



26-Mar-2021

Tim Dobransky
Entrada Consulting Group
240 Mesa Ave.
Grand Junction, CO 81501

Re: **N VEGA 5A**

Work Order: **21031371**

Dear Tim,

ALS Environmental received 2 samples on 12-Mar-2021 09:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 9.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Report of Laboratory Analysis

Certificate No: MN 026-999-449

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Entrada Consulting Group
Project: N VEGA 5A
Work Order: 21031371

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
21031371-01	20210310-NV5A-5BG-6"-840	Soil		3/10/2021 08:40	3/12/2021 09:30	<input type="checkbox"/>
21031371-02	20210310-NV5A-WBG-6"-830	Soil		3/10/2021 08:30	3/12/2021 09:30	<input type="checkbox"/>

Client: Entrada Consulting Group
Project: N VEGA 5A
WorkOrder: 21031371

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group, USA

Date: 26-Mar-21

Client: Entrada Consulting Group
Project: N VEGA 5A
Sample ID: 20210310-NV5A-5BG-6"-840
Collection Date: 3/10/2021 08:40 AM

Work Order: 21031371
Lab ID: 21031371-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP							
Arsenic	U		0.13	0.49	mg/Kg-dry	1	3/24/2021 20:14
MOISTURE							
Moisture	25		0.10	0.10	% of sample	1	3/23/2021 10:32

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 26-Mar-21

Client: Entrada Consulting Group
Project: N VEGA 5A
Sample ID: 20210310-NV5A-WBG-6"-830
Collection Date: 3/10/2021 08:30 AM

Work Order: 21031371
Lab ID: 21031371-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP							
Arsenic	0.43		Method: SW6010D 0.11	0.41	mg/Kg-dry	1	Prep: SW3050B / 3/23/21 Analyst: DSC 3/24/2021 20:19
MOISTURE							
Moisture	19		Method: SW3550C 0.10	0.10	% of sample	1	Analyst: KTP 3/23/2021 10:32

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Entrada Consulting Group
Work Order: 21031371
Project: N VEGA 5A

QC BATCH REPORT

Batch ID: **173930** Instrument ID **ICP2** Method: **SW6010D**

MBLK		Sample ID: MBLK-173930-173930				Units: mg/Kg		Analysis Date: 3/24/2021 07:49 PM		
Client ID:		Run ID: ICP2_210324B				SeqNo: 7247881		Prep Date: 3/23/2021		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic U 0.25

LCS		Sample ID: LCS-173930-173930				Units: mg/Kg		Analysis Date: 3/24/2021 08:09 PM		
Client ID:		Run ID: ICP2_210324B				SeqNo: 7247885		Prep Date: 3/23/2021		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic 4.89 0.25 5 0 97.8 80-120 0

MS		Sample ID: 21032118-01AMS				Units: mg/Kg		Analysis Date: 3/25/2021 06:59 PM		
Client ID:		Run ID: ICP2_210325A				SeqNo: 7250294		Prep Date: 3/23/2021		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic 9.135 0.33 6.57 3.906 79.6 75-125 0

MSD		Sample ID: 21032118-01AMSD				Units: mg/Kg		Analysis Date: 3/25/2021 07:04 PM		
Client ID:		Run ID: ICP2_210325A				SeqNo: 7250298		Prep Date: 3/23/2021		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic 8.876 0.33 6.562 3.906 75.7 75-125 9.135 2.87 20

The following samples were analyzed in this batch:

21031371-01A 21031371-02A

Client: Entrada Consulting Group
 Work Order: 21031371
 Project: N VEGA 5A

QC BATCH REPORT

Batch ID: **R312528** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R312528				Units: % of sample		Analysis Date: 3/23/2021 10:32 AM		
Client ID:		Run ID: MOIST_210323A				SeqNo: 7243363		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	U	0.10								

LCS		Sample ID: LCS-R312528				Units: % of sample		Analysis Date: 3/23/2021 10:32 AM		
Client ID:		Run ID: MOIST_210323A				SeqNo: 7243362		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	99.99	0.10	100	0	100	98-102	0			

DUP		Sample ID: 21031632-01B DUP				Units: % of sample		Analysis Date: 3/23/2021 10:32 AM		
Client ID:		Run ID: MOIST_210323A				SeqNo: 7243348		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	13.11	0.10	0	0	0	0-0	13.28	1.29	10	

DUP		Sample ID: 21031632-05B DUP				Units: % of sample		Analysis Date: 3/23/2021 10:32 AM		
Client ID:		Run ID: MOIST_210323A				SeqNo: 7243353		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	12.38	0.10	0	0	0	0-0	12.72	2.71	10	

The following samples were analyzed in this batch:

21031371-01A 21031371-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



Chain of Custody Form

Page 1 of 1

COC ID: 123456

☐ Cincinnati, OH
+1 513 733 5336

☐ Everett, WA
+1 425 356 2600

☐ Fort Collins, CO
+1 970 490 1511

☒ Holland, MI
+1 616 399 6070

☐ Houston, TX
+1 281 530 5656

☐ Middletown, PA
+1 717 944 5541

☐ Salt Lake City, UT
+1 801 266 7700

☐ Spring City, PA
+1 610 948 4903

☐ York, PA
+1 717 505 5280

Customer Information				ALS Project Manager:				Work Order #: 21031371											
Project Information				Parameter/Method Request for Analysis															
Purchase Order	Project Name	Project Number	A	Arsenic															
Work Order	Project Number	B																	
Company Name	Bill To Company	C																	
Send Report To	Invoice Attn:	D																	
Address	Address	E																	
City/State/Zip	City/State/Zip	F																	
Phone	Phone	G																	
Fax	Fax	H																	
e-Mail Address	e-Mail Address	I																	
J																			
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold		
1	20210310 - NVSA - SBC - 6" - 840	3/10/21	840	SS			X												
2	20210310 - NVSA - WBG - 6" - 830	3/10/21	830	SS			X												
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			

Sampler(s): Please Print & Sign				Shipment Method: FedEx		Required Turnaround Time: <input checked="" type="checkbox"/> STD 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour				Results Due Date:	
Relinquished by:		Date: 3/10/21	Time: 1800	Received by:		Notes:					
Relinquished by:		Date: 3-10-21	Time: 1830	Received by (Laboratory):		Cooler Temp.		QC Package: (Check Box Below)			
Logged by (Laboratory):		Date: 3/15/21	Time: 1230	Checked by (Laboratory):		12/1 4.05		<input checked="" type="checkbox"/> Level II: Standard QC			
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 8-5035								<input type="checkbox"/> Level III: Std QC + Raw Data			
								<input type="checkbox"/> Level IV: SW846 CLP-Like			
								Other:			

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

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Sample Receipt Checklist

Client Name: **ENTRADA**

Date/Time Received: **12-Mar-21 09:30**

Work Order: **21031371**

Received by: **DS**

Checklist completed by **Diane Shaw**

15-Mar-21

Reviewed by: **Chad Whelton**

16-Mar-21

eSignature

Date

eSignature

Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☒ No ☐ Not Present ☐

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Container/Temp Blank temperature in compliance? Yes ☒ No ☐

Sample(s) received on ice? Yes ☒ No ☐

Temperature(s)/Thermometer(s): **4.0/4.0 c** **IR1**

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: **3/15/2021 1:03:10 PM**

Water - VOA vials have zero headspace? Yes ☐ No ☐ No VOA vials submitted ☒

Water - pH acceptable upon receipt? Yes ☐ No ☐ N/A ☒

pH adjusted? Yes ☐ No ☐ N/A ☒

pH adjusted by: **-**

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

January 07, 2021

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Entrada Consulting Group

Sample Delivery Group: L1301368
Samples Received: 12/30/2020
Project Number:
Description: North Vega 5A

Report To: Stuart Hall
240 Mesa Avenue
Grand Junction, CO 81501

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 www.pacenational.com



Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Sr: Sample Results	5	³ Ss
NV5A-BG1 L1301368-01	5	
NV5A-BG2 L1301368-02	6	⁴ Cn
NV5A-BG3 L1301368-03	7	⁵ Sr
Qc: Quality Control Summary	8	
Metals (ICP) by Method 6010B	8	⁶ Qc
Gl: Glossary of Terms	9	⁷ Gl
Al: Accreditations & Locations	10	⁸ Al
Sc: Sample Chain of Custody	11	⁹ Sc

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



NV5A-BG1 L1301368-01 Solid

Collected by
Jason McLartyCollected date/time
12/29/20 12:15Received date/time
12/30/20 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1600676	1	01/05/21 09:07	01/06/21 23:11	EL	Mt. Juliet, TN

¹ Cp² Tc³ Ss

NV5A-BG2 L1301368-02 Solid

Collected by
Jason McLartyCollected date/time
12/29/20 12:30Received date/time
12/30/20 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1600676	1	01/05/21 09:07	01/06/21 23:13	EL	Mt. Juliet, TN

⁴ Cn⁵ Sr⁶ Qc

NV5A-BG3 L1301368-03 Solid

Collected by
Jason McLartyCollected date/time
12/29/20 12:45Received date/time
12/30/20 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1600676	1	01/05/21 09:07	01/06/21 23:16	EL	Mt. Juliet, TN

⁷ Gl⁸ Al⁹ Sc

ACCOUNT:

Entrada Consulting Group

PROJECT:

SDG:

L1301368

DATE/TIME:

01/07/21 10:58

PAGE:

3 of 11



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

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Collected date/time: 12/29/20 12:15

L1301368

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	01/06/2021 23:11	WG1600676

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.61		2.00	1	01/06/2021 23:13	WG1600676

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	01/06/2021 23:16	WG1600676

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3610360-1 01/06/21 22:36

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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

Laboratory Control Sample (LCS)

(LCS) R3610360-2 01/06/21 22:38

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Arsenic	100	94.1	94.1	80.0-120	

⁷Gl

⁸Al

⁹Sc

L1301371-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1301371-03 01/06/21 22:42 • (MS) R3610360-5 01/06/21 22:50 • (MSD) R3610360-6 01/06/21 22:53

	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	%	%		%			%	%
Arsenic	100	5.82	97.4	96.7	91.5	90.9	1	75.0-125			0.646	20



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.
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

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* 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 National.

State Accreditations

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	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA

Third Party Federal Accreditations

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

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



[illegible]

January 08, 2021

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Entrada Consulting Group

Sample Delivery Group: L1301372
Samples Received: 12/30/2020
Project Number:
Description: North Vega 5A

Report To: Stuart Hall
240 Mesa Avenue
Grand Junction, CO 81501

Entire Report Reviewed By:



Chris Ward
Project Manager

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Pace Analytical National

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



NV5A-POR L1301372-01 Solid

Collected by
Jason McLarty

Collected date/time
12/29/20 11:15

Received date/time
12/30/20 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1600238	1	01/06/21 22:24	01/06/21 22:24	EL	Mt. Juliet, TN
Calculated Results	WG1600676	1	01/05/21 09:07	01/06/21 23:25	EL	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1601450	1	01/06/21 11:00	01/06/21 19:52	BJD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1599773	1	01/07/21 12:00	01/07/21 15:38	JRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1600343	1	01/04/21 13:00	01/04/21 16:00	SRG	Mt. Juliet, TN
Mercury by Method 7471A	WG1600977	1	01/05/21 17:25	01/06/21 10:06	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1600676	1	01/05/21 09:07	01/06/21 23:25	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1600484	10000	12/30/20 19:46	01/05/21 23:06	TPR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1600946	10	01/06/21 10:22	01/07/21 07:23	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1600673	1	01/05/21 08:41	01/05/21 21:22	AAT	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1600673	10	01/05/21 08:41	01/06/21 08:51	AAT	Mt. Juliet, TN

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

NV5A-WEST L1301372-02 Solid

Collected by
Jason McLarty

Collected date/time
12/29/20 11:30

Received date/time
12/30/20 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1600238	1	01/06/21 22:27	01/06/21 22:27	EL	Mt. Juliet, TN
Calculated Results	WG1600676	1	01/05/21 09:07	01/06/21 23:28	EL	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1601450	1	01/06/21 11:00	01/06/21 19:52	BJD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1599773	1	01/07/21 12:00	01/07/21 15:38	JRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1600343	1	01/04/21 13:00	01/04/21 16:00	SRG	Mt. Juliet, TN
Mercury by Method 7471A	WG1600977	1	01/05/21 17:25	01/06/21 10:09	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1600676	1	01/05/21 09:07	01/06/21 23:28	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1600484	100	12/30/20 19:46	01/05/21 23:28	TPR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1600946	1	01/06/21 10:22	01/07/21 07:10	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1600673	1	01/05/21 08:41	01/05/21 21:40	AAT	Mt. Juliet, TN



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

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	40.0		1	01/06/2021 22:24	WG1600238

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	14.9		1.00	1	01/06/2021 23:25	WG1600676

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	01/06/2021 19:52	WG1601450

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.14	T8	1	01/07/2021 15:38	WG1599773

Sample Narrative:

L1301372-01 WG1599773: 8.14 at 21.3C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	3940		10.0	1	01/04/2021 16:00	WG1600343

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	01/06/2021 10:06	WG1600977

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	01/06/2021 23:25	WG1600676
Barium	248		0.500	1	01/06/2021 23:25	WG1600676
Cadmium	ND		0.500	1	01/06/2021 23:25	WG1600676
Chromium	14.9		1.00	1	01/06/2021 23:25	WG1600676
Copper	15.5		2.00	1	01/06/2021 23:25	WG1600676
Lead	7.39		0.500	1	01/06/2021 23:25	WG1600676
Nickel	25.0		2.00	1	01/06/2021 23:25	WG1600676
Selenium	ND		2.00	1	01/06/2021 23:25	WG1600676
Silver	ND		1.00	1	01/06/2021 23:25	WG1600676
Zinc	45.0		5.00	1	01/06/2021 23:25	WG1600676

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	21.3		5.00	10000	01/05/2021 23:06	WG1600484
Toluene	650		50.0	10000	01/05/2021 23:06	WG1600484
Ethylbenzene	153		5.00	10000	01/05/2021 23:06	WG1600484
Total Xylene	2670		15.0	10000	01/05/2021 23:06	WG1600484
TPH (GC/FID) Low Fraction	25700		1000	10000	01/05/2021 23:06	WG1600484



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	96.9		77.0-120		01/05/2021 23:06	WG1600484
(S) a,a,a-Trifluorotoluene(PID)	106		72.0-128		01/05/2021 23:06	WG1600484

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1480		40.0	10	01/07/2021 07:23	WG1600946
(S) o-Terphenyl	265	<u>J1</u>	18.0-148		01/07/2021 07:23	WG1600946

Sample Narrative:

L1301372-01 WG1600946: Surrogate failure due to matrix interference

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	01/05/2021 21:22	WG1600673
Acenaphthene	0.0473		0.00600	1	01/05/2021 21:22	WG1600673
Acenaphthylene	ND		0.00600	1	01/05/2021 21:22	WG1600673
Benzo(a)anthracene	ND		0.00600	1	01/05/2021 21:22	WG1600673
Benzo(a)pyrene	ND		0.00600	1	01/05/2021 21:22	WG1600673
Benzo(b)fluoranthene	ND		0.00600	1	01/05/2021 21:22	WG1600673
Benzo(g,h,i)perylene	ND		0.00600	1	01/05/2021 21:22	WG1600673
Benzo(k)fluoranthene	ND		0.00600	1	01/05/2021 21:22	WG1600673
Chrysene	ND		0.00600	1	01/05/2021 21:22	WG1600673
Dibenz(a,h)anthracene	ND		0.00600	1	01/05/2021 21:22	WG1600673
Fluoranthene	ND		0.00600	1	01/05/2021 21:22	WG1600673
Fluorene	0.107		0.00600	1	01/05/2021 21:22	WG1600673
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	01/05/2021 21:22	WG1600673
Naphthalene	3.41		0.0200	1	01/05/2021 21:22	WG1600673
Phenanthrene	0.0719		0.00600	1	01/05/2021 21:22	WG1600673
Pyrene	ND		0.00600	1	01/05/2021 21:22	WG1600673
1-Methylnaphthalene	2.13		0.0200	1	01/05/2021 21:22	WG1600673
2-Methylnaphthalene	7.49		0.200	10	01/06/2021 08:51	WG1600673
2-Chloronaphthalene	ND		0.0200	1	01/05/2021 21:22	WG1600673
(S) p-Terphenyl-d14	94.2		23.0-120		01/06/2021 08:51	WG1600673
(S) p-Terphenyl-d14	96.1		23.0-120		01/05/2021 21:22	WG1600673
(S) Nitrobenzene-d5	0.000	<u>J2</u>	14.0-149		01/05/2021 21:22	WG1600673
(S) Nitrobenzene-d5	0.000	<u>J2</u>	14.0-149		01/06/2021 08:51	WG1600673
(S) 2-Fluorobiphenyl	82.3		34.0-125		01/05/2021 21:22	WG1600673
(S) 2-Fluorobiphenyl	105		34.0-125		01/06/2021 08:51	WG1600673

Sample Narrative:

L1301372-01 WG1600673: Surrogate failure due to matrix interference

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	24.4		1	01/06/2021 22:27	WG1600238

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	11.3		1.00	1	01/06/2021 23:28	WG1600676

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	01/06/2021 19:52	WG1601450

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.36	T8	1	01/07/2021 15:38	WG1599773

Sample Narrative:

L1301372-02 WG1599773: 8.36 at 21.1C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	3300		10.0	1	01/04/2021 16:00	WG1600343

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	01/06/2021 10:09	WG1600977

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	01/06/2021 23:28	WG1600676
Barium	343		0.500	1	01/06/2021 23:28	WG1600676
Cadmium	ND		0.500	1	01/06/2021 23:28	WG1600676
Chromium	11.3		1.00	1	01/06/2021 23:28	WG1600676
Copper	12.2		2.00	1	01/06/2021 23:28	WG1600676
Lead	4.92		0.500	1	01/06/2021 23:28	WG1600676
Nickel	31.3		2.00	1	01/06/2021 23:28	WG1600676
Selenium	ND		2.00	1	01/06/2021 23:28	WG1600676
Silver	ND		1.00	1	01/06/2021 23:28	WG1600676
Zinc	29.3		5.00	1	01/06/2021 23:28	WG1600676

