0-137			1.76	32
Naphthalene	0.0772	U	0.0518	0.0534	66.6	69.4	1	10.0-135			3.04	27
Phenanthrene	0.0772	U	0.0491	0.0518	63.6	67.8	1	10.0-144			5.35	31
Pyrene	0.0772	U	0.0524	0.0547	67.9	71.6	1	10.0-148			4.30	35
1-Methylnaphthalene	0.0772	U	0.0506	0.0530	65.2	69.0	1	10.0-142			4.63	28
2-Methylnaphthalene	0.0772	U	0.0491	0.0511	63.3	66.6	1	10.0-137			3.99	28
2-Chloronaphthalene	0.0772	U	0.0497	0.0535	64.3	70.0	1	29.0-120			7.36	24
(S) Nitrobenzene-d5					80.5	81.3		14.0-149				
(S) 2-Fluorobiphenyl					72.5	75.1		34.0-125				
(S) p-Terphenyl-d14					82.5	84.7		23.0-120				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

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.

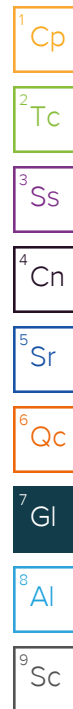
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. 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.
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.
T8	Sample(s) received past/too close to holding time expiration.



ACCREDITATIONS & LOCATIONS

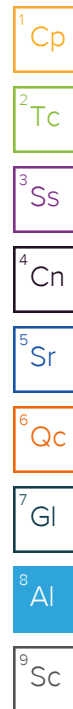
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

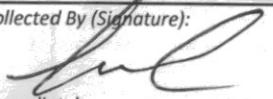
¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

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

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



Client: HRL Compliance Solutions Inc. 2385 F 1/2 RD Grand Junction, CO 81505	Billing Info: M. DeRose HRL Compliance Solutions 2385 F 1/2 Road Grand Junction, CO 81505
Report To: Kris Rowe & Nichola Cholas	E-Mail: krowe@hrlcomp.com ncholas@hrlcomp.com

Project Description: RL Bayless - Philidelphia Creek #18 - Pit Closure		City/State Collected: COLORADO
Phone: 970-243-3271 Fax: 970-243-4380	Client Project #: RL Bayless	Lab Project #
Collected By: Nick Cholas	Site/Facility ID: PC 18 - Pit Closure	P.O. #
Collected By (Signature): 	Rush ? (lab must be notified) _____ Same Day----- (200%) _____ Next Day----- (100%) _____ Two Day----- (50%) _____ Three Day----- (25%)	Date Results Needed STD 5 Day Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Fax? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>		

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. Of Cntrs
Pit Bottom @ 5ft	Grab	Soil	5'	7/1/2021	0915	4
North Side Wall @ 3ft	Grab	Soil	3'	7/1/2021	0930	2
East Side Wall @ 3ft	Grab	Soil	3'	7/1/2021	1000	2
South Side Wall @ 3ft	Grab	Soil	3'	7/1/2021	0945	2
West Side Wall @ 3ft	Grab	Soil	3'	7/1/2021	1015	2

Analysis / Container / Preservative									
DRO	GRO	ORO	BTEX	COGCC 915-1 -PAH	COGCC 915-1 - Metals	SAR/EC/pH			
X	X	X	X	X	X	X			
X	X	X	X			X			
X	X	X	X			X			
X	X	X	X			X			
X	X	X	X			X			

Page 1 of 1

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Ph: 615-758-5858
Ph: 800-767-5859
Fax: 615-758-5859 **L1374151**

L# **B105**

Table #

Acct #: **HRLCSCO**

Template: **T176745**

Prelogin: **P805799**
PM: 824 - Chris Ward
PB:

Shipped Via: **FedEx Ground**

Rem/Contaminant	Sample #
	01
	02
	03
	04
	05

Sample Receipt Checklist

COC Seal Present/Intact: ☒ Y ☐ N If Applicable

COC Signed/Accurate: ☒ Y ☐ N VOA Zero Headspace: ☐ Y ☒ N

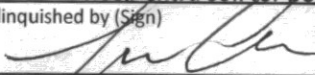
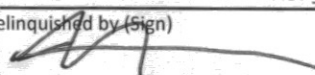
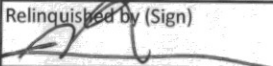
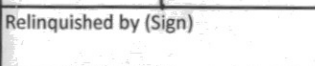
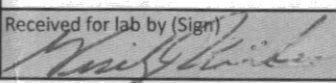
Bottles arrive intact: ☒ Y ☐ N Pres. Correct/Check: ☐ Y ☒ N