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	1.71		0.0500	100	01/05/2021 23:28	WG1600484
Toluene	13.1		0.500	100	01/05/2021 23:28	WG1600484
Ethylbenzene	2.82		0.0500	100	01/05/2021 23:28	WG1600484
Total Xylene	48.7		0.150	100	01/05/2021 23:28	WG1600484
TPH (GC/FID) Low Fraction	717		10.0	100	01/05/2021 23:28	WG1600484



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	98.0		77.0-120		01/05/2021 23:28	WG1600484
(S) a,a,a-Trifluorotoluene(PID)	105		72.0-128		01/05/2021 23:28	WG1600484

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	84.9		4.00	1	01/07/2021 07:10	WG1600946
(S) o-Terphenyl	59.7		18.0-148		01/07/2021 07:10	WG1600946

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	01/05/2021 21:40	WG1600673
Acenaphthene	ND		0.00600	1	01/05/2021 21:40	WG1600673
Acenaphthylene	ND		0.00600	1	01/05/2021 21:40	WG1600673
Benzo(a)anthracene	ND		0.00600	1	01/05/2021 21:40	WG1600673
Benzo(a)pyrene	ND		0.00600	1	01/05/2021 21:40	WG1600673
Benzo(b)fluoranthene	ND		0.00600	1	01/05/2021 21:40	WG1600673
Benzo(g,h,i)perylene	ND		0.00600	1	01/05/2021 21:40	WG1600673
Benzo(k)fluoranthene	ND		0.00600	1	01/05/2021 21:40	WG1600673
Chrysene	ND		0.00600	1	01/05/2021 21:40	WG1600673
Dibenz(a,h)anthracene	ND		0.00600	1	01/05/2021 21:40	WG1600673
Fluoranthene	ND		0.00600	1	01/05/2021 21:40	WG1600673
Fluorene	ND		0.00600	1	01/05/2021 21:40	WG1600673
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	01/05/2021 21:40	WG1600673
Naphthalene	0.110		0.0200	1	01/05/2021 21:40	WG1600673
Phenanthrene	ND		0.00600	1	01/05/2021 21:40	WG1600673
Pyrene	ND		0.00600	1	01/05/2021 21:40	WG1600673
1-Methylnaphthalene	0.0681		0.0200	1	01/05/2021 21:40	WG1600673
2-Methylnaphthalene	0.201		0.0200	1	01/05/2021 21:40	WG1600673
2-Chloronaphthalene	ND		0.0200	1	01/05/2021 21:40	WG1600673
(S) p-Terphenyl-d14	113		23.0-120		01/05/2021 21:40	WG1600673
(S) Nitrobenzene-d5	150	J1	14.0-149		01/05/2021 21:40	WG1600673
(S) 2-Fluorobiphenyl	103		34.0-125		01/05/2021 21:40	WG1600673



Method Blank (MB)

(MB) R3610308-1 01/06/21 19:49

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Chromium,Hexavalent	U		0.640	2.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1301371-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1301371-02 01/06/21 19:50 • (DUP) R3610308-3 01/06/21 19:51

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

L1302733-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1302733-05 01/06/21 20:00 • (DUP) R3610308-8 01/06/21 20:01

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

Laboratory Control Sample (LCS)

(LCS) R3610308-2 01/06/21 19:49

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chromium,Hexavalent	24.0	21.8	90.8	80.0-120	

L1302355-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1302355-01 01/06/21 19:54 • (MS) R3610308-4 01/06/21 19:55 • (MSD) R3610308-5 01/06/21 19:56

	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	%	%		%			%	%
Chromium,Hexavalent	20.0	ND	8.97	9.21	44.9	46.0	1	75.0-125	J6	J6	2.58	20

L1302355-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1302355-01 01/06/21 19:54 • (MS) R3610308-6 01/06/21 19:56

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/kg	mg/kg	mg/kg	%		%	
Chromium,Hexavalent	656	ND	577	87.9	50	75.0-125	



L1301348-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1301348-02 01/07/21 15:38 • (DUP) R3610661-2 01/07/21 15:38

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	10.5	10.6	1	0.855		1

Sample Narrative:

OS: 10.48 at 21.2C

DUP: 10.57 at 21C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1302322-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1302322-07 01/07/21 15:38 • (DUP) R3610661-3 01/07/21 15:38

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.96	8.96	1	0.000		1

Sample Narrative:

OS: 8.96 at 20.9C

DUP: 8.96 at 20.7C

Laboratory Control Sample (LCS)

(LCS) R3610661-1 01/07/21 15:38

	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: 10.05 at 18.3C



Method Blank (MB)

(MB) R3609460-1 01/04/21 16:00

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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

L1301371-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1301371-01 01/04/21 16:00 • (DUP) R3609460-3 01/04/21 16:00

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	1130	1150	1	2.19		20

Laboratory Control Sample (LCS)

(LCS) R3609460-2 01/04/21 16:00

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	483	489	101	85.0-115	

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3610098-1 01/06/21 09:31

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3610098-2 01/06/21 09:34

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Mercury	0.500	0.556	111	80.0-120	

L1301594-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1301594-01 01/06/21 09:36 • (MS) R3610098-3 01/06/21 09:39 • (MSD) R3610098-4 01/06/21 09:41

	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	%	%		%			%	%
Mercury	0.500	0.0886	0.609	0.635	104	109	1	75.0-125			4.15	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3610360-1 01/06/21 22:36

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Chromium	U		0.133	1.00
Copper	U		0.400	2.00
Lead	U		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) R3610360-2 01/06/21 22:38

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	94.1	94.1	80.0-120	
Barium	100	101	101	80.0-120	
Cadmium	100	95.9	95.9	80.0-120	
Chromium	100	98.2	98.2	80.0-120	
Copper	100	98.0	98.0	80.0-120	
Lead	100	98.0	98.0	80.0-120	
Nickel	100	100	100	80.0-120	
Selenium	100	96.8	96.8	80.0-120	
Silver	20.0	19.2	96.1	80.0-120	
Zinc	100	98.3	98.3	80.0-120	

L1301371-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1301371-03 01/06/21 22:42 • (MS) R3610360-5 01/06/21 22:50 • (MSD) R3610360-6 01/06/21 22:53

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	5.82	97.4	96.7	91.5	90.9	1	75.0-125			0.646	20
Barium	100	335	443	761	108	427	1	75.0-125		J3 J5	52.9	20
Cadmium	100	ND	96.1	95.5	95.8	95.3	1	75.0-125			0.603	20
Chromium	100	39.4	134	137	95.0	97.8	1	75.0-125			2.10	20
Copper	100	16.7	114	114	97.6	97.2	1	75.0-125			0.316	20
Lead	100	10.1	108	109	97.9	99.0	1	75.0-125			1.04	20
Nickel	100	22.1	124	125	102	103	1	75.0-125			0.315	20



[L1301372-01,02](#)

L1301371-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1301371-03 01/06/21 22:42 • (MS) R3610360-5 01/06/21 22:50 • (MSD) R3610360-6 01/06/21 22:53

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Selenium	100	ND	95.1	94.4	95.1	94.4	1	75.0-125			0.657	20
Silver	20.0	ND	19.5	19.4	97.5	96.9	1	75.0-125			0.572	20
Zinc	100	44.6	139	142	94.4	97.6	1	75.0-125			2.27	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3609875-3 01/05/21 15:02

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	0.000268	⌋	0.000150	0.00500
Ethylbenzene	0.000232	⌋	0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	106			72.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3609875-1 01/05/21 13:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0524	105	76.0-121	
Toluene	0.0500	0.0547	109	80.0-120	
Ethylbenzene	0.0500	0.0520	104	80.0-124	
Total Xylene	0.150	0.163	109	37.0-160	
(S) a,a,a-Trifluorotoluene(FID)			103	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			104	72.0-128	

Laboratory Control Sample (LCS)

(LCS) R3609875-2 01/05/21 14:17

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)			108	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			113	72.0-128	

Method Blank (MB)

(MB) R3610365-1 01/06/21 22:57

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	58.9			18.0-148

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Laboratory Control Sample (LCS)

(LCS) R3610365-2 01/06/21 23:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	38.1	76.2	50.0-150	
(S) o-Terphenyl			57.8	18.0-148	

L1301842-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1301842-01 01/07/21 00:13 • (MS) R3610365-3 01/07/21 00:26 • (MSD) R3610365-4 01/07/21 00:38

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) High Fraction	47.0	ND	35.1	34.1	74.7	71.3	1	50.0-150			2.89	20
(S) o-Terphenyl					52.9	47.6		18.0-148				

Method Blank (MB)

(MB) R3610022-2 01/05/21 18:05

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	122			14.0-149
(S) 2-Fluorobiphenyl	95.2			34.0-125
(S) p-Terphenyl-d14	111			23.0-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3610022-1 01/05/21 17:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0835	104	50.0-126	
Acenaphthene	0.0800	0.0853	107	50.0-120	
Acenaphthylene	0.0800	0.0879	110	50.0-120	
Benzo(a)anthracene	0.0800	0.0874	109	45.0-120	
Benzo(a)pyrene	0.0800	0.0779	97.4	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0892	112	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0928	116	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0893	112	49.0-125	
Chrysene	0.0800	0.0894	112	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0942	118	47.0-125	
Fluoranthene	0.0800	0.0879	110	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3610022-1 01/05/21 17:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Fluorene	0.0800	0.0875	109	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0975	122	46.0-125	
Naphthalene	0.0800	0.0817	102	50.0-120	
Phenanthrene	0.0800	0.0888	111	47.0-120	
Pyrene	0.0800	0.0862	108	43.0-123	
1-Methylnaphthalene	0.0800	0.0825	103	51.0-121	
2-Methylnaphthalene	0.0800	0.0801	100	50.0-120	
2-Chloronaphthalene	0.0800	0.0835	104	50.0-120	
(S) Nitrobenzene-d5			131	14.0-149	
(S) 2-Fluorobiphenyl			99.0	34.0-125	
(S) p-Terphenyl-d14			115	23.0-120	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1299513-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1299513-18 01/05/21 19:53 • (MS) R3610022-3 01/05/21 20:10 • (MSD) R3610022-4 01/05/21 20:28

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Anthracene	0.0800	ND	0.0757	0.0777	94.6	97.6	1	10.0-145			2.61	30
Acenaphthene	0.0800	ND	0.0819	0.0837	102	105	1	14.0-127			2.17	27
Acenaphthylene	0.0800	ND	0.0840	0.0864	105	109	1	21.0-124			2.82	25
Benzo(a)anthracene	0.0800	ND	0.0733	0.0755	91.6	94.8	1	10.0-139			2.96	30
Benzo(a)pyrene	0.0800	ND	0.0736	0.0766	92.0	96.2	1	10.0-141			3.99	31
Benzo(b)fluoranthene	0.0800	ND	0.0776	0.0799	97.0	100	1	10.0-140			2.92	36
Benzo(g,h,i)perylene	0.0800	ND	0.0817	0.0831	102	104	1	10.0-140			1.70	33
Benzo(k)fluoranthene	0.0800	ND	0.0779	0.0820	97.4	103	1	10.0-137			5.13	31
Chrysene	0.0800	ND	0.0778	0.0829	97.3	104	1	10.0-145			6.35	30
Dibenz(a,h)anthracene	0.0800	ND	0.0839	0.0861	105	108	1	10.0-132			2.59	31
Fluoranthene	0.0800	ND	0.0749	0.0766	93.6	96.2	1	10.0-153			2.24	33
Fluorene	0.0800	ND	0.0814	0.0833	102	105	1	11.0-130			2.31	29
Indeno(1,2,3-cd)pyrene	0.0800	ND	0.0839	0.0849	105	107	1	10.0-137			1.18	32
Naphthalene	0.0800	ND	0.0823	0.0854	103	107	1	10.0-135			3.70	27
Phenanthrene	0.0800	ND	0.0800	0.0828	100	104	1	10.0-144			3.44	31
Pyrene	0.0800	ND	0.0751	0.0789	93.9	99.1	1	10.0-148			4.94	35
1-Methylnaphthalene	0.0800	ND	0.0800	0.0824	100	104	1	10.0-142			2.96	28
2-Methylnaphthalene	0.0800	ND	0.0774	0.0792	96.8	99.5	1	10.0-137			2.30	28
2-Chloronaphthalene	0.0800	ND	0.0815	0.0833	102	105	1	29.0-120			2.18	24
(S) Nitrobenzene-d5					125	133		14.0-149				
(S) 2-Fluorobiphenyl					101	108		34.0-125				
(S) p-Terphenyl-d14					107	120		23.0-120				



Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* 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 National.

State Accreditations

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	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA

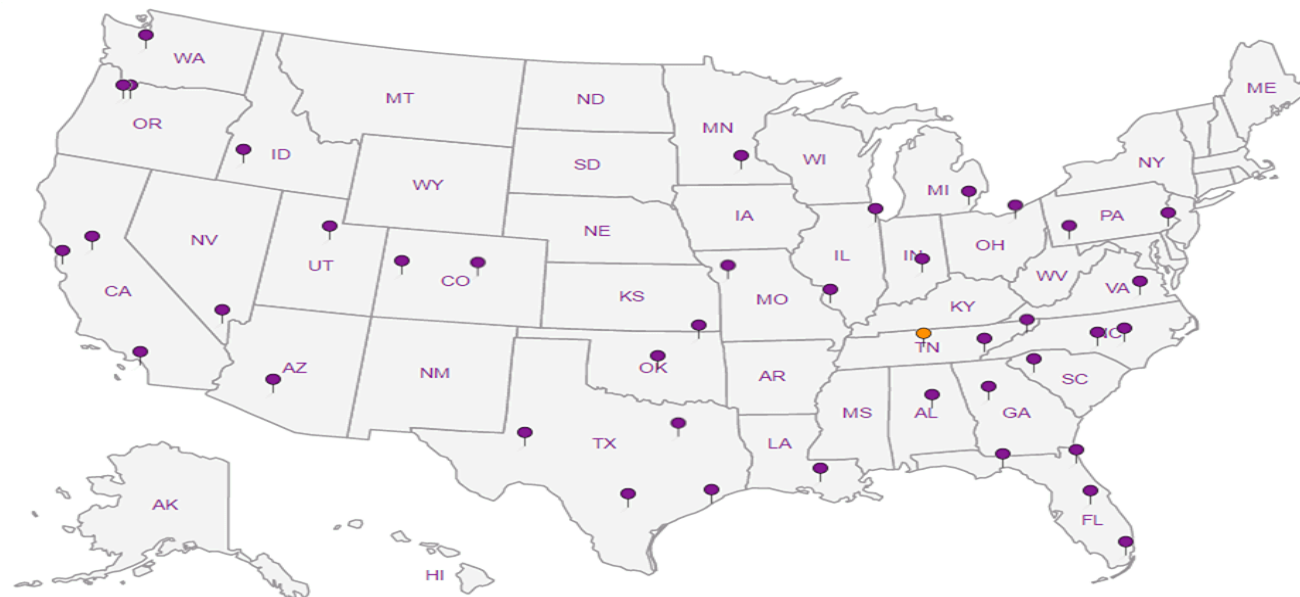
Third Party Federal Accreditations

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

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



[illegible]

ANALYTICAL REPORT

February 26, 2021

Revised Report

Entrada Consulting Group

Sample Delivery Group: L1318199
Samples Received: 02/22/2021
Project Number:
Description: North Vega 5A

Report To: Stuart Hall
240 Mesa Avenue
Grand Junction, CO 81501

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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 www.pacenational.com



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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



NV5A-EAST (2') L1318199-01 Solid

Collected by Jason McLarty
Collected date/time 02/15/21 10:00
Received date/time 02/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1623985	1	02/24/21 19:45	02/24/21 19:45	KMG	Mt. Juliet, TN
Calculated Results	WG1623722	1	02/22/21 17:32	02/24/21 22:39	MSP	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1624036	1	02/24/21 10:59	02/24/21 22:39	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1624276	1	02/24/21 00:37	02/24/21 01:38	WOS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1625949	1	02/25/21 18:06	02/25/21 19:52	AMH	Mt. Juliet, TN
Mercury by Method 7471A	WG1623794	1	02/22/21 18:52	02/23/21 09:46	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1623722	1	02/22/21 17:32	02/23/21 09:24	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1623855	1	02/22/21 13:12	02/23/21 03:19	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1623798	1	02/23/21 00:42	02/23/21 08:06	CAG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1623799	1	02/23/21 00:54	02/23/21 07:42	LEA	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

NV5A-MID (2') L1318199-02 Solid

Collected by Jason McLarty
Collected date/time 02/15/21 10:30
Received date/time 02/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1623985	1	02/24/21 19:48	02/24/21 19:48	KMG	Mt. Juliet, TN
Calculated Results	WG1623774	1	02/22/21 18:19	02/24/21 22:39	MSP	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1624036	1	02/24/21 10:59	02/24/21 22:39	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1624578	1	02/24/21 16:53	02/24/21 23:02	WOS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1625949	1	02/25/21 18:06	02/25/21 19:52	AMH	Mt. Juliet, TN
Mercury by Method 7471A	WG1623794	1	02/22/21 18:52	02/23/21 09:49	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1623774	1	02/22/21 18:19	02/23/21 21:32	KMG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1623855	1	02/22/21 13:12	02/23/21 03:41	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1623798	1	02/23/21 00:42	02/23/21 08:20	CAG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1623799	1	02/23/21 00:54	02/23/21 07:59	LEA	Mt. Juliet, TN

NV5A-CONT W (2') L1318199-03 Solid

Collected by Jason McLarty
Collected date/time 02/15/21 11:00
Received date/time 02/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1623985	1	02/24/21 19:51	02/24/21 19:51	KMG	Mt. Juliet, TN
Calculated Results	WG1623774	1	02/22/21 18:19	02/24/21 22:40	MSP	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1624036	1	02/24/21 10:59	02/24/21 22:40	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1624276	1	02/24/21 00:37	02/24/21 01:38	WOS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1625949	1	02/25/21 18:06	02/25/21 19:52	AMH	Mt. Juliet, TN
Mercury by Method 7471A	WG1623794	1	02/22/21 18:52	02/23/21 09:56	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1623774	1	02/22/21 18:19	02/23/21 21:35	KMG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1624293	1	02/23/21 15:19	02/23/21 22:12	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1623798	1	02/23/21 00:42	02/23/21 08:33	CAG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1623799	1	02/23/21 00:54	02/23/21 08:17	LEA	Mt. Juliet, TN

NV5A-CONT E (2') L1318199-04 Solid

Collected by Jason McLarty
Collected date/time 02/15/21 11:30
Received date/time 02/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1623985	1	02/24/21 19:53	02/24/21 19:53	KMG	Mt. Juliet, TN
Calculated Results	WG1623774	1	02/22/21 18:19	02/24/21 22:40	MSP	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1624036	1	02/24/21 10:59	02/24/21 22:40	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1624276	1	02/24/21 00:37	02/24/21 01:38	WOS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1625949	1	02/25/21 18:06	02/25/21 19:52	AMH	Mt. Juliet, TN
Mercury by Method 7471A	WG1623794	1	02/22/21 18:52	02/23/21 09:59	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1623774	1	02/22/21 18:19	02/23/21 21:38	KMG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1624293	1	02/23/21 15:19	02/23/21 22:34	JHH	Mt. Juliet, TN

ACCOUNT:

Entrada Consulting Group

PROJECT:

SDG:

L1318199

DATE/TIME:

02/26/21 10:00

PAGE:

3 of 32



NV5A-CONT E (2') L1318199-04 Solid

Collected by
Jason McLartyCollected date/time
02/15/21 11:30Received date/time
02/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1623798	1	02/23/21 00:42	02/23/21 08:47	CAG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1623799	1	02/23/21 00:54	02/23/21 08:34	LEA	Mt. Juliet, TN

¹Cp²Tc³Ss

NV5A-WEST 2 (1') L1318199-05 Solid

Collected by
Jason McLartyCollected date/time
02/15/21 12:00Received date/time
02/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1623985	1	02/24/21 19:56	02/24/21 19:56	KMG	Mt. Juliet, TN
Calculated Results	WG1623774	1	02/22/21 18:19	02/24/21 22:40	MSP	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1624036	1	02/24/21 10:59	02/24/21 22:40	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1624578	1	02/24/21 16:53	02/24/21 23:02	WOS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1625949	1	02/25/21 18:06	02/25/21 19:52	AMH	Mt. Juliet, TN
Mercury by Method 7471A	WG1623794	1	02/22/21 18:52	02/23/21 10:01	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1623774	1	02/22/21 18:19	02/23/21 21:40	KMG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1624293	1	02/22/21 13:12	02/23/21 22:56	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1623798	1	02/23/21 00:42	02/23/21 09:00	CAG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1623799	1	02/23/21 00:54	02/23/21 08:51	LEA	Mt. Juliet, TN

⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc



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

Level II Report - Version 1: 02/26/21 09:13

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.676		1	02/24/2021 19:45	WG1623985

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	19.2		1.00	1	02/24/2021 22:39	WG1623722

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	02/24/2021 22:39	WG1624036

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.38	T8	1	02/24/2021 01:38	WG1624276

Sample Narrative:

L1318199-01 WG1624276: 8.38 at 20.4C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	200		10.0	1	02/25/2021 19:52	WG1625949

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	02/23/2021 09:46	WG1623794

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	02/23/2021 09:24	WG1623722
Barium	128		0.500	1	02/23/2021 09:24	WG1623722
Cadmium	ND		0.500	1	02/23/2021 09:24	WG1623722
Chromium	19.2		1.00	1	02/23/2021 09:24	WG1623722
Copper	23.9		2.00	1	02/23/2021 09:24	WG1623722
Lead	11.7		0.500	1	02/23/2021 09:24	WG1623722
Nickel	17.0		2.00	1	02/23/2021 09:24	WG1623722
Selenium	ND		2.00	1	02/23/2021 09:24	WG1623722
Silver	ND		1.00	1	02/23/2021 09:24	WG1623722
Zinc	56.6		5.00	1	02/23/2021 09:24	WG1623722

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00101		0.000500	1	02/23/2021 03:19	WG1623855
Toluene	0.00958		0.00500	1	02/23/2021 03:19	WG1623855
Ethylbenzene	0.00260		0.000500	1	02/23/2021 03:19	WG1623855
Total Xylene	0.0494		0.00150	1	02/23/2021 03:19	WG1623855
TPH (GC/FID) Low Fraction	0.352		0.100	1	02/23/2021 03:19	WG1623855



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	108		77.0-120		02/23/2021 03:19	WG1623855
(S) a,a,a-Trifluorotoluene(PID)	100		72.0-128		02/23/2021 03:19	WG1623855

1
Cp2
Tc3
Ss4
Cn5
Sr

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	02/23/2021 08:06	WG1623798
(S) o-Terphenyl	53.4		18.0-148		02/23/2021 08:06	WG1623798

6
Qc7
Gl8
Al9
Sc

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	02/23/2021 07:42	WG1623799
Acenaphthene	ND		0.00600	1	02/23/2021 07:42	WG1623799
Acenaphthylene	ND		0.00600	1	02/23/2021 07:42	WG1623799
Benzo(a)anthracene	ND		0.00600	1	02/23/2021 07:42	WG1623799
Benzo(a)pyrene	ND		0.00600	1	02/23/2021 07:42	WG1623799
Benzo(b)fluoranthene	ND		0.00600	1	02/23/2021 07:42	WG1623799
Benzo(g,h,i)perylene	ND		0.00600	1	02/23/2021 07:42	WG1623799
Benzo(k)fluoranthene	ND		0.00600	1	02/23/2021 07:42	WG1623799
Chrysene	ND		0.00600	1	02/23/2021 07:42	WG1623799
Dibenz(a,h)anthracene	ND		0.00600	1	02/23/2021 07:42	WG1623799
Fluoranthene	ND		0.00600	1	02/23/2021 07:42	WG1623799
Fluorene	ND		0.00600	1	02/23/2021 07:42	WG1623799
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	02/23/2021 07:42	WG1623799
Naphthalene	ND		0.0200	1	02/23/2021 07:42	WG1623799
Phenanthrene	ND		0.00600	1	02/23/2021 07:42	WG1623799
Pyrene	ND		0.00600	1	02/23/2021 07:42	WG1623799
1-Methylnaphthalene	ND		0.0200	1	02/23/2021 07:42	WG1623799
2-Methylnaphthalene	ND		0.0200	1	02/23/2021 07:42	WG1623799
2-Chloronaphthalene	ND		0.0200	1	02/23/2021 07:42	WG1623799
(S) p-Terphenyl-d14	64.7		23.0-120		02/23/2021 07:42	WG1623799
(S) Nitrobenzene-d5	89.4		14.0-149		02/23/2021 07:42	WG1623799
(S) 2-Fluorobiphenyl	66.5		34.0-125		02/23/2021 07:42	WG1623799



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	3.19		1	02/24/2021 19:48	WG1623985

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	21.4		1.00	1	02/24/2021 22:39	WG1623774

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	02/24/2021 22:39	WG1624036

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.95	T8	1	02/24/2021 23:02	WG1624578

Sample Narrative:

L1318199-02 WG1624578: 8.95 at 21.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	342		10.0	1	02/25/2021 19:52	WG1625949

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	02/23/2021 09:49	WG1623794

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	02/23/2021 21:32	WG1623774
Barium	106		0.500	1	02/23/2021 21:32	WG1623774
Cadmium	ND		0.500	1	02/23/2021 21:32	WG1623774
Chromium	21.4		1.00	1	02/23/2021 21:32	WG1623774
Copper	24.3		2.00	1	02/23/2021 21:32	WG1623774
Lead	12.1		0.500	1	02/23/2021 21:32	WG1623774
Nickel	17.4		2.00	1	02/23/2021 21:32	WG1623774
Selenium	ND		2.00	1	02/23/2021 21:32	WG1623774
Silver	ND		1.00	1	02/23/2021 21:32	WG1623774
Zinc	61.7		5.00	1	02/23/2021 21:32	WG1623774

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00157		0.000500	1	02/23/2021 03:41	WG1623855
Toluene	0.00969		0.00500	1	02/23/2021 03:41	WG1623855
Ethylbenzene	0.00230		0.000500	1	02/23/2021 03:41	WG1623855
Total Xylene	0.0415		0.00150	1	02/23/2021 03:41	WG1623855
TPH (GC/FID) Low Fraction	0.457		0.100	1	02/23/2021 03:41	WG1623855

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



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	108		77.0-120		02/23/2021 03:41	WG1623855
(S) a,a,a-Trifluorotoluene(PID)	100		72.0-128		02/23/2021 03:41	WG1623855

1
Cp2
Tc3
Ss4
Cn5
Sr

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	02/23/2021 08:20	WG1623798
(S) o-Terphenyl	50.2		18.0-148		02/23/2021 08:20	WG1623798

6
Qc7
Gl8
Al9
Sc

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	02/23/2021 07:59	WG1623799
Acenaphthene	ND		0.00600	1	02/23/2021 07:59	WG1623799
Acenaphthylene	ND		0.00600	1	02/23/2021 07:59	WG1623799
Benzo(a)anthracene	ND		0.00600	1	02/23/2021 07:59	WG1623799
Benzo(a)pyrene	ND		0.00600	1	02/23/2021 07:59	WG1623799
Benzo(b)fluoranthene	ND		0.00600	1	02/23/2021 07:59	WG1623799
Benzo(g,h,i)perylene	ND		0.00600	1	02/23/2021 07:59	WG1623799
Benzo(k)fluoranthene	ND		0.00600	1	02/23/2021 07:59	WG1623799
Chrysene	ND		0.00600	1	02/23/2021 07:59	WG1623799
Dibenz(a,h)anthracene	ND		0.00600	1	02/23/2021 07:59	WG1623799
Fluoranthene	ND		0.00600	1	02/23/2021 07:59	WG1623799
Fluorene	ND		0.00600	1	02/23/2021 07:59	WG1623799
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	02/23/2021 07:59	WG1623799
Naphthalene	ND		0.0200	1	02/23/2021 07:59	WG1623799
Phenanthrene	ND		0.00600	1	02/23/2021 07:59	WG1623799
Pyrene	ND		0.00600	1	02/23/2021 07:59	WG1623799
1-Methylnaphthalene	ND		0.0200	1	02/23/2021 07:59	WG1623799
2-Methylnaphthalene	ND		0.0200	1	02/23/2021 07:59	WG1623799
2-Chloronaphthalene	ND		0.0200	1	02/23/2021 07:59	WG1623799
(S) p-Terphenyl-d14	79.9		23.0-120		02/23/2021 07:59	WG1623799
(S) Nitrobenzene-d5	100		14.0-149		02/23/2021 07:59	WG1623799
(S) 2-Fluorobiphenyl	77.6		34.0-125		02/23/2021 07:59	WG1623799



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	8.84		1	02/24/2021 19:51	WG1623985

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	18.5		1.00	1	02/24/2021 22:40	WG1623774

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	02/24/2021 22:40	WG1624036

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.97	T8	1	02/24/2021 01:38	WG1624276

Sample Narrative:

L1318199-03 WG1624276: 8.97 at 20.8C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	768		10.0	1	02/25/2021 19:52	WG1625949

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	02/23/2021 09:56	WG1623794

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	02/23/2021 21:35	WG1623774
Barium	111		0.500	1	02/23/2021 21:35	WG1623774
Cadmium	ND		0.500	1	02/23/2021 21:35	WG1623774
Chromium	18.5		1.00	1	02/23/2021 21:35	WG1623774
Copper	18.9		2.00	1	02/23/2021 21:35	WG1623774
Lead	10.6		0.500	1	02/23/2021 21:35	WG1623774
Nickel	15.3		2.00	1	02/23/2021 21:35	WG1623774
Selenium	ND		2.00	1	02/23/2021 21:35	WG1623774
Silver	ND		1.00	1	02/23/2021 21:35	WG1623774
Zinc	53.5		5.00	1	02/23/2021 21:35	WG1623774

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.000812		0.000500	1	02/23/2021 22:12	WG1624293
Toluene	ND		0.00500	1	02/23/2021 22:12	WG1624293
Ethylbenzene	ND		0.000500	1	02/23/2021 22:12	WG1624293
Total Xylene	0.00654		0.00150	1	02/23/2021 22:12	WG1624293
TPH (GC/FID) Low Fraction	0.239	B	0.100	1	02/23/2021 22:12	WG1624293

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



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	109		77.0-120		02/23/2021 22:12	WG1624293
(S) a,a,a-Trifluorotoluene(PID)	100		72.0-128		02/23/2021 22:12	WG1624293

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	02/23/2021 08:33	WG1623798
(S) o-Terphenyl	55.6		18.0-148		02/23/2021 08:33	WG1623798

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	02/23/2021 08:17	WG1623799
Acenaphthene	ND		0.00600	1	02/23/2021 08:17	WG1623799
Acenaphthylene	ND		0.00600	1	02/23/2021 08:17	WG1623799
Benzo(a)anthracene	ND		0.00600	1	02/23/2021 08:17	WG1623799
Benzo(a)pyrene	ND		0.00600	1	02/23/2021 08:17	WG1623799
Benzo(b)fluoranthene	ND		0.00600	1	02/23/2021 08:17	WG1623799
Benzo(g,h,i)perylene	ND		0.00600	1	02/23/2021 08:17	WG1623799
Benzo(k)fluoranthene	ND		0.00600	1	02/23/2021 08:17	WG1623799
Chrysene	ND		0.00600	1	02/23/2021 08:17	WG1623799
Dibenz(a,h)anthracene	ND		0.00600	1	02/23/2021 08:17	WG1623799
Fluoranthene	ND		0.00600	1	02/23/2021 08:17	WG1623799
Fluorene	ND		0.00600	1	02/23/2021 08:17	WG1623799
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	02/23/2021 08:17	WG1623799
Naphthalene	ND		0.0200	1	02/23/2021 08:17	WG1623799
Phenanthrene	ND		0.00600	1	02/23/2021 08:17	WG1623799
Pyrene	ND		0.00600	1	02/23/2021 08:17	WG1623799
1-Methylnaphthalene	ND		0.0200	1	02/23/2021 08:17	WG1623799
2-Methylnaphthalene	ND		0.0200	1	02/23/2021 08:17	WG1623799
2-Chloronaphthalene	ND		0.0200	1	02/23/2021 08:17	WG1623799
(S) p-Terphenyl-d14	75.4		23.0-120		02/23/2021 08:17	WG1623799
(S) Nitrobenzene-d5	95.4		14.0-149		02/23/2021 08:17	WG1623799
(S) 2-Fluorobiphenyl	74.3		34.0-125		02/23/2021 08:17	WG1623799

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	2.27		1	02/24/2021 19:53	WG1623985

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	21.9		1.00	1	02/24/2021 22:40	WG1623774

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	02/24/2021 22:40	WG1624036

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	9.15	T8	1	02/24/2021 01:38	WG1624276

Sample Narrative:

L1318199-04 WG1624276: 9.15 at 21.2C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	451		10.0	1	02/25/2021 19:52	WG1625949

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	02/23/2021 09:59	WG1623794

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.06		2.00	1	02/23/2021 21:38	WG1623774
Barium	165		0.500	1	02/23/2021 21:38	WG1623774
Cadmium	ND		0.500	1	02/23/2021 21:38	WG1623774
Chromium	21.9		1.00	1	02/23/2021 21:38	WG1623774
Copper	22.6		2.00	1	02/23/2021 21:38	WG1623774
Lead	12.1		0.500	1	02/23/2021 21:38	WG1623774
Nickel	17.5		2.00	1	02/23/2021 21:38	WG1623774
Selenium	ND		2.00	1	02/23/2021 21:38	WG1623774
Silver	ND		1.00	1	02/23/2021 21:38	WG1623774
Zinc	62.2		5.00	1	02/23/2021 21:38	WG1623774

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.000962		0.000500	1	02/23/2021 22:34	WG1624293
Toluene	0.00543		0.00500	1	02/23/2021 22:34	WG1624293
Ethylbenzene	0.00200		0.000500	1	02/23/2021 22:34	WG1624293
Total Xylene	0.0267		0.00150	1	02/23/2021 22:34	WG1624293
TPH (GC/FID) Low Fraction	0.488		0.100	1	02/23/2021 22:34	WG1624293



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	106		77.0-120		02/23/2021 22:34	WG1624293
(S) a,a,a-Trifluorotoluene(PID)	100		72.0-128		02/23/2021 22:34	WG1624293

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	02/23/2021 08:47	WG1623798
(S) o-Terphenyl	52.8		18.0-148		02/23/2021 08:47	WG1623798