Correct bottles used: ☒ Y ☐ N

Sufficient volume sent: ☒ Y ☐ N

RAD Screen <0.5 mR/hr: ☒ Y ☐ N

*Matrix **SS-Soil** **GW-Groundwater** **WW-WasteWater** **DW-Drinking Water** **OT-Other**

Remarks: Analyze for COGCC Table 915-1 on the pit bottom. Keep extra soil for possible additional analysis				pH _____ Temp _____	Hold #
				Flow _____ Other _____	
Relinquished by (Sign) 	Date: 07-01-21	Time: 1500	Relinquished by (Sign) 	Samples Returned Via ____ UPS ____ FedEx	Condition: (Lab Use) COC Seal Intact <input type="checkbox"/> Y <input checked="" type="checkbox"/> N pH Checked <input type="checkbox"/> NCF: <input type="checkbox"/>
Relinquished by (Sign) 	Date: 7/1/21	Time: 1700	Relinquished by (Sign) 	Temp: 24.1:2.5 # Bot 12	
Relinquished by (Sign)	Date:	Time:	Received for lab by (Sign) 	Date: 7/2/21 Time: 09:00	

5014 12.27 29140

HRL Compliance Solutions- CO

Sample Delivery Group: L1374154
Samples Received: 07/02/2021
Project Number: RL BAYLESS
Description: RL Bayless-Philidelphia Creek #18-BKGD
Site: PC 18-BKGD
Report To: Kris Rowe
2385 F ½ Road
Grand Junction, CO 81505

Entire Report Reviewed By:



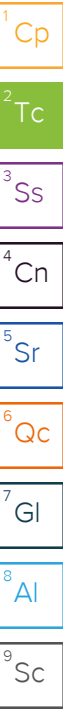
Chris Ward
Project Manager

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

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SAMPLE SUMMARY

BKGD 1 L1374154-01 Solid

Collected by
Nick Cholas

Collected date/time
07/01/21 10:30

Received date/time
07/02/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1701786	1	07/11/21 20:57	07/11/21 20:57	EL	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1703135	1	07/10/21 11:00	07/11/21 15:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1701051	1	07/08/21 03:00	07/08/21 06:11	ARD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1702212	1	07/09/21 17:56	07/10/21 16:52	EL	Mt. Juliet, TN

BKGD 2 L1374154-02 Solid

Collected by
Nick Cholas

Collected date/time
07/01/21 10:45

Received date/time
07/02/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1701786	1	07/11/21 21:00	07/11/21 21:00	EL	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1703135	1	07/10/21 11:00	07/11/21 15:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1701051	1	07/08/21 03:00	07/08/21 06:11	ARD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1702212	1	07/09/21 17:56	07/10/21 16:55	EL	Mt. Juliet, TN

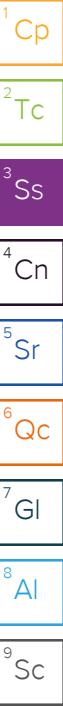
BKGD 3 L1374154-03 Solid

Collected by
Nick Cholas

Collected date/time
07/01/21 10:55

Received date/time
07/02/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1701786	1	07/11/21 21:03	07/11/21 21:03	EL	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1703135	1	07/10/21 11:00	07/11/21 15:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1701051	1	07/08/21 03:00	07/08/21 06:11	ARD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1702212	1	07/09/21 17:56	07/10/21 16:57	EL	Mt. Juliet, TN

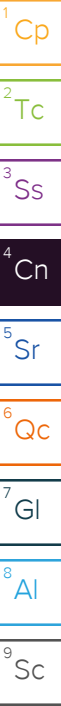


CASE NARRATIVE

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



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.0980		1	07/11/2021 20:57	WG1701786

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.73	<u>T8</u>	1	07/11/2021 15:00	WG1703135

Sample Narrative:

L1374154-01 WG1703135: 8.73 at 21.5C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	umhos/cm		umhos/cm			
Specific Conductance	155		10.0	1	07/08/2021 06:11	WG1701051

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	mg/kg		mg/kg			
Arsenic	3.40		2.00	1	07/10/2021 16:52	WG1702212

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.859		1	07/11/2021 21:00	WG1701786

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.47	T8	1	07/11/2021 15:00	WG1703135

Sample Narrative:

L1374154-02 WG1703135: 8.47 at 21.5C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	201		10.0	1	07/08/2021 06:11	WG1701051

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	3.00		2.00	1	07/10/2021 16:55	WG1702212

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.108		1	07/11/2021 21:03	WG1701786

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.99	<u>T8</u>	1	07/11/2021 15:00	WG1703135

Sample Narrative:

L1374154-03 WG1703135: 7.99 at 21.4C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	252		10.0	1	07/08/2021 06:11	WG1701051

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	3.67		2.00	1	07/10/2021 16:57	WG1702212