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	02/23/2021 08:34	WG1623799
Acenaphthene	ND		0.00600	1	02/23/2021 08:34	WG1623799
Acenaphthylene	ND		0.00600	1	02/23/2021 08:34	WG1623799
Benzo(a)anthracene	ND		0.00600	1	02/23/2021 08:34	WG1623799
Benzo(a)pyrene	ND		0.00600	1	02/23/2021 08:34	WG1623799
Benzo(b)fluoranthene	ND		0.00600	1	02/23/2021 08:34	WG1623799
Benzo(g,h,i)perylene	ND		0.00600	1	02/23/2021 08:34	WG1623799
Benzo(k)fluoranthene	ND		0.00600	1	02/23/2021 08:34	WG1623799
Chrysene	ND		0.00600	1	02/23/2021 08:34	WG1623799
Dibenz(a,h)anthracene	ND		0.00600	1	02/23/2021 08:34	WG1623799
Fluoranthene	ND		0.00600	1	02/23/2021 08:34	WG1623799
Fluorene	ND		0.00600	1	02/23/2021 08:34	WG1623799
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	02/23/2021 08:34	WG1623799
Naphthalene	ND		0.0200	1	02/23/2021 08:34	WG1623799
Phenanthrene	ND		0.00600	1	02/23/2021 08:34	WG1623799
Pyrene	ND		0.00600	1	02/23/2021 08:34	WG1623799
1-Methylnaphthalene	ND		0.0200	1	02/23/2021 08:34	WG1623799
2-Methylnaphthalene	ND		0.0200	1	02/23/2021 08:34	WG1623799
2-Chloronaphthalene	ND		0.0200	1	02/23/2021 08:34	WG1623799
(S) p-Terphenyl-d14	65.9		23.0-120		02/23/2021 08:34	WG1623799
(S) Nitrobenzene-d5	85.4		14.0-149		02/23/2021 08:34	WG1623799
(S) 2-Fluorobiphenyl	65.3		34.0-125		02/23/2021 08:34	WG1623799

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	5.04		1	02/24/2021 19:56	WG1623985

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	21.5		1.00	1	02/24/2021 22:40	WG1623774

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	02/24/2021 22:40	WG1624036

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.80	T8	1	02/24/2021 23:02	WG1624578

Sample Narrative:

L1318199-05 WG1624578: 8.8 at 22C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	443		10.0	1	02/25/2021 19:52	WG1625949

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	02/23/2021 10:01	WG1623794

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.03		2.00	1	02/23/2021 21:40	WG1623774
Barium	120		0.500	1	02/23/2021 21:40	WG1623774
Cadmium	ND		0.500	1	02/23/2021 21:40	WG1623774
Chromium	21.5		1.00	1	02/23/2021 21:40	WG1623774
Copper	23.3		2.00	1	02/23/2021 21:40	WG1623774
Lead	11.6		0.500	1	02/23/2021 21:40	WG1623774
Nickel	20.2		2.00	1	02/23/2021 21:40	WG1623774
Selenium	ND		2.00	1	02/23/2021 21:40	WG1623774
Silver	ND		1.00	1	02/23/2021 21:40	WG1623774
Zinc	61.5		5.00	1	02/23/2021 21:40	WG1623774

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00117		0.000500	1	02/23/2021 22:56	WG1624293
Toluene	ND		0.00500	1	02/23/2021 22:56	WG1624293
Ethylbenzene	0.000516		0.000500	1	02/23/2021 22:56	WG1624293
Total Xylene	0.00162		0.00150	1	02/23/2021 22:56	WG1624293
TPH (GC/FID) Low Fraction	ND		0.100	1	02/23/2021 22:56	WG1624293

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



Volatile Organic Compounds (GC) by Method 8015/8021

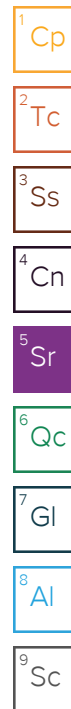
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	108		77.0-120		02/23/2021 22:56	WG1624293
(S) a,a,a-Trifluorotoluene(PID)	100		72.0-128		02/23/2021 22:56	WG1624293

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	02/23/2021 09:00	WG1623798
(S) o-Terphenyl	53.2		18.0-148		02/23/2021 09:00	WG1623798

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	02/23/2021 08:51	WG1623799
Acenaphthene	ND		0.00600	1	02/23/2021 08:51	WG1623799
Acenaphthylene	ND		0.00600	1	02/23/2021 08:51	WG1623799
Benzo(a)anthracene	ND		0.00600	1	02/23/2021 08:51	WG1623799
Benzo(a)pyrene	ND		0.00600	1	02/23/2021 08:51	WG1623799
Benzo(b)fluoranthene	ND		0.00600	1	02/23/2021 08:51	WG1623799
Benzo(g,h,i)perylene	ND		0.00600	1	02/23/2021 08:51	WG1623799
Benzo(k)fluoranthene	ND		0.00600	1	02/23/2021 08:51	WG1623799
Chrysene	ND		0.00600	1	02/23/2021 08:51	WG1623799
Dibenz(a,h)anthracene	ND		0.00600	1	02/23/2021 08:51	WG1623799
Fluoranthene	ND		0.00600	1	02/23/2021 08:51	WG1623799
Fluorene	ND		0.00600	1	02/23/2021 08:51	WG1623799
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	02/23/2021 08:51	WG1623799
Naphthalene	ND		0.0200	1	02/23/2021 08:51	WG1623799
Phenanthrene	ND		0.00600	1	02/23/2021 08:51	WG1623799
Pyrene	ND		0.00600	1	02/23/2021 08:51	WG1623799
1-Methylnaphthalene	ND		0.0200	1	02/23/2021 08:51	WG1623799
2-Methylnaphthalene	ND		0.0200	1	02/23/2021 08:51	WG1623799
2-Chloronaphthalene	ND		0.0200	1	02/23/2021 08:51	WG1623799
(S) p-Terphenyl-d14	68.1		23.0-120		02/23/2021 08:51	WG1623799
(S) Nitrobenzene-d5	92.0		14.0-149		02/23/2021 08:51	WG1623799
(S) 2-Fluorobiphenyl	69.2		34.0-125		02/23/2021 08:51	WG1623799



Method Blank (MB)

(MB) R3624843-1 02/24/21 22:38

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Chromium,Hexavalent	U		0.640	2.00

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L1318199-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1318199-01 02/24/21 22:39 • (DUP) R3624843-3 02/24/21 22:39

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

L1319129-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1319129-02 02/24/21 22:48 • (DUP) R3624843-8 02/24/21 22:48

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

Laboratory Control Sample (LCS)

(LCS) R3624843-2 02/24/21 22:38

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chromium,Hexavalent	24.0	24.0	100	80.0-120	

L1318843-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1318843-01 02/24/21 22:44 • (MS) R3624843-4 02/24/21 22:45 • (MSD) R3624843-5 02/24/21 22:45

	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	%	%		%			%	%
Chromium,Hexavalent	20.0	ND	17.3	17.5	86.4	87.4	1	75.0-125			1.15	20

L1318843-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1318843-01 02/24/21 22:44 • (MS) R3624843-6 02/24/21 22:46

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/kg	mg/kg	mg/kg	%		%	
Chromium,Hexavalent	656	ND	584	89.0	50	75.0-125	

L1318447-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1318447-01 02/24/21 01:38 • (DUP) R3624477-4 02/24/21 01:38

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	6.71	6.73	1	0.298		1

Sample Narrative:
OS: 6.71 at 19.7C
DUP: 6.73 at 19.5C

Laboratory Control Sample (LCS)

(LCS) R3624477-1 02/24/21 01:38

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

Sample Narrative:
LCS: 10.04 at 18.9C

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1318097-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1318097-01 02/24/21 23:02 • (DUP) R3624846-2 02/24/21 23:02

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.29	7.25	1	0.550		1

Sample Narrative:
OS: 7.29 at 21.6C
DUP: 7.25 at 21.5C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1318622-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1318622-04 02/24/21 23:02 • (DUP) R3624846-3 02/24/21 23:02

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.52	8.56	1	0.468		1

Sample Narrative:
OS: 8.52 at 21.5C
DUP: 8.56 at 21.8C

Laboratory Control Sample (LCS)

(LCS) R3624846-1 02/24/21 23:02

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

Sample Narrative:
LCS: 10.03 at 21.3C

Method Blank (MB)

(MB) R3625267-1 02/25/21 19:52

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

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L1318199-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1318199-02 02/25/21 19:52 • (DUP) R3625267-3 02/25/21 19:52

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	342	348	1	1.74		20

Laboratory Control Sample (LCS)

(LCS) R3625267-2 02/25/21 19:52

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	umhos/cm	umhos/cm	%	%	
Specific Conductance	483	482	99.8	85.0-115	

Method Blank (MB)

(MB) R3624209-1 02/23/21 08:55				
	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3624209-2 02/23/21 08:58					
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	mg/kg	mg/kg	%	%	
Mercury	0.500	0.514	103	80.0-120	

L1318004-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1318004-01 02/23/21 09:00 • (MS) R3624209-3 02/23/21 09:03 • (MSD) R3624209-4 02/23/21 09:05												
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Mercury	0.500	ND	0.466	0.445	93.1	88.9	1	75.0-125			4.63	20

1

Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

8

Al

9

Sc



Method Blank (MB)

(MB) R3624242-1 02/23/21 08:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Chromium	U		0.133	1.00
Copper	0.536	J	0.400	2.00
Lead	U		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

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3624242-2 02/23/21 08:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	98.3	98.3	80.0-120	
Barium	100	104	104	80.0-120	
Cadmium	100	98.6	98.6	80.0-120	
Chromium	100	99.8	99.8	80.0-120	
Copper	100	102	102	80.0-120	
Lead	100	98.2	98.2	80.0-120	
Nickel	100	99.5	99.5	80.0-120	
Selenium	100	101	101	80.0-120	
Silver	20.0	19.9	99.4	80.0-120	
Zinc	100	97.9	97.9	80.0-120	

L1318176-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1318176-01 02/23/21 08:18 • (MS) R3624242-4 02/23/21 08:23 • (MSD) R3624242-5 02/23/21 08:26

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	ND	94.4	95.0	92.9	93.6	1	75.0-125			0.646	20
Barium	100	66.1	163	156	96.9	89.7	1	75.0-125			4.47	20
Cadmium	100	ND	93.9	94.0	93.7	93.9	1	75.0-125			0.139	20
Chromium	100	5.02	98.7	99.4	93.7	94.4	1	75.0-125			0.706	20
Copper	100	6.35	110	108	103	102	1	75.0-125			1.55	20
Lead	100	63.6	197	187	133	123	1	75.0-125	J5		5.13	20
Nickel	100	3.59	98.5	99.4	94.9	95.8	1	75.0-125			0.921	20



L1318176-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1318176-01 02/23/21 08:18 • (MS) R3624242-4 02/23/21 08:23 • (MSD) R3624242-5 02/23/21 08:26

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Selenium	100	ND	95.1	95.8	95.1	95.8	1	75.0-125			0.805	20
Silver	20.0	ND	19.4	19.1	97.0	95.5	1	75.0-125			1.62	20
Zinc	100	27.7	118	121	90.7	93.2	1	75.0-125			2.04	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3624467-1 02/23/21 20:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Chromium	U		0.133	1.00
Copper	U		0.400	2.00
Lead	U		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

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3624467-2 02/23/21 20:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	97.4	97.4	80.0-120	
Barium	100	106	106	80.0-120	
Cadmium	100	101	101	80.0-120	
Chromium	100	105	105	80.0-120	
Copper	100	103	103	80.0-120	
Lead	100	102	102	80.0-120	
Nickel	100	103	103	80.0-120	
Selenium	100	99.3	99.3	80.0-120	
Silver	20.0	20.6	103	80.0-120	
Zinc	100	104	104	80.0-120	

L1317960-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1317960-19 02/23/21 20:47 • (MS) R3624467-5 02/23/21 20:55 • (MSD) R3624467-6 02/23/21 20:57

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	2.49	90.3	88.1	87.8	85.7	1	75.0-125			2.40	20
Barium	100	102	199	236	97.2	134	1	75.0-125	J5		16.8	20
Cadmium	100	ND	92.1	89.0	92.0	88.9	1	75.0-125			3.37	20
Chromium	100	12.0	105	103	93.4	90.6	1	75.0-125			2.72	20
Copper	100	12.0	110	107	98.1	94.5	1	75.0-125			3.31	20
Lead	100	9.72	108	105	97.9	95.1	1	75.0-125			2.65	20
Nickel	100	9.72	108	106	97.8	95.9	1	75.0-125			1.76	20



[L1318199-02.03.04.05](#)

L1317960-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1317960-19 02/23/21 20:47 • (MS) R3624467-5 02/23/21 20:55 • (MSD) R3624467-6 02/23/21 20:57

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Selenium	100	ND	89.5	86.5	89.5	86.5	1	75.0-125			3.42	20
Silver	20.0	ND	18.8	18.1	94.0	90.6	1	75.0-125			3.71	20
Zinc	100	30.4	122	120	91.3	89.4	1	75.0-125			1.62	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3624254-3 02/22/21 22:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	U		0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	106			72.0-128

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Cp

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Tc

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Ss

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Cn

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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) R3624254-1 02/22/21 21:25

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0519	104	76.0-121	
Toluene	0.0500	0.0495	99.0	80.0-120	
Ethylbenzene	0.0500	0.0488	97.6	80.0-124	
Total Xylene	0.150	0.152	101	37.0-160	
(S) a,a,a-Trifluorotoluene(FID)			115	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			107	72.0-128	

Laboratory Control Sample (LCS)

(LCS) R3624254-2 02/22/21 21:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.58	101	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			103	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			109	72.0-128	

Method Blank (MB)

(MB) R3624560-3 02/23/21 17:03

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	U		0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	0.0269	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	105			72.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3624560-1 02/23/21 15:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0537	107	76.0-121	
Toluene	0.0500	0.0505	101	80.0-120	
Ethylbenzene	0.0500	0.0503	101	80.0-124	
Total Xylene	0.150	0.156	104	37.0-160	
(S) a,a,a-Trifluorotoluene(FID)			113	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			104	72.0-128	

Laboratory Control Sample (LCS)

(LCS) R3624560-2 02/23/21 16:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.33	115	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			111	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			115	72.0-128	



Method Blank (MB)

(MB) R3624317-1 02/23/21 07:39

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	63.5			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3624317-2 02/23/21 07:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	33.1	66.2	50.0-150	
(S) o-Terphenyl			83.3	18.0-148	

L1318028-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1318028-03 02/23/21 16:10 • (MS) R3624317-3 02/23/21 16:23 • (MSD) R3624317-4 02/23/21 16:37

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) High Fraction	48.0	ND	34.4	41.9	68.2	83.3	1	50.0-150			19.7	20
(S) o-Terphenyl					85.6	93.8		18.0-148				

1
Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

Method Blank (MB)

(MB) R3624373-2 02/23/21 07:25

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	0.00687	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	0.0106	U	0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	104			14.0-149
(S) 2-Fluorobiphenyl	78.9			34.0-125
(S) p-Terphenyl-d14	83.3			23.0-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3624373-1 02/23/21 07:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0680	85.0	50.0-126	
Acenaphthene	0.0800	0.0617	77.1	50.0-120	
Acenaphthylene	0.0800	0.0726	90.8	50.0-120	
Benzo(a)anthracene	0.0800	0.0709	88.6	45.0-120	
Benzo(a)pyrene	0.0800	0.0545	68.1	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0529	66.1	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0563	70.4	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0533	66.6	49.0-125	
Chrysene	0.0800	0.0595	74.4	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0680	85.0	47.0-125	
Fluoranthene	0.0800	0.0666	83.3	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3624373-1 02/23/21 07:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0687	85.9	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0717	89.6	46.0-125	
Naphthalene	0.0800	0.0618	77.3	50.0-120	
Phenanthrene	0.0800	0.0607	75.9	47.0-120	
Pyrene	0.0800	0.0547	68.4	43.0-123	
1-Methylnaphthalene	0.0800	0.0638	79.8	51.0-121	
2-Methylnaphthalene	0.0800	0.0621	77.6	50.0-120	
2-Chloronaphthalene	0.0800	0.0599	74.9	50.0-120	
(S) Nitrobenzene-d5			99.4	14.0-149	
(S) 2-Fluorobiphenyl			77.0	34.0-125	
(S) p-Terphenyl-d14			79.0	23.0-120	

L1317904-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1317904-01 02/23/21 12:38 • (MS) R3624373-3 02/23/21 12:55 • (MSD) R3624373-4 02/23/21 13:12

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 %
Anthracene	0.0764	0.0636	0.103	0.112	51.6	62.7	1	10.0-145			8.37	30
Acenaphthene	0.0764	0.0163	0.0667	0.0696	66.0	69.0	1	14.0-127			4.26	27
Acenaphthylene	0.0764	0.0340	0.0780	0.0835	57.6	64.1	1	21.0-124			6.81	25
Benzo(a)anthracene	0.0764	0.148	0.164	0.181	20.9	42.7	1	10.0-139			9.86	30
Benzo(a)pyrene	0.0764	0.105	0.120	0.136	19.6	40.2	1	10.0-141			12.5	31
Benzo(b)fluoranthene	0.0764	0.499	0.425	0.494	0.000	0.000	1	10.0-140	V	V	15.0	36
Benzo(g,h,i)perylene	0.0764	0.173	0.174	0.196	1.31	29.8	1	10.0-140	J6		11.9	33
Benzo(k)fluoranthene	0.0764	0.110	0.150	0.175	52.4	84.2	1	10.0-137			15.4	31
Chrysene	0.0764	0.378	0.465	0.535	114	203	1	10.0-145		V	14.0	30
Dibenz(a,h)anthracene	0.0764	ND	0.0830	0.0985	109	128	1	10.0-132			17.1	31
Fluoranthene	0.0764	0.662	0.577	0.652	0.000	0.000	1	10.0-153	V	V	12.2	33
Fluorene	0.0764	0.0312	0.0982	0.103	87.7	93.0	1	11.0-130			4.77	29
Indeno(1,2,3-cd)pyrene	0.0764	0.189	0.205	0.232	20.9	55.7	1	10.0-137			12.4	32
Naphthalene	0.0764	ND	0.0713	0.0759	70.5	75.8	1	10.0-135			6.25	27
Phenanthrene	0.0764	0.175	0.188	0.205	17.0	38.9	1	10.0-144			8.65	31
Pyrene	0.0764	0.299	0.255	0.279	0.000	0.000	1	10.0-148	J6	J6	8.99	35
1-Methylnaphthalene	0.0764	0.0219	0.0777	0.0813	73.0	76.9	1	10.0-142			4.53	28
2-Methylnaphthalene	0.0764	0.0294	0.0823	0.0862	69.2	73.6	1	10.0-137			4.63	28
2-Chloronaphthalene	0.0764	ND	0.0490	0.0519	64.1	67.2	1	29.0-120			5.75	24
(S) Nitrobenzene-d5					87.4	91.1		14.0-149				
(S) 2-Fluorobiphenyl					67.3	69.2		34.0-125				
(S) p-Terphenyl-d14					74.1	75.5		23.0-120				

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Tc

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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.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* 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 National.