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3678049-1 07/11/21 15:00

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
	su	su	%	%	
pH	10.0	10.1	101	99.0-101	

Sample Narrative:

LCS: 10.06 at 21.5C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3676846-1 07/08/21 06:11

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

L1373412-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1373412-01 07/08/21 06:11 • (DUP) R3676846-3 07/08/21 06:11

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	735	720	1	2.06		20

L1374154-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1374154-01 07/08/21 06:11 • (DUP) R3676846-4 07/08/21 06:11

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	155	167	1	7.14		20

Laboratory Control Sample (LCS)

(LCS) R3676846-2 07/08/21 06:11

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	899	884	98.3	85.0-115	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3678013-1 07/10/21 15:41

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.518	2.00

Laboratory Control Sample (LCS)

(LCS) R3678013-2 07/10/21 15:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Arsenic	100	95.7	95.7	80.0-120	

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.
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

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		

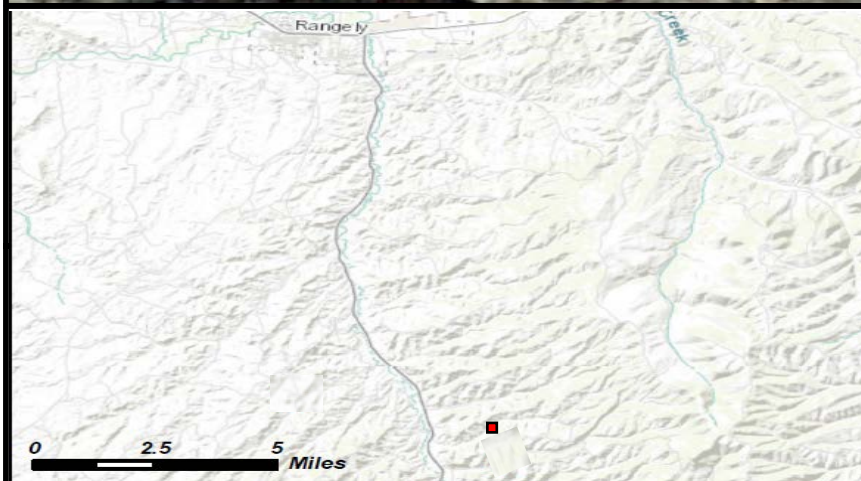
¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* 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.



Client: HRL Compliance Solutions Inc. 2385 F 1/2 RD Grand Junction, CO 81505				Billing Info: M. DeRose HRL Compliance Solutions 2385 F 1/2 Road Grand Junction, CO 81505				Analysis / Container / Preservative										Page 1 of 1	
Report To: Kris Rowe & Nichola Cholas				E-Mail: krowe@hrlcomp.com ncholas@hrlcomp.com				DRO GRO ORO BTEX COGCC 915-1 - PAH COGCC 915-1 - Metals SAR/EC/pH Arsenic										Pace Analytical® National Center for Testing & Innovation	
Project Description: RL Bayless - Philadelphia Creek #18 - BKGD				City/State Collected: COLORADO														12065 Lebanon Rd Mount Juliet, TN 37122	
Phone: 970-243-3271 Fax: 970-243-4380				Client Project #: RL Bayless														Ph: 615-758-5858 Ph: 800-767-5859 Fax: 615-758-5859	
Collected By: Nick Cholas				Site/Facility ID: PC 18 - BKGD														L# B106	
Collected By (Signature): [Signature]				Rush? (lab must be notified) Same Day (200%) Next Day (100%) Two Day (50%) Three Day (25%)				Lab Project #				Table		Acct #: HRLCSCO					
Immediately Packed on Ice N Y X				Date Results Needed STD 5 Day Email? No X Yes Fax? X No Yes				P.O. #				Template: T176745							
Sample ID				Comp/Grab		Matrix*		Depth		Date		Time		No. Of Cntrs		Prelogin: P805799 PM: 824 - Chris Ward PB:			
BKGD 1				Grab		Soil		0-6"		7/1/2021		1030		1		Shipped Via: FedEx Ground			
BKGD 2				Grab		Soil		0-6"		7/1/2021		1045		1		Rem/Contaminant			
BKGD 3				Grab		Soil		0-6"		7/1/2021		1055		1		Sample #			
Sample Receipt Checklist COC Seal Present/Intact: Y N If Applicable COC Signed/Accurate: Y N VOA Zero Headspace: Y N Bottles arrive intact: Y N Pres. Correct/Check: Y N Correct bottles used: Y N Sufficient volume sent: Y N RAD Screen <0.5 mR/hr: Y N																			
*Matrix SS-Soil GW-Groundwater WW-WasteWater DW-Drinking Water OT-Other																			
Remarks:										pH Temp				Hold #					
Relinquished by (Sign): [Signature]										Flow Other				Condition: (Lab Use)					
Date: 07-01-21 Time: 1500										Relinquished by (Sign): [Signature]				Samples Returned Via UPS FedEx					
Date: 7/1/21 Time: 1700										Relinquished by (Sign): [Signature]				Temp: 20°C # Bot 24+1=25 3					
Date: 7/2/21 Time: 09:00										Received for lab by (Sign): [Signature]				COC Seal Intact Y N pH Checked NCF:					



ROBERT L. BAYLESS

Pit Closure Sample Locations

PC #18

39.873432, -108.724908
Section 15, Township 2' South, Range 101 West



Sample Location

Transportation

— CO Highways

Hydrography

— Ditch

— Intermittent Stream

— Perennial Stream



HRL
COMPLIANCE
SOLUTIONS

Author: K.Rowe

Revision: 0

Date: 7/30/2021

RL Bayless PC #18 Pit	COGCC Table 915-1 Threshold (RSS Level)	sample locations							
		7/1/2021							
		L1374151							
		Bottom @ 5'	North Wall @ 3'	East Wall @ 3'	South Wall @ 3'	West Wall @ 3'	BKGD 1	BKGD 2	BKGD 3
GRO (C6-C10)	500	0.085	ND	ND	ND	ND	-	-	-
DRO (C10-C28)		2.97	9.09	ND	ND	ND	-	-	-
ORO (C28-C36)		6	22.6	6.98	6.09	8	-	-	-
BENZENE	1.2	ND	0.0016	0.0021	0.003	0.002	-	-	-
TOLUENE	490	ND	ND	ND	ND	ND	-	-	-
ETHYLBENZENE	5.8	ND	ND	ND	ND	ND	-	-	-
XYLENE TOTAL	58	0.0079	ND	ND	ND	ND	-	-	-
1,2,4 -TRIMETHYLBENZENE	30	0.01	-	-	-	-	-	-	-
1,3,5 -TRIMETHYLBENZENE	27	ND	-	-	-	-	-	-	-
1-METHYLNAPHTHALENE	18	ND	-	-	-	-	-	-	-
2-METHYLNAPHTHALENE	24	ND	-	-	-	-	-	-	-
ACENAPHTHENE	360	ND	-	-	-	-	-	-	-
ANTHRACENE	1,800	ND	-	-	-	-	-	-	-
BENZO(A)ANTHRACENE	1.1	ND	-	-	-	-	-	-	-
BENZO(A)PYRENE	0.11	ND	-	-	-	-	-	-	-
BENZO(B)FLUORANTHENE	1.1	ND	-	-	-	-	-	-	-
BENZO(K)FLUORANTHENE	11	ND	-	-	-	-	-	-	-
CHRYSENE	110	ND	-	-	-	-	-	-	-
DIBENZO(A,H)ANTHRACENE	0.11	ND	-	-	-	-	-	-	-
FLUORANTHENE	240	ND	-	-	-	-	-	-	-
FLUORENE	240	ND	-	-	-	-	-	-	-
INDENO(1,2,3-CD)PYRENE	1.1	ND	-	-	-	-	-	-	-
NAPHTHALENE	2	ND	-	-	-	-	-	-	-
PYRENE	180	ND	-	-	-	-	-	-	-
ARSENIC	0.68	3.86	-	-	-	-	3.4	3.00	3.67
BARIUM	15,000	84.7	-	-	-	-	-	-	-
CADMIUM	71	0.147	-	-	-	-	-	-	-
CHROMIUM (IV)	0.3	ND	-	-	-	-	-	-	-
COPPER	3,100	7.46	-	-	-	-	-	-	-
LEAD	400	7.9	-	-	-	-	-	-	-
NICKEL	1,500	8.61	-	-	-	-	-	-	-
SELENIUM	390	ND	-	-	-	-	-	-	-
SILVER	390	ND	-	-	-	-	-	-	-
ZINC	23,000	39	-	-	-	-	-	-	-
BORON (hot water soluble extract)	2	0.49	-	-	-	-	-	-	-
ELECTRICAL CONDUCTIVITY (EC) (mmho/cm)	<4 mmhos/cm or x2 bkgd	4.49	5.5	0.919	0.785	4.24	0.155	0.201	0.252
pH	6 to 8.3	8.89	9.05	9.56	9.61	8.64	8.73	8.47	7.99
SODIUM ADSORPTION RATIO (SAR)	6	51.2	70.3	7.01	7.01	44.6	0.098	0.859	0.108

All results are reported in mg/kg, unless otherwise noted

Boron (hot water soluble extract) is reported in mg/l

Exceedances are highlighted in yellow (except if below background)