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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	LAO00356
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
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Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
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A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
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Alabama	40160
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California	2961	Oregon	CA300002
Minnesota	006-999-465	Washington	C926
North Dakota	R-214		

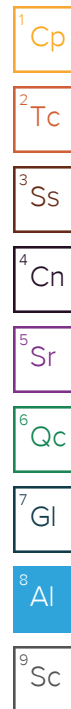
Pace Analytical National 6000 South Eastern Avenue Ste 9A Las Vegas, NV, 89119

Nevada	NV009412021-1
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Pace Analytical National 1606 E. Brazos Street Suite D Victoria, TX, 77901

Texas	T104704328-20-18
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¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable



[illegible]

March 15, 2021

Entrada Consulting Group

Sample Delivery Group: L1323167
Samples Received: 03/04/2021
Project Number:
Description: North Vega 5A

Report To: Stuart Hall
240 Mesa Avenue
Grand Junction, CO 81501

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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 www.pacenational.com

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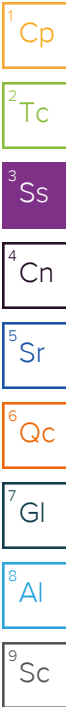
¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
⁹ Sc

SAMPLE SUMMARY

NV5A-CONT E (2.5') L1323167-01 Solid

Collected by Jason McLarty
Collected date/time 03/03/21 09:03
Received date/time 03/04/21 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1629866	1	03/08/21 19:04	03/08/21 19:04	EL	Mt. Juliet, TN
Calculated Results	WG1629679	1	03/04/21 21:31	03/09/21 21:32	ARD	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1630482	1	03/07/21 16:21	03/09/21 21:32	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1631074	1	03/09/21 01:09	03/09/21 08:35	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1629821	1	03/05/21 05:30	03/05/21 14:49	SRG	Mt. Juliet, TN
Mercury by Method 7471A	WG1629931	1	03/05/21 08:33	03/08/21 05:48	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1629679	1	03/04/21 21:31	03/05/21 09:48	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1631384	1	03/05/21 16:32	03/09/21 10:05	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1631178	1	03/10/21 07:28	03/10/21 17:09	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1631188	1	03/09/21 04:46	03/09/21 14:52	LEA	Mt. Juliet, TN



NV5A-E WALL MID (2') L1323167-02 Solid

Collected by Jason McLarty
Collected date/time 03/03/21 10:00
Received date/time 03/04/21 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1629866	1	03/08/21 19:06	03/08/21 19:06	EL	Mt. Juliet, TN
Calculated Results	WG1629679	1	03/04/21 21:31	03/09/21 21:32	ARD	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1630482	1	03/07/21 16:21	03/09/21 21:32	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1631074	1	03/09/21 01:09	03/09/21 08:35	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1629821	1	03/05/21 05:30	03/05/21 14:49	SRG	Mt. Juliet, TN
Mercury by Method 7471A	WG1629931	1	03/05/21 08:33	03/08/21 05:56	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1629679	1	03/04/21 21:31	03/05/21 09:50	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1631384	1	03/05/21 16:32	03/09/21 10:27	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1631178	1	03/10/21 07:28	03/10/21 17:36	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1631188	1	03/09/21 04:46	03/09/21 15:10	LEA	Mt. Juliet, TN

NV5A-BOT S (2') L1323167-03 Solid

Collected by Jason McLarty
Collected date/time 03/03/21 10:30
Received date/time 03/04/21 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1629866	1	03/08/21 19:09	03/08/21 19:09	EL	Mt. Juliet, TN
Calculated Results	WG1629679	1	03/04/21 21:31	03/09/21 21:33	ARD	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1630482	1	03/07/21 16:21	03/09/21 21:33	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1631074	1	03/09/21 01:09	03/09/21 08:35	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1629821	1	03/05/21 05:30	03/05/21 14:49	SRG	Mt. Juliet, TN
Mercury by Method 7471A	WG1629931	1	03/05/21 08:33	03/08/21 05:58	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1629679	1	03/04/21 21:31	03/05/21 09:53	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1631384	1	03/05/21 16:32	03/09/21 10:49	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1631178	1	03/10/21 07:28	03/10/21 17:23	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1631188	1	03/09/21 04:46	03/09/21 15:27	LEA	Mt. Juliet, TN

NV5A-W WALL S (2') L1323167-04 Solid

Collected by Jason McLarty
Collected date/time 03/03/21 11:00
Received date/time 03/04/21 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1629866	1	03/08/21 19:17	03/08/21 19:17	EL	Mt. Juliet, TN
Calculated Results	WG1629679	1	03/04/21 21:31	03/09/21 21:33	ARD	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1630482	1	03/07/21 16:21	03/09/21 21:33	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1631074	1	03/09/21 01:09	03/09/21 08:35	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1629821	1	03/05/21 05:30	03/05/21 14:49	SRG	Mt. Juliet, TN
Mercury by Method 7471A	WG1629931	1	03/05/21 08:33	03/08/21 06:00	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1629679	1	03/04/21 21:31	03/05/21 09:56	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1631384	1	03/05/21 16:32	03/09/21 11:11	DWR	Mt. Juliet, TN

SAMPLE SUMMARY

NV5A-W WALL S (2') L1323167-04 Solid

Collected by
Jason McLarty

Collected date/time
03/03/21 11:00

Received date/time
03/04/21 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1631178	1	03/10/21 07:28	03/10/21 16:28	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1631553	1	03/09/21 11:14	03/09/21 20:02	LEA	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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	3.16		1	03/08/2021 19:04	WG1629866

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	23.3		1.00	1	03/09/2021 21:32	WG1629679

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/09/2021 21:32	WG1630482

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.80	T8	1	03/09/2021 08:35	WG1631074

Sample Narrative:

L1323167-01 WG1631074: 8.8 at 20.4C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	388		10.0	1	03/05/2021 14:49	WG1629821

Mercury by Method 7471A

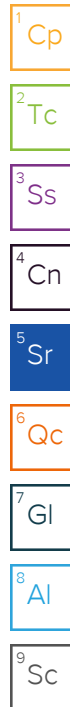
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/08/2021 05:48	WG1629931

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/05/2021 09:48	WG1629679
Barium	142		0.500	1	03/05/2021 09:48	WG1629679
Cadmium	ND		0.500	1	03/05/2021 09:48	WG1629679
Chromium	23.3		1.00	1	03/05/2021 09:48	WG1629679
Copper	24.4		2.00	1	03/05/2021 09:48	WG1629679
Lead	12.5		0.500	1	03/05/2021 09:48	WG1629679
Nickel	22.0		2.00	1	03/05/2021 09:48	WG1629679
Selenium	ND		2.00	1	03/05/2021 09:48	WG1629679
Silver	ND		1.00	1	03/05/2021 09:48	WG1629679
Zinc	77.5		5.00	1	03/05/2021 09:48	WG1629679

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.000500	1	03/09/2021 10:05	WG1631384
Toluene	ND		0.00500	1	03/09/2021 10:05	WG1631384
Ethylbenzene	ND		0.000500	1	03/09/2021 10:05	WG1631384
Total Xylene	ND		0.00150	1	03/09/2021 10:05	WG1631384
TPH (GC/FID) Low Fraction	ND		0.100	1	03/09/2021 10:05	WG1631384



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	110		77.0-120		03/09/2021 10:05	WG1631384
(S) a,a,a-Trifluorotoluene(PID)	102		72.0-128		03/09/2021 10:05	WG1631384

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	03/10/2021 17:09	WG1631178
(S) o-Terphenyl	59.5		18.0-148		03/10/2021 17:09	WG1631178

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/09/2021 14:52	WG1631188
Acenaphthene	ND		0.00600	1	03/09/2021 14:52	WG1631188
Acenaphthylene	ND		0.00600	1	03/09/2021 14:52	WG1631188
Benzo(a)anthracene	ND		0.00600	1	03/09/2021 14:52	WG1631188
Benzo(a)pyrene	ND		0.00600	1	03/09/2021 14:52	WG1631188
Benzo(b)fluoranthene	ND		0.00600	1	03/09/2021 14:52	WG1631188
Benzo(g,h,i)perylene	ND		0.00600	1	03/09/2021 14:52	WG1631188
Benzo(k)fluoranthene	ND		0.00600	1	03/09/2021 14:52	WG1631188
Chrysene	ND		0.00600	1	03/09/2021 14:52	WG1631188
Dibenz(a,h)anthracene	ND		0.00600	1	03/09/2021 14:52	WG1631188
Fluoranthene	ND		0.00600	1	03/09/2021 14:52	WG1631188
Fluorene	ND		0.00600	1	03/09/2021 14:52	WG1631188
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/09/2021 14:52	WG1631188
Naphthalene	ND		0.0200	1	03/09/2021 14:52	WG1631188
Phenanthrene	ND		0.00600	1	03/09/2021 14:52	WG1631188
Pyrene	ND		0.00600	1	03/09/2021 14:52	WG1631188
1-Methylnaphthalene	ND		0.0200	1	03/09/2021 14:52	WG1631188
2-Methylnaphthalene	ND		0.0200	1	03/09/2021 14:52	WG1631188
2-Chloronaphthalene	ND		0.0200	1	03/09/2021 14:52	WG1631188
(S) p-Terphenyl-d14	83.0		23.0-120		03/09/2021 14:52	WG1631188
(S) Nitrobenzene-d5	77.4		14.0-149		03/09/2021 14:52	WG1631188
(S) 2-Fluorobiphenyl	66.5		34.0-125		03/09/2021 14:52	WG1631188

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	2.19		1	03/08/2021 19:06	WG1629866

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	13.3		1.00	1	03/09/2021 21:32	WG1629679

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/09/2021 21:32	WG1630482

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.79	T8	1	03/09/2021 08:35	WG1631074

Sample Narrative:

L1323167-02 WG1631074: 8.79 at 20.2C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	200		10.0	1	03/05/2021 14:49	WG1629821

Mercury by Method 7471A

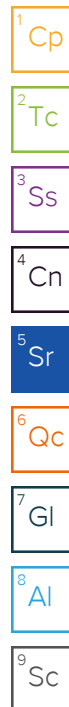
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/08/2021 05:56	WG1629931

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/05/2021 09:50	WG1629679
Barium	81.1		0.500	1	03/05/2021 09:50	WG1629679
Cadmium	ND		0.500	1	03/05/2021 09:50	WG1629679
Chromium	13.3		1.00	1	03/05/2021 09:50	WG1629679
Copper	16.4		2.00	1	03/05/2021 09:50	WG1629679
Lead	6.73		0.500	1	03/05/2021 09:50	WG1629679
Nickel	14.7		2.00	1	03/05/2021 09:50	WG1629679
Selenium	ND		2.00	1	03/05/2021 09:50	WG1629679
Silver	ND		1.00	1	03/05/2021 09:50	WG1629679
Zinc	45.2		5.00	1	03/05/2021 09:50	WG1629679

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00115		0.000500	1	03/09/2021 10:27	WG1631384
Toluene	ND		0.00500	1	03/09/2021 10:27	WG1631384
Ethylbenzene	ND		0.000500	1	03/09/2021 10:27	WG1631384
Total Xylene	0.00469		0.00150	1	03/09/2021 10:27	WG1631384
TPH (GC/FID) Low Fraction	0.101		0.100	1	03/09/2021 10:27	WG1631384



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	109		77.0-120		03/09/2021 10:27	WG1631384
(S) a,a,a-Trifluorotoluene(PID)	100		72.0-128		03/09/2021 10:27	WG1631384

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	15.1		4.00	1	03/10/2021 17:36	WG1631178
(S) o-Terphenyl	76.6		18.0-148		03/10/2021 17:36	WG1631178

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/09/2021 15:10	WG1631188
Acenaphthene	ND		0.00600	1	03/09/2021 15:10	WG1631188
Acenaphthylene	ND		0.00600	1	03/09/2021 15:10	WG1631188
Benzo(a)anthracene	ND		0.00600	1	03/09/2021 15:10	WG1631188
Benzo(a)pyrene	ND		0.00600	1	03/09/2021 15:10	WG1631188
Benzo(b)fluoranthene	ND		0.00600	1	03/09/2021 15:10	WG1631188
Benzo(g,h,i)perylene	ND		0.00600	1	03/09/2021 15:10	WG1631188
Benzo(k)fluoranthene	ND		0.00600	1	03/09/2021 15:10	WG1631188
Chrysene	ND		0.00600	1	03/09/2021 15:10	WG1631188
Dibenz(a,h)anthracene	ND		0.00600	1	03/09/2021 15:10	WG1631188
Fluoranthene	ND		0.00600	1	03/09/2021 15:10	WG1631188
Fluorene	ND		0.00600	1	03/09/2021 15:10	WG1631188
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/09/2021 15:10	WG1631188
Naphthalene	ND		0.0200	1	03/09/2021 15:10	WG1631188
Phenanthrene	ND		0.00600	1	03/09/2021 15:10	WG1631188
Pyrene	ND		0.00600	1	03/09/2021 15:10	WG1631188
1-Methylnaphthalene	ND		0.0200	1	03/09/2021 15:10	WG1631188
2-Methylnaphthalene	ND		0.0200	1	03/09/2021 15:10	WG1631188
2-Chloronaphthalene	ND		0.0200	1	03/09/2021 15:10	WG1631188
(S) p-Terphenyl-d14	94.0		23.0-120		03/09/2021 15:10	WG1631188
(S) Nitrobenzene-d5	90.9		14.0-149		03/09/2021 15:10	WG1631188
(S) 2-Fluorobiphenyl	75.9		34.0-125		03/09/2021 15:10	WG1631188

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	1.53		1	03/08/2021 19:09	WG1629866

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	15.2		1.00	1	03/09/2021 21:33	WG1629679

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/09/2021 21:33	WG1630482

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.71	T8	1	03/09/2021 08:35	WG1631074

Sample Narrative:

L1323167-03 WG1631074: 8.71 at 20C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	236		10.0	1	03/05/2021 14:49	WG1629821

Mercury by Method 7471A

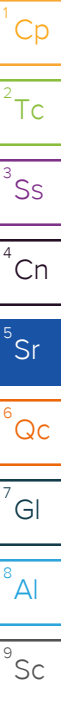
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/08/2021 05:58	WG1629931

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/05/2021 09:53	WG1629679
Barium	163		0.500	1	03/05/2021 09:53	WG1629679
Cadmium	ND		0.500	1	03/05/2021 09:53	WG1629679
Chromium	15.2		1.00	1	03/05/2021 09:53	WG1629679
Copper	18.1		2.00	1	03/05/2021 09:53	WG1629679
Lead	10.5		0.500	1	03/05/2021 09:53	WG1629679
Nickel	18.2		2.00	1	03/05/2021 09:53	WG1629679
Selenium	ND		2.00	1	03/05/2021 09:53	WG1629679
Silver	ND		1.00	1	03/05/2021 09:53	WG1629679
Zinc	54.7		5.00	1	03/05/2021 09:53	WG1629679

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00158		0.000500	1	03/09/2021 10:49	WG1631384
Toluene	ND		0.00500	1	03/09/2021 10:49	WG1631384
Ethylbenzene	0.00102		0.000500	1	03/09/2021 10:49	WG1631384
Total Xylene	0.0614		0.00150	1	03/09/2021 10:49	WG1631384
TPH (GC/FID) Low Fraction	0.470		0.100	1	03/09/2021 10:49	WG1631384



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	108		77.0-120		03/09/2021 10:49	WG1631384
(S) a,a,a-Trifluorotoluene(PID)	100		72.0-128		03/09/2021 10:49	WG1631384

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	6.92		4.00	1	03/10/2021 17:23	WG1631178
(S) o-Terphenyl	74.4		18.0-148		03/10/2021 17:23	WG1631178

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/09/2021 15:27	WG1631188
Acenaphthene	ND		0.00600	1	03/09/2021 15:27	WG1631188
Acenaphthylene	ND		0.00600	1	03/09/2021 15:27	WG1631188
Benzo(a)anthracene	ND		0.00600	1	03/09/2021 15:27	WG1631188
Benzo(a)pyrene	ND		0.00600	1	03/09/2021 15:27	WG1631188
Benzo(b)fluoranthene	ND		0.00600	1	03/09/2021 15:27	WG1631188
Benzo(g,h,i)perylene	ND		0.00600	1	03/09/2021 15:27	WG1631188
Benzo(k)fluoranthene	ND		0.00600	1	03/09/2021 15:27	WG1631188
Chrysene	ND		0.00600	1	03/09/2021 15:27	WG1631188
Dibenz(a,h)anthracene	ND		0.00600	1	03/09/2021 15:27	WG1631188
Fluoranthene	ND		0.00600	1	03/09/2021 15:27	WG1631188
Fluorene	ND		0.00600	1	03/09/2021 15:27	WG1631188
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/09/2021 15:27	WG1631188
Naphthalene	ND		0.0200	1	03/09/2021 15:27	WG1631188
Phenanthrene	ND		0.00600	1	03/09/2021 15:27	WG1631188
Pyrene	ND		0.00600	1	03/09/2021 15:27	WG1631188
1-Methylnaphthalene	ND		0.0200	1	03/09/2021 15:27	WG1631188
2-Methylnaphthalene	ND		0.0200	1	03/09/2021 15:27	WG1631188
2-Chloronaphthalene	ND		0.0200	1	03/09/2021 15:27	WG1631188
(S) p-Terphenyl-d14	85.3		23.0-120		03/09/2021 15:27	WG1631188
(S) Nitrobenzene-d5	82.6		14.0-149		03/09/2021 15:27	WG1631188
(S) 2-Fluorobiphenyl	69.2		34.0-125		03/09/2021 15:27	WG1631188

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	2.95		1	03/08/2021 19:17	WG1629866

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	18.1		1.00	1	03/09/2021 21:33	WG1629679

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/09/2021 21:33	WG1630482

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	9.07	T8	1	03/09/2021 08:35	WG1631074

Sample Narrative:

L1323167-04 WG1631074: 9.07 at 19.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	291		10.0	1	03/05/2021 14:49	WG1629821

Mercury by Method 7471A

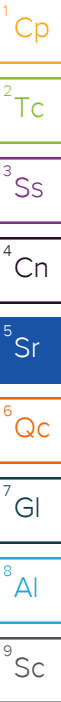
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/08/2021 06:00	WG1629931

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/05/2021 09:56	WG1629679
Barium	101		0.500	1	03/05/2021 09:56	WG1629679
Cadmium	ND		0.500	1	03/05/2021 09:56	WG1629679
Chromium	18.1		1.00	1	03/05/2021 09:56	WG1629679
Copper	22.9		2.00	1	03/05/2021 09:56	WG1629679
Lead	10.7		0.500	1	03/05/2021 09:56	WG1629679
Nickel	18.3		2.00	1	03/05/2021 09:56	WG1629679
Selenium	ND		2.00	1	03/05/2021 09:56	WG1629679
Silver	ND		1.00	1	03/05/2021 09:56	WG1629679
Zinc	58.5		5.00	1	03/05/2021 09:56	WG1629679

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00164		0.000500	1	03/09/2021 11:11	WG1631384
Toluene	ND		0.00500	1	03/09/2021 11:11	WG1631384
Ethylbenzene	0.000654		0.000500	1	03/09/2021 11:11	WG1631384
Total Xylene	0.00792		0.00150	1	03/09/2021 11:11	WG1631384
TPH (GC/FID) Low Fraction	0.125		0.100	1	03/09/2021 11:11	WG1631384



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	109		77.0-120		03/09/2021 11:11	WG1631384
(S) a,a,a-Trifluorotoluene(PID)	101		72.0-128		03/09/2021 11:11	WG1631384

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	03/10/2021 16:28	WG1631178
(S) o-Terphenyl	68.0		18.0-148		03/10/2021 16:28	WG1631178

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/09/2021 20:02	WG1631553
Acenaphthene	ND		0.00600	1	03/09/2021 20:02	WG1631553
Acenaphthylene	ND		0.00600	1	03/09/2021 20:02	WG1631553
Benzo(a)anthracene	ND		0.00600	1	03/09/2021 20:02	WG1631553
Benzo(a)pyrene	ND		0.00600	1	03/09/2021 20:02	WG1631553
Benzo(b)fluoranthene	ND		0.00600	1	03/09/2021 20:02	WG1631553
Benzo(g,h,i)perylene	ND		0.00600	1	03/09/2021 20:02	WG1631553
Benzo(k)fluoranthene	ND		0.00600	1	03/09/2021 20:02	WG1631553
Chrysene	ND		0.00600	1	03/09/2021 20:02	WG1631553
Dibenz(a,h)anthracene	ND		0.00600	1	03/09/2021 20:02	WG1631553
Fluoranthene	ND		0.00600	1	03/09/2021 20:02	WG1631553
Fluorene	ND		0.00600	1	03/09/2021 20:02	WG1631553
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/09/2021 20:02	WG1631553
Naphthalene	ND		0.0200	1	03/09/2021 20:02	WG1631553
Phenanthrene	ND		0.00600	1	03/09/2021 20:02	WG1631553
Pyrene	ND		0.00600	1	03/09/2021 20:02	WG1631553
1-Methylnaphthalene	ND		0.0200	1	03/09/2021 20:02	WG1631553
2-Methylnaphthalene	ND		0.0200	1	03/09/2021 20:02	WG1631553
2-Chloronaphthalene	ND		0.0200	1	03/09/2021 20:02	WG1631553
(S) p-Terphenyl-d14	83.0		23.0-120		03/09/2021 20:02	WG1631553
(S) Nitrobenzene-d5	50.4		14.0-149		03/09/2021 20:02	WG1631553
(S) 2-Fluorobiphenyl	65.3		34.0-125		03/09/2021 20:02	WG1631553

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3629569-1 03/09/21 21:23

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Chromium,Hexavalent	U		0.640	2.00

L1322919-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1322919-03 03/09/21 21:24 • (DUP) R3629569-3 03/09/21 21:25

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

L1323167-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1323167-02 03/09/21 21:32 • (DUP) R3629569-4 03/09/21 21:32

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

Laboratory Control Sample (LCS)

(LCS) R3629569-2 03/09/21 21:24

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chromium,Hexavalent	24.0	23.2	96.8	80.0-120	

L1323542-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1323542-04 03/09/21 21:34 • (MS) R3629569-5 03/09/21 21:34 • (MSD) R3629569-6 03/09/21 21:34

	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	%	%		%			%	%
Chromium,Hexavalent	20.0	ND	16.2	15.7	80.9	78.5	1	75.0-125			3.04	20

L1323542-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1323542-04 03/09/21 21:34 • (MS) R3629569-7 03/09/21 21:36

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/kg	mg/kg	mg/kg	%		%	
Chromium,Hexavalent	6860	ND	650	9.48	50	75.0-125	J6

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1323491-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1323491-01 03/09/21 08:35 • (DUP) R3628620-2 03/09/21 08:35

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	7.45	7.43	1	0.269		1

Sample Narrative:

OS: 7.45 at 19.8C

DUP: 7.43 at 19.2C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1324115-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1324115-02 03/09/21 08:35 • (DUP) R3628620-3 03/09/21 08:35

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	9.93	9.89	1	0.404		1

Sample Narrative:

OS: 9.93 at 19.5C

DUP: 9.89 at 19.6C

Laboratory Control Sample (LCS)

(LCS) R3628620-1 03/09/21 08:35

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

Sample Narrative:

LCS: 10.04 at 22.1C

Method Blank (MB)

(MB) R3627835-1 03/05/21 14:49

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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1322963-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1322963-01 03/05/21 14:49 • (DUP) R3627835-3 03/05/21 14:49

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	5140	4510	1	13.1		20

L1322985-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1322985-01 03/05/21 14:49 • (DUP) R3627835-4 03/05/21 14:49

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	2820	2720	1	3.79		20

Laboratory Control Sample (LCS)

(LCS) R3627835-2 03/05/21 14:49

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	385	383	99.5	85.0-115	

Method Blank (MB)

(MB) R3628210-1 03/08/21 05:01

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3628210-2 03/08/21 05:07

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Mercury	0.500	0.506	101	80.0-120	

L1322474-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1322474-09 03/08/21 05:09 • (MS) R3628210-3 03/08/21 05:11 • (MSD) R3628210-4 03/08/21 05:13

	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	%	%		%			%	%
Mercury	0.500	0.957	1.10	1.42	29.3	93.2	1	75.0-125	J6	J3	25.3	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3627782-1 03/05/21 08:37

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Chromium	U		0.133	1.00
Copper	U		0.400	2.00
Lead	U		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) R3627782-2 03/05/21 08:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	98.4	98.4	80.0-120	
Barium	100	105	105	80.0-120	
Cadmium	100	99.1	99.1	80.0-120	
Chromium	100	100	100	80.0-120	
Copper	100	100	100	80.0-120	
Lead	100	100	100	80.0-120	
Nickel	100	103	103	80.0-120	
Selenium	100	101	101	80.0-120	
Silver	20.0	19.8	99.2	80.0-120	
Zinc	100	101	101	80.0-120	

L1322921-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1322921-01 03/05/21 08:42 • (MS) R3627782-5 03/05/21 08:50 • (MSD) R3627782-6 03/05/21 08:53

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	99.7	4.73	91.9	98.7	87.2	94.0	1	75.0-125			7.09	20
Barium	99.7	168	261	281	93.4	114	1	75.0-125			7.45	20
Cadmium	99.7	ND	90.5	93.9	90.3	93.7	1	75.0-125			3.76	20
Chromium	99.7	14.4	101	107	86.6	92.7	1	75.0-125			5.84	20
Copper	99.7	12.8	107	111	93.7	98.3	1	75.0-125			4.17	20
Lead	99.7	7.37	97.5	106	90.2	98.9	1	75.0-125			8.58	20
Nickel	99.7	17.6	112	122	94.2	104	1	75.0-125			8.62	20

L1322921-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1322921-01 03/05/21 08:42 • (MS) R3627782-5 03/05/21 08:50 • (MSD) R3627782-6 03/05/21 08:53

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 %
Selenium	99.7	ND	89.0	93.5	88.1	92.6	1	75.0-125			4.93	20
Silver	20.0	ND	18.2	19.0	91.2	95.2	1	75.0-125			4.30	20
Zinc	99.7	32.1	119	131	86.8	98.7	1	75.0-125			9.51	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3629290-3 03/09/21 04:17

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	U		0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	106			72.0-128

Laboratory Control Sample (LCS)

(LCS) R3629290-1 03/09/21 02:33

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0533	107	76.0-121	
Toluene	0.0500	0.0512	102	80.0-120	
Ethylbenzene	0.0500	0.0507	101	80.0-124	
Total Xylene	0.150	0.158	105	37.0-160	
(S) a,a,a-Trifluorotoluene(FID)			113	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			104	72.0-128	

Laboratory Control Sample (LCS)

(LCS) R3629290-2 03/09/21 03:32

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)			104	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			111	72.0-128	

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3629492-1 03/10/21 14:57

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	68.9			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3629492-2 03/10/21 15:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	40.3	80.6	50.0-150	
(S) o-Terphenyl			94.3	18.0-148	

L1323167-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1323167-04 03/10/21 16:28 • (MS) R3629492-3 03/10/21 16:42 • (MSD) R3629492-4 03/10/21 16:55

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	49.5	ND	35.3	35.9	71.3	72.5	1	50.0-150			1.69	20
(S) o-Terphenyl					81.7	83.0		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3628775-2 03/09/21 09:57

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	76.1			14.0-149
(S) 2-Fluorobiphenyl	71.5			34.0-125
(S) p-Terphenyl-d14	87.4			23.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3628775-1 03/09/21 09:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0545	68.1	50.0-126	
Acenaphthene	0.0800	0.0570	71.3	50.0-120	
Acenaphthylene	0.0800	0.0615	76.9	50.0-120	
Benzo(a)anthracene	0.0800	0.0594	74.3	45.0-120	
Benzo(a)pyrene	0.0800	0.0456	57.0	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0562	70.3	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0581	72.6	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0554	69.3	49.0-125	
Chrysene	0.0800	0.0581	72.6	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0613	76.6	47.0-125	
Fluoranthene	0.0800	0.0534	66.8	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3628775-1 03/09/21 09:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0607	75.9	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0607	75.9	46.0-125	
Naphthalene	0.0800	0.0577	72.1	50.0-120	
Phenanthrene	0.0800	0.0541	67.6	47.0-120	
Pyrene	0.0800	0.0623	77.9	43.0-123	
1-Methylnaphthalene	0.0800	0.0565	70.6	51.0-121	
2-Methylnaphthalene	0.0800	0.0541	67.6	50.0-120	
2-Chloronaphthalene	0.0800	0.0578	72.3	50.0-120	
(S) Nitrobenzene-d5			76.0	14.0-149	
(S) 2-Fluorobiphenyl			67.4	34.0-125	
(S) p-Terphenyl-d14			90.6	23.0-120	

L1323047-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1323047-05 03/09/21 11:41 • (MS) R3628775-3 03/09/21 11:59 • (MSD) R3628775-4 03/09/21 12:16

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	ND	0.0432	0.0533	56.0	68.7	1	10.0-145			20.9	30
Acenaphthene	0.0772	ND	0.0457	0.0572	59.2	73.7	1	14.0-127			22.4	27
Acenaphthylene	0.0772	ND	0.0494	0.0598	64.0	77.1	1	21.0-124			19.0	25
Benzo(a)anthracene	0.0772	ND	0.0467	0.0576	60.5	74.2	1	10.0-139			20.9	30
Benzo(a)pyrene	0.0772	ND	0.0425	0.0531	55.1	68.4	1	10.0-141			22.2	31
Benzo(b)fluoranthene	0.0772	ND	0.0440	0.0553	57.0	71.3	1	10.0-140			22.8	36
Benzo(g,h,i)perylene	0.0772	ND	0.0462	0.0574	59.8	74.0	1	10.0-140			21.6	33
Benzo(k)fluoranthene	0.0772	ND	0.0433	0.0546	56.1	70.4	1	10.0-137			23.1	31
Chrysene	0.0772	ND	0.0463	0.0584	60.0	75.3	1	10.0-145			23.1	30
Dibenz(a,h)anthracene	0.0772	ND	0.0481	0.0596	62.3	76.8	1	10.0-132			21.4	31
Fluoranthene	0.0772	ND	0.0422	0.0523	54.7	67.4	1	10.0-153			21.4	33
Fluorene	0.0772	ND	0.0481	0.0588	62.3	75.8	1	11.0-130			20.0	29
Indeno(1,2,3-cd)pyrene	0.0772	ND	0.0475	0.0589	61.5	75.9	1	10.0-137			21.4	32
Naphthalene	0.0772	ND	0.0437	0.0566	56.6	72.9	1	10.0-135			25.7	27
Phenanthrene	0.0772	ND	0.0427	0.0534	55.3	68.8	1	10.0-144			22.3	31
Pyrene	0.0772	ND	0.0496	0.0618	64.2	79.6	1	10.0-148			21.9	35
1-Methylnaphthalene	0.0772	ND	0.0434	0.0557	56.2	71.8	1	10.0-142			24.8	28
2-Methylnaphthalene	0.0772	ND	0.0422	0.0535	54.7	68.9	1	10.0-137			23.6	28
2-Chloronaphthalene	0.0772	ND	0.0456	0.0568	59.1	73.2	1	29.0-120			21.9	24
(S) Nitrobenzene-d5					65.7	83.6		14.0-149				
(S) 2-Fluorobiphenyl					62.9	75.6		34.0-125				
(S) p-Terphenyl-d14					78.0	92.1		23.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3628940-2 03/09/21 15:05

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	55.9			14.0-149
(S) 2-Fluorobiphenyl	68.9			34.0-125
(S) p-Terphenyl-d14	81.4			23.0-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3628940-1 03/09/21 14:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0483	60.4	50.0-126	
Acenaphthene	0.0800	0.0462	57.8	50.0-120	
Acenaphthylene	0.0800	0.0509	63.6	50.0-120	
Benzo(a)anthracene	0.0800	0.0472	59.0	45.0-120	
Benzo(a)pyrene	0.0800	0.0381	47.6	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0424	53.0	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0429	53.6	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0420	52.5	49.0-125	
Chrysene	0.0800	0.0459	57.4	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0427	53.4	47.0-125	
Fluoranthene	0.0800	0.0492	61.5	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3628940-1 03/09/21 14:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0487	60.9	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0440	55.0	46.0-125	
Naphthalene	0.0800	0.0451	56.4	50.0-120	
Phenanthrene	0.0800	0.0462	57.8	47.0-120	
Pyrene	0.0800	0.0471	58.9	43.0-123	
1-Methylnaphthalene	0.0800	0.0476	59.5	51.0-121	
2-Methylnaphthalene	0.0800	0.0463	57.9	50.0-120	
2-Chloronaphthalene	0.0800	0.0481	60.1	50.0-120	
(S) Nitrobenzene-d5			53.6	14.0-149	
(S) 2-Fluorobiphenyl			65.7	34.0-125	
(S) p-Terphenyl-d14			72.4	23.0-120	

L1324271-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1324271-01 03/09/21 15:44 • (MS) R3628940-3 03/09/21 16:04 • (MSD) R3628940-4 03/09/21 16:24

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	0.0792	0.0243	0.0699	0.0705	57.6	58.6	1	10.0-145			0.855	30
Acenaphthene	0.0792	0.0962	0.155	0.156	74.2	75.9	1	14.0-127			0.643	27
Acenaphthylene	0.0792	0.0681	0.123	0.123	69.3	69.7	1	21.0-124			0.000	25
Benzo(a)anthracene	0.0792	0.00859	0.0598	0.0601	64.7	65.4	1	10.0-139			0.500	30
Benzo(a)pyrene	0.0792	ND	0.0514	0.0514	61.5	61.9	1	10.0-141			0.000	31
Benzo(b)fluoranthene	0.0792	ND	0.0499	0.0498	60.6	60.8	1	10.0-140			0.201	36
Benzo(g,h,i)perylene	0.0792	ND	0.0511	0.0509	60.6	60.6	1	10.0-140			0.392	33
Benzo(k)fluoranthene	0.0792	ND	0.0493	0.0496	62.2	62.9	1	10.0-137			0.607	31
Chrysene	0.0792	ND	0.0550	0.0551	63.9	64.3	1	10.0-145			0.182	30
Dibenz(a,h)anthracene	0.0792	ND	0.0473	0.0468	59.7	59.4	1	10.0-132			1.06	31
Fluoranthene	0.0792	0.0154	0.0654	0.0650	63.1	62.9	1	10.0-153			0.613	33
Fluorene	0.0792	0.100	0.142	0.143	53.0	54.6	1	11.0-130			0.702	29
Indeno(1,2,3-cd)pyrene	0.0792	ND	0.0485	0.0480	61.2	60.9	1	10.0-137			1.04	32
Naphthalene	0.0792	16.8	16.3	16.3	0.000	0.000	1	10.0-135	E V	E V	0.000	27
Phenanthrene	0.0792	0.106	0.137	0.135	39.1	36.8	1	10.0-144			1.47	31
Pyrene	0.0792	0.0211	0.0669	0.0679	57.8	59.4	1	10.0-148			1.48	35
1-Methylnaphthalene	0.0792	8.42	8.02	8.40	0.000	0.000	1	10.0-142	E V	E V	4.63	28
2-Methylnaphthalene	0.0792	14.3	13.9	14.3	0.000	0.000	1	10.0-137	E V	E V	2.84	28
2-Chloronaphthalene	0.0792	ND	0.0656	0.0637	59.2	57.1	1	29.0-120			2.94	24
(S) Nitrobenzene-d5					316	322		14.0-149	J1	J1		
(S) 2-Fluorobiphenyl					78.3	78.1		34.0-125				
(S) p-Terphenyl-d14					79.1	80.3		23.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1324271-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1324271-01 03/09/21 15:44 • (MS) R3628940-3 03/09/21 16:04 • (MSD) R3628940-4 03/09/21 16:24

	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	%	%		%			%	%

Sample Narrative:
OS: Surrogate failure due to matrix interference

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

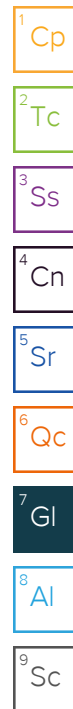
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122


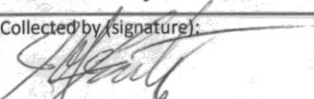
Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	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.



ENTRADA CONSULTING GROUP 330 Grand Avenue, Unit C Grand Junction, CO 81501				Billing Information:				Pres Chk		Analysis / Container / Preservative								Chain of Custody Page ____ of ____	
				Report to: Stuart Hall						Email To: shallentradainc.com@									
Project Description: North Vega 5A				City/State Collected: Collbran , CO														 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859	
Phone: (970)712.7329		Client Project #		Lab Project #															
Collected by (print): Jason McLarty		Site/Facility ID #		P.O. #															
Collected by (signature): 		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 #															
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>				Date Results Needed		No. of Cntrs										L # 1323167 C095 Acctnum: Template: Prelogin: TSR: PB: Shipped Via:			
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time			TPH (DRO and GRO)	BTEX	Table 910-1 metals in soil	Table 910-1 PAHs	EC, SAR, pH	Arsenic				Remarks	Sample # (lab only)	
NV5A-Cont E (2.5')	Grab	SS	2.5'	3/3/21	930	3		X	X	X	X	X						01	
NV5A-E Wall Mid (2')	Grab	SS	2'	3/3/21	1000	3		X	X	X	X	X						02	
NV5A-BOTS (2')	Grab	SS	2'	3/3/21	1030	3		X	X	X	X	X						03	
NV5A-W Wall S (2')	Grab	SS	2'	3/3/21	1100	3		X	X	X	X	X						04	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other				Remarks: Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier				Tracking #				pH _____ Temp _____ Flow _____ Other _____				Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> NP Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> Y Y <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> Y Y <input type="checkbox"/> N			
Relinquished by: (Signature)		Date: 3/3/21		Time: 1435		Received by: (Signature)		Trip Blank Received: Yes/No		HCL/MeOH		TBR		Bottles Received:		If preservation required by Login: Date/Time			
Relinquished by: (Signature)		Date: 3/3/21		Time: 1730		Received by: (Signature)		Temp: 12°C		1.0+1=1.1		12							
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature)		Date: 3/4/21		Time: 0915		Hold:				Condition: NCF / OK			

Entrada Consulting Group

Sample Delivery Group: L1325290
Samples Received: 03/10/2021
Project Number: 020-063
Description: Vega Pad 5A

Report To: Matt Kasten
240 Mesa Avenue
Grand Junction, CO 81501

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

20210309-NV5A-SE WALL-18"-1010 L1325290-01 Solid

Collected by
Chance Holder

Collected date/time
03/09/21 10:10

Received date/time
03/10/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1633551	1	03/16/21 08:14	03/16/21 08:14	EL	Mt. Juliet, TN
Calculated Results	WG1632838	1	03/11/21 07:11	03/15/21 18:29	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:29	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634562	1	03/14/21 19:28	03/15/21 03:21	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1632787	1	03/11/21 07:04	03/11/21 10:04	ARD	Mt. Juliet, TN
Mercury by Method 7471A	WG1632816	1	03/11/21 02:25	03/12/21 11:12	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1632838	1	03/11/21 07:11	03/12/21 17:08	KMG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1633831	1	03/10/21 21:45	03/13/21 06:27	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1634913	1	03/16/21 07:40	03/16/21 14:34	CAG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635137	1	03/16/21 17:14	03/17/21 04:36	AAT	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

20210309-NV5A-S WALL-18"-1015 L1325290-02 Solid

Collected by
Chance Holder

Collected date/time
03/09/21 10:10

Received date/time
03/10/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1633551	1	03/16/21 08:17	03/16/21 08:17	EL	Mt. Juliet, TN
Calculated Results	WG1632838	1	03/11/21 07:11	03/15/21 18:29	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:29	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634562	1	03/14/21 19:28	03/15/21 03:21	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1632787	1	03/11/21 07:04	03/11/21 10:04	ARD	Mt. Juliet, TN
Mercury by Method 7471A	WG1632816	1	03/11/21 02:25	03/12/21 11:14	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1632838	1	03/11/21 07:11	03/12/21 17:11	KMG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1633831	1	03/10/21 21:45	03/13/21 06:49	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1634913	1	03/16/21 07:40	03/16/21 13:26	JN	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635137	1	03/16/21 17:14	03/17/21 04:54	AAT	Mt. Juliet, TN

⁷Gl

⁸Al

⁹Sc

20210309-NV5A-SW WALL-18"-1020 L1325290-03 Solid

Collected by
Chance Holder

Collected date/time
03/09/21 10:10

Received date/time
03/10/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1633551	1	03/16/21 08:20	03/16/21 08:20	EL	Mt. Juliet, TN
Calculated Results	WG1632838	1	03/11/21 07:11	03/15/21 18:29	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:29	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634562	1	03/14/21 19:28	03/15/21 03:21	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1632787	1	03/11/21 07:04	03/11/21 10:04	ARD	Mt. Juliet, TN
Mercury by Method 7471A	WG1632816	1	03/11/21 02:25	03/12/21 11:17	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1632838	1	03/11/21 07:11	03/12/21 17:14	KMG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1633831	1	03/10/21 21:45	03/13/21 07:11	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1634913	1	03/16/21 07:40	03/16/21 14:21	CAG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635137	1	03/16/21 17:14	03/17/21 00:11	AAT	Mt. Juliet, TN

20210309-NV5A-N BOT-14'-1200 L1325290-04 Solid

Collected by
Chance Holder

Collected date/time
03/09/21 10:10

Received date/time
03/10/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1633551	1	03/16/21 08:22	03/16/21 08:22	EL	Mt. Juliet, TN
Calculated Results	WG1632838	1	03/11/21 07:11	03/15/21 18:30	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:30	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634562	1	03/14/21 19:28	03/15/21 03:21	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1632787	1	03/11/21 07:04	03/11/21 10:04	ARD	Mt. Juliet, TN
Mercury by Method 7471A	WG1632816	1	03/11/21 02:25	03/12/21 11:20	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1632838	1	03/11/21 07:11	03/12/21 17:17	KMG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1633831	1	03/10/21 21:45	03/13/21 07:33	ADM	Mt. Juliet, TN

SAMPLE SUMMARY

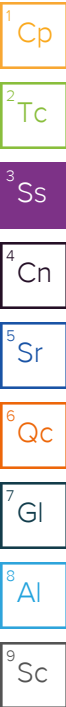
20210309-NV5A-N BOT-14'-1200 L1325290-04 Solid

Collected by
Chance Holder

Collected date/time
03/09/21 10:10

Received date/time
03/10/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021	WG1634291	25	03/10/21 21:45	03/16/21 16:00	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1635149	1	03/16/21 16:26	03/16/21 22:28	CAG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635137	1	03/16/21 17:14	03/17/21 05:12	AAT	Mt. Juliet, TN



20210309-NV5A-WT WALL-16'-1435 L1325290-05 Solid

Collected by
Chance Holder

Collected date/time
03/09/21 10:10

Received date/time
03/10/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1633551	1	03/16/21 08:25	03/16/21 08:25	EL	Mt. Juliet, TN
Calculated Results	WG1632838	1	03/11/21 07:11	03/15/21 18:30	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:30	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634562	1	03/14/21 19:28	03/15/21 03:21	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1632787	1	03/11/21 07:04	03/11/21 10:04	ARD	Mt. Juliet, TN
Mercury by Method 7471A	WG1632816	1	03/11/21 02:25	03/12/21 11:22	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1632838	1	03/11/21 07:11	03/12/21 17:20	KMG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1633831	1	03/10/21 21:45	03/13/21 07:57	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG1634291	25	03/10/21 21:45	03/16/21 16:22	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1635149	1	03/16/21 16:26	03/16/21 22:46	CAG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635137	1	03/16/21 17:14	03/17/21 05:29	AAT	Mt. Juliet, TN

20210309-NV5A-NW WALL-18"-1300 L1325290-06 Solid

Collected by
Chance Holder

Collected date/time
03/09/21 10:10

Received date/time
03/10/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1633551	1	03/16/21 08:28	03/16/21 08:28	EL	Mt. Juliet, TN
Calculated Results	WG1632838	1	03/11/21 07:11	03/15/21 18:30	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:30	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634562	1	03/14/21 19:28	03/15/21 03:21	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1632787	1	03/11/21 07:04	03/11/21 10:04	ARD	Mt. Juliet, TN
Mercury by Method 7471A	WG1632816	1	03/11/21 02:25	03/12/21 11:25	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1632838	1	03/11/21 07:11	03/12/21 17:23	KMG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1633831	1	03/10/21 21:45	03/13/21 08:19	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG1634291	1	03/10/21 21:45	03/16/21 16:44	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1635149	1	03/16/21 16:26	03/16/21 23:00	CAG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635137	1	03/16/21 17:14	03/17/21 05:47	AAT	Mt. Juliet, TN

20210309-NV5A-ET WALL-10'-1440 L1325290-07 Solid

Collected by
Chance Holder

Collected date/time
03/09/21 10:10

Received date/time
03/10/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1633551	1	03/16/21 08:31	03/16/21 08:31	EL	Mt. Juliet, TN
Calculated Results	WG1632838	1	03/11/21 07:11	03/15/21 18:30	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:30	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634562	1	03/14/21 19:28	03/15/21 03:21	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1632787	1	03/11/21 07:04	03/11/21 10:04	ARD	Mt. Juliet, TN
Mercury by Method 7471A	WG1632816	1	03/11/21 02:25	03/12/21 11:27	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1632838	1	03/11/21 07:11	03/12/21 17:26	KMG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1633831	1	03/10/21 21:45	03/13/21 08:41	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1635149	1	03/16/21 16:26	03/16/21 23:13	CAG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635137	1	03/16/21 17:14	03/17/21 06:05	AAT	Mt. Juliet, TN

SAMPLE SUMMARY

20210309-NV5A-S BOT-24"-1400 L1325290-08 Solid

Collected by
Chance Holder

Collected date/time
03/09/21 10:10

Received date/time
03/10/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1633551	1	03/16/21 08:33	03/16/21 08:33	EL	Mt. Juliet, TN
Calculated Results	WG1632838	1	03/11/21 07:11	03/15/21 18:31	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:31	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634562	1	03/14/21 19:28	03/15/21 03:21	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1632787	1	03/11/21 07:04	03/11/21 10:04	ARD	Mt. Juliet, TN
Mercury by Method 7471A	WG1632816	1	03/11/21 02:25	03/12/21 11:30	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1632838	1	03/11/21 07:11	03/12/21 16:38	KMG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1633831	1	03/10/21 21:45	03/13/21 09:03	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1635150	1	03/16/21 23:51	03/17/21 10:13	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635137	1	03/16/21 17:14	03/17/21 06:22	AAT	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

20210309-NV5A-ST WAKK-10'-1430 L1325290-09 Solid

Collected by
Chance Holder

Collected date/time
03/09/21 10:10

Received date/time
03/10/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1633551	1	03/16/21 08:36	03/16/21 08:36	EL	Mt. Juliet, TN
Calculated Results	WG1632838	1	03/11/21 07:11	03/15/21 18:31	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:31	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634562	1	03/14/21 19:28	03/15/21 03:21	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1632787	1	03/11/21 07:04	03/11/21 10:04	ARD	Mt. Juliet, TN
Mercury by Method 7471A	WG1632816	1	03/11/21 02:25	03/12/21 10:40	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1632838	1	03/11/21 07:11	03/12/21 17:28	KMG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1633831	1	03/10/21 21:45	03/13/21 09:25	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1635150	1	03/16/21 23:51	03/17/21 10:27	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635139	1	03/16/21 08:53	03/16/21 14:14	LEA	Mt. Juliet, TN

⁷Gl

⁸Al

⁹Sc

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	6.90		1	03/16/2021 08:14	WG1633551

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	21.6		1.00	1	03/15/2021 18:29	WG1632838

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:29	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.37	T8	1	03/15/2021 03:21	WG1634562

Sample Narrative:

L1325290-01 WG1634562: 8.37 at 21.9C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	4310		10.0	1	03/11/2021 10:04	WG1632787

Mercury by Method 7471A

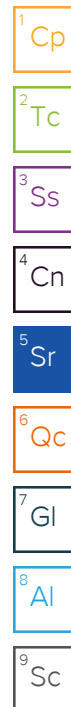
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/12/2021 11:12	WG1632816

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/12/2021 17:08	WG1632838
Barium	109		0.500	1	03/12/2021 17:08	WG1632838
Cadmium	0.591		0.500	1	03/12/2021 17:08	WG1632838
Chromium	21.6		1.00	1	03/12/2021 17:08	WG1632838
Copper	22.3		2.00	1	03/12/2021 17:08	WG1632838
Lead	10.9		0.500	1	03/12/2021 17:08	WG1632838
Nickel	19.0		2.00	1	03/12/2021 17:08	WG1632838
Selenium	ND		2.00	1	03/12/2021 17:08	WG1632838
Silver	ND		1.00	1	03/12/2021 17:08	WG1632838
Zinc	58.8		5.00	1	03/12/2021 17:08	WG1632838

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00351		0.000500	1	03/13/2021 06:27	WG1633831
Toluene	0.0934		0.00500	1	03/13/2021 06:27	WG1633831
Ethylbenzene	ND		0.000500	1	03/13/2021 06:27	WG1633831
Total Xylene	0.145		0.00150	1	03/13/2021 06:27	WG1633831
TPH (GC/FID) Low Fraction	5.93		0.100	1	03/13/2021 06:27	WG1633831



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	97.5		77.0-120		03/13/2021 06:27	WG1633831
(S) a,a,a-Trifluorotoluene(PID)	98.3		72.0-128		03/13/2021 06:27	WG1633831

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	03/16/2021 14:34	WG1634913
(S) o-Terphenyl	62.8		18.0-148		03/16/2021 14:34	WG1634913

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 04:36	WG1635137
Acenaphthene	ND		0.00600	1	03/17/2021 04:36	WG1635137
Acenaphthylene	ND		0.00600	1	03/17/2021 04:36	WG1635137
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 04:36	WG1635137
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 04:36	WG1635137
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 04:36	WG1635137
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 04:36	WG1635137
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 04:36	WG1635137
Chrysene	ND		0.00600	1	03/17/2021 04:36	WG1635137
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 04:36	WG1635137
Fluoranthene	ND		0.00600	1	03/17/2021 04:36	WG1635137
Fluorene	ND		0.00600	1	03/17/2021 04:36	WG1635137
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 04:36	WG1635137
Naphthalene	ND		0.0200	1	03/17/2021 04:36	WG1635137
Phenanthrene	ND		0.00600	1	03/17/2021 04:36	WG1635137
Pyrene	ND		0.00600	1	03/17/2021 04:36	WG1635137
1-Methylnaphthalene	ND		0.0200	1	03/17/2021 04:36	WG1635137
2-Methylnaphthalene	ND		0.0200	1	03/17/2021 04:36	WG1635137
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 04:36	WG1635137
(S) p-Terphenyl-d14	93.1		23.0-120		03/17/2021 04:36	WG1635137
(S) Nitrobenzene-d5	68.7		14.0-149		03/17/2021 04:36	WG1635137
(S) 2-Fluorobiphenyl	63.7		34.0-125		03/17/2021 04:36	WG1635137

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	1.36		1	03/16/2021 08:17	WG1633551

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	21.6		1.00	1	03/15/2021 18:29	WG1632838

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:29	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.47	T8	1	03/15/2021 03:21	WG1634562

Sample Narrative:

L1325290-02 WG1634562: 8.47 at 20.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	443		10.0	1	03/11/2021 10:04	WG1632787

Mercury by Method 7471A

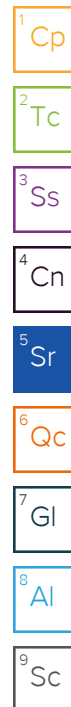
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/12/2021 11:14	WG1632816

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/12/2021 17:11	WG1632838
Barium	122		0.500	1	03/12/2021 17:11	WG1632838
Cadmium	0.602		0.500	1	03/12/2021 17:11	WG1632838
Chromium	21.6		1.00	1	03/12/2021 17:11	WG1632838
Copper	21.5		2.00	1	03/12/2021 17:11	WG1632838
Lead	11.2		0.500	1	03/12/2021 17:11	WG1632838
Nickel	19.0		2.00	1	03/12/2021 17:11	WG1632838
Selenium	2.26		2.00	1	03/12/2021 17:11	WG1632838
Silver	ND		1.00	1	03/12/2021 17:11	WG1632838
Zinc	58.7		5.00	1	03/12/2021 17:11	WG1632838

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.000978		0.000500	1	03/13/2021 06:49	WG1633831
Toluene	ND		0.00500	1	03/13/2021 06:49	WG1633831
Ethylbenzene	ND		0.000500	1	03/13/2021 06:49	WG1633831
Total Xylene	0.00254		0.00150	1	03/13/2021 06:49	WG1633831
TPH (GC/FID) Low Fraction	0.146		0.100	1	03/13/2021 06:49	WG1633831



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	110		77.0-120		03/13/2021 06:49	WG1633831
(S) a,a,a-Trifluorotoluene(PID)	102		72.0-128		03/13/2021 06:49	WG1633831

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	03/16/2021 13:26	WG1634913
(S) o-Terphenyl	52.7		18.0-148		03/16/2021 13:26	WG1634913

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 04:54	WG1635137
Acenaphthene	ND		0.00600	1	03/17/2021 04:54	WG1635137
Acenaphthylene	ND		0.00600	1	03/17/2021 04:54	WG1635137
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 04:54	WG1635137
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 04:54	WG1635137
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 04:54	WG1635137
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 04:54	WG1635137
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 04:54	WG1635137
Chrysene	ND		0.00600	1	03/17/2021 04:54	WG1635137
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 04:54	WG1635137
Fluoranthene	ND		0.00600	1	03/17/2021 04:54	WG1635137
Fluorene	ND		0.00600	1	03/17/2021 04:54	WG1635137
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 04:54	WG1635137
Naphthalene	ND		0.0200	1	03/17/2021 04:54	WG1635137
Phenanthrene	ND		0.00600	1	03/17/2021 04:54	WG1635137
Pyrene	ND		0.00600	1	03/17/2021 04:54	WG1635137
1-Methylnaphthalene	ND		0.0200	1	03/17/2021 04:54	WG1635137
2-Methylnaphthalene	ND		0.0200	1	03/17/2021 04:54	WG1635137
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 04:54	WG1635137
(S) p-Terphenyl-d14	90.5		23.0-120		03/17/2021 04:54	WG1635137
(S) Nitrobenzene-d5	67.4		14.0-149		03/17/2021 04:54	WG1635137
(S) 2-Fluorobiphenyl	62.0		34.0-125		03/17/2021 04:54	WG1635137

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	5.50		1	03/16/2021 08:20	WG1633551

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	14.6		1.00	1	03/15/2021 18:29	WG1632838

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:29	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.41	T8	1	03/15/2021 03:21	WG1634562

Sample Narrative:

L1325290-03 WG1634562: 8.41 at 20.6C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	524		10.0	1	03/11/2021 10:04	WG1632787

Mercury by Method 7471A

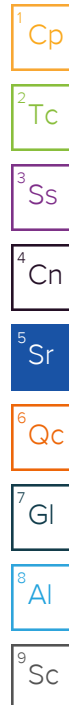
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/12/2021 11:17	WG1632816

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/12/2021 17:14	WG1632838
Barium	85.3		0.500	1	03/12/2021 17:14	WG1632838
Cadmium	ND		0.500	1	03/12/2021 17:14	WG1632838
Chromium	14.6		1.00	1	03/12/2021 17:14	WG1632838
Copper	17.2		2.00	1	03/12/2021 17:14	WG1632838
Lead	14.4		0.500	1	03/12/2021 17:14	WG1632838
Nickel	13.2		2.00	1	03/12/2021 17:14	WG1632838
Selenium	ND		2.00	1	03/12/2021 17:14	WG1632838
Silver	ND		1.00	1	03/12/2021 17:14	WG1632838
Zinc	43.7		5.00	1	03/12/2021 17:14	WG1632838

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.000591		0.000500	1	03/13/2021 07:11	WG1633831
Toluene	ND		0.00500	1	03/13/2021 07:11	WG1633831
Ethylbenzene	ND		0.000500	1	03/13/2021 07:11	WG1633831
Total Xylene	0.00350		0.00150	1	03/13/2021 07:11	WG1633831
TPH (GC/FID) Low Fraction	0.215		0.100	1	03/13/2021 07:11	WG1633831



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	110		77.0-120		03/13/2021 07:11	WG1633831
(S) a,a,a-Trifluorotoluene(PID)	103		72.0-128		03/13/2021 07:11	WG1633831

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	03/16/2021 14:21	WG1634913
(S) o-Terphenyl	71.9		18.0-148		03/16/2021 14:21	WG1634913

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 00:11	WG1635137
Acenaphthene	ND		0.00600	1	03/17/2021 00:11	WG1635137
Acenaphthylene	ND		0.00600	1	03/17/2021 00:11	WG1635137
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 00:11	WG1635137
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 00:11	WG1635137
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 00:11	WG1635137
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 00:11	WG1635137
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 00:11	WG1635137
Chrysene	ND		0.00600	1	03/17/2021 00:11	WG1635137
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 00:11	WG1635137
Fluoranthene	ND		0.00600	1	03/17/2021 00:11	WG1635137
Fluorene	ND		0.00600	1	03/17/2021 00:11	WG1635137
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 00:11	WG1635137
Naphthalene	ND		0.0200	1	03/17/2021 00:11	WG1635137
Phenanthrene	ND		0.00600	1	03/17/2021 00:11	WG1635137
Pyrene	ND		0.00600	1	03/17/2021 00:11	WG1635137
1-Methylnaphthalene	ND		0.0200	1	03/17/2021 00:11	WG1635137
2-Methylnaphthalene	ND		0.0200	1	03/17/2021 00:11	WG1635137
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 00:11	WG1635137
(S) p-Terphenyl-d14	94.9		23.0-120		03/17/2021 00:11	WG1635137
(S) Nitrobenzene-d5	72.3		14.0-149		03/17/2021 00:11	WG1635137
(S) 2-Fluorobiphenyl	64.4		34.0-125		03/17/2021 00:11	WG1635137

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	8.45		1	03/16/2021 08:22	WG1633551

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	24.2		1.00	1	03/15/2021 18:30	WG1632838

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:30	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.49	T8	1	03/15/2021 03:21	WG1634562

Sample Narrative:

L1325290-04 WG1634562: 8.49 at 20.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	732		10.0	1	03/11/2021 10:04	WG1632787

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/12/2021 11:20	WG1632816

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/12/2021 17:17	WG1632838
Barium	98.1		0.500	1	03/12/2021 17:17	WG1632838
Cadmium	0.712		0.500	1	03/12/2021 17:17	WG1632838
Chromium	24.2		1.00	1	03/12/2021 17:17	WG1632838
Copper	22.6		2.00	1	03/12/2021 17:17	WG1632838
Lead	12.5		0.500	1	03/12/2021 17:17	WG1632838
Nickel	21.2		2.00	1	03/12/2021 17:17	WG1632838
Selenium	ND		2.00	1	03/12/2021 17:17	WG1632838
Silver	ND		1.00	1	03/12/2021 17:17	WG1632838
Zinc	77.3		5.00	1	03/12/2021 17:17	WG1632838

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00253		0.000500	1	03/13/2021 07:33	WG1633831
Toluene	0.105		0.00500	1	03/13/2021 07:33	WG1633831
Ethylbenzene	0.0241		0.000500	1	03/13/2021 07:33	WG1633831
Total Xylene	1.85		0.0375	25	03/16/2021 16:00	WG1634291
TPH (GC/FID) Low Fraction	3.38		0.100	1	03/13/2021 07:33	WG1633831



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	105		77.0-120		03/13/2021 07:33	WG1633831
(S) a,a,a-Trifluorotoluene(FID)	115		77.0-120		03/16/2021 16:00	WG1634291
(S) a,a,a-Trifluorotoluene(PID)	101		72.0-128		03/13/2021 07:33	WG1633831
(S) a,a,a-Trifluorotoluene(PID)	106		72.0-128		03/16/2021 16:00	WG1634291

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	03/16/2021 22:28	WG1635149
(S) o-Terphenyl	39.1		18.0-148		03/16/2021 22:28	WG1635149

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 05:12	WG1635137
Acenaphthene	ND		0.00600	1	03/17/2021 05:12	WG1635137
Acenaphthylene	ND		0.00600	1	03/17/2021 05:12	WG1635137
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 05:12	WG1635137
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 05:12	WG1635137
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 05:12	WG1635137
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 05:12	WG1635137
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 05:12	WG1635137
Chrysene	ND		0.00600	1	03/17/2021 05:12	WG1635137
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 05:12	WG1635137
Fluoranthene	ND		0.00600	1	03/17/2021 05:12	WG1635137
Fluorene	ND		0.00600	1	03/17/2021 05:12	WG1635137
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 05:12	WG1635137
Naphthalene	ND		0.0200	1	03/17/2021 05:12	WG1635137
Phenanthrene	ND		0.00600	1	03/17/2021 05:12	WG1635137
Pyrene	ND		0.00600	1	03/17/2021 05:12	WG1635137
1-Methylnaphthalene	ND		0.0200	1	03/17/2021 05:12	WG1635137
2-Methylnaphthalene	ND		0.0200	1	03/17/2021 05:12	WG1635137
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 05:12	WG1635137
(S) p-Terphenyl-d14	96.1		23.0-120		03/17/2021 05:12	WG1635137
(S) Nitrobenzene-d5	71.5		14.0-149		03/17/2021 05:12	WG1635137
(S) 2-Fluorobiphenyl	63.1		34.0-125		03/17/2021 05:12	WG1635137

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	5.44		1	03/16/2021 08:25	WG1633551

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	22.5		1.00	1	03/15/2021 18:30	WG1632838

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:30	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.85	T8	1	03/15/2021 03:21	WG1634562

Sample Narrative:

L1325290-05 WG1634562: 8.85 at 20.6C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	274		10.0	1	03/11/2021 10:04	WG1632787

Mercury by Method 7471A

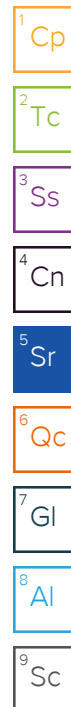
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/12/2021 11:22	WG1632816

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/12/2021 17:20	WG1632838
Barium	125		0.500	1	03/12/2021 17:20	WG1632838
Cadmium	0.723		0.500	1	03/12/2021 17:20	WG1632838
Chromium	22.5		1.00	1	03/12/2021 17:20	WG1632838
Copper	22.2		2.00	1	03/12/2021 17:20	WG1632838
Lead	11.9		0.500	1	03/12/2021 17:20	WG1632838
Nickel	19.7		2.00	1	03/12/2021 17:20	WG1632838
Selenium	ND		2.00	1	03/12/2021 17:20	WG1632838
Silver	ND		1.00	1	03/12/2021 17:20	WG1632838
Zinc	67.1		5.00	1	03/12/2021 17:20	WG1632838

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00261		0.000500	1	03/13/2021 07:57	WG1633831
Toluene	0.114		0.00500	1	03/13/2021 07:57	WG1633831
Ethylbenzene	0.0280		0.000500	1	03/13/2021 07:57	WG1633831
Total Xylene	3.59		0.0375	25	03/16/2021 16:22	WG1634291
TPH (GC/FID) Low Fraction	4.76		0.100	1	03/13/2021 07:57	WG1633831



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	100		77.0-120		03/13/2021 07:57	WG1633831
(S) a,a,a-Trifluorotoluene(FID)	111		77.0-120		03/16/2021 16:22	WG1634291
(S) a,a,a-Trifluorotoluene(PID)	100		72.0-128		03/13/2021 07:57	WG1633831
(S) a,a,a-Trifluorotoluene(PID)	106		72.0-128		03/16/2021 16:22	WG1634291

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	03/16/2021 22:46	WG1635149
(S) o-Terphenyl	25.5		18.0-148		03/16/2021 22:46	WG1635149

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 05:29	WG1635137
Acenaphthene	ND		0.00600	1	03/17/2021 05:29	WG1635137
Acenaphthylene	ND		0.00600	1	03/17/2021 05:29	WG1635137
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 05:29	WG1635137
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 05:29	WG1635137
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 05:29	WG1635137
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 05:29	WG1635137
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 05:29	WG1635137
Chrysene	ND		0.00600	1	03/17/2021 05:29	WG1635137
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 05:29	WG1635137
Fluoranthene	ND		0.00600	1	03/17/2021 05:29	WG1635137
Fluorene	ND		0.00600	1	03/17/2021 05:29	WG1635137
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 05:29	WG1635137
Naphthalene	ND		0.0200	1	03/17/2021 05:29	WG1635137
Phenanthrene	ND		0.00600	1	03/17/2021 05:29	WG1635137
Pyrene	ND		0.00600	1	03/17/2021 05:29	WG1635137
1-Methylnaphthalene	ND		0.0200	1	03/17/2021 05:29	WG1635137
2-Methylnaphthalene	ND		0.0200	1	03/17/2021 05:29	WG1635137
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 05:29	WG1635137
(S) p-Terphenyl-d14	87.1		23.0-120		03/17/2021 05:29	WG1635137
(S) Nitrobenzene-d5	63.5		14.0-149		03/17/2021 05:29	WG1635137
(S) 2-Fluorobiphenyl	59.2		34.0-125		03/17/2021 05:29	WG1635137

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	8.54		1	03/16/2021 08:28	WG1633551

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	20.7		1.00	1	03/15/2021 18:30	WG1632838

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:30	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.83	T8	1	03/15/2021 03:21	WG1634562

Sample Narrative:

L1325290-06 WG1634562: 8.83 at 20.8C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	699		10.0	1	03/11/2021 10:04	WG1632787

Mercury by Method 7471A

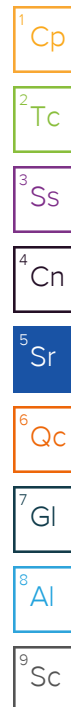
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/12/2021 11:25	WG1632816

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/12/2021 17:23	WG1632838
Barium	135		0.500	1	03/12/2021 17:23	WG1632838
Cadmium	0.617		0.500	1	03/12/2021 17:23	WG1632838
Chromium	20.7		1.00	1	03/12/2021 17:23	WG1632838
Copper	21.8		2.00	1	03/12/2021 17:23	WG1632838
Lead	12.1		0.500	1	03/12/2021 17:23	WG1632838
Nickel	21.3		2.00	1	03/12/2021 17:23	WG1632838
Selenium	ND		2.00	1	03/12/2021 17:23	WG1632838
Silver	ND		1.00	1	03/12/2021 17:23	WG1632838
Zinc	58.9		5.00	1	03/12/2021 17:23	WG1632838

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00206		0.000500	1	03/13/2021 08:19	WG1633831
Toluene	ND		0.00500	1	03/13/2021 08:19	WG1633831
Ethylbenzene	0.000543		0.000500	1	03/13/2021 08:19	WG1633831
Total Xylene	0.00171		0.00150	1	03/16/2021 16:44	WG1634291
TPH (GC/FID) Low Fraction	ND		0.100	1	03/13/2021 08:19	WG1633831



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	109		77.0-120		03/13/2021 08:19	WG1633831
(S) a,a,a-Trifluorotoluene(FID)	110		77.0-120		03/16/2021 16:44	WG1634291
(S) a,a,a-Trifluorotoluene(PID)	101		72.0-128		03/13/2021 08:19	WG1633831
(S) a,a,a-Trifluorotoluene(PID)	101		72.0-128		03/16/2021 16:44	WG1634291

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	03/16/2021 23:00	WG1635149
(S) o-Terphenyl	51.1		18.0-148		03/16/2021 23:00	WG1635149

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 05:47	WG1635137
Acenaphthene	ND		0.00600	1	03/17/2021 05:47	WG1635137
Acenaphthylene	ND		0.00600	1	03/17/2021 05:47	WG1635137
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 05:47	WG1635137
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 05:47	WG1635137
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 05:47	WG1635137
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 05:47	WG1635137
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 05:47	WG1635137
Chrysene	ND		0.00600	1	03/17/2021 05:47	WG1635137
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 05:47	WG1635137
Fluoranthene	ND		0.00600	1	03/17/2021 05:47	WG1635137
Fluorene	ND		0.00600	1	03/17/2021 05:47	WG1635137
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 05:47	WG1635137
Naphthalene	ND		0.0200	1	03/17/2021 05:47	WG1635137
Phenanthrene	ND		0.00600	1	03/17/2021 05:47	WG1635137
Pyrene	ND		0.00600	1	03/17/2021 05:47	WG1635137
1-Methylnaphthalene	ND		0.0200	1	03/17/2021 05:47	WG1635137
2-Methylnaphthalene	ND		0.0200	1	03/17/2021 05:47	WG1635137
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 05:47	WG1635137
(S) p-Terphenyl-d14	88.8		23.0-120		03/17/2021 05:47	WG1635137
(S) Nitrobenzene-d5	61.8		14.0-149		03/17/2021 05:47	WG1635137
(S) 2-Fluorobiphenyl	58.7		34.0-125		03/17/2021 05:47	WG1635137

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	5.90		1	03/16/2021 08:31	WG1633551

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	21.9		1.00	1	03/15/2021 18:30	WG1632838

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:30	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.07	T8	1	03/15/2021 03:21	WG1634562

Sample Narrative:

L1325290-07 WG1634562: 8.07 at 21.2C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1770		10.0	1	03/11/2021 10:04	WG1632787

Mercury by Method 7471A

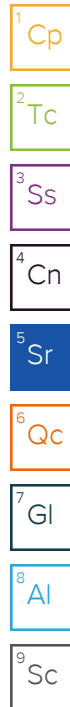
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/12/2021 11:27	WG1632816

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/12/2021 17:26	WG1632838
Barium	120		0.500	1	03/12/2021 17:26	WG1632838
Cadmium	0.662		0.500	1	03/12/2021 17:26	WG1632838
Chromium	21.9		1.00	1	03/12/2021 17:26	WG1632838
Copper	21.6		2.00	1	03/12/2021 17:26	WG1632838
Lead	11.9		0.500	1	03/12/2021 17:26	WG1632838
Nickel	19.8		2.00	1	03/12/2021 17:26	WG1632838
Selenium	ND		2.00	1	03/12/2021 17:26	WG1632838
Silver	ND		1.00	1	03/12/2021 17:26	WG1632838
Zinc	67.3		5.00	1	03/12/2021 17:26	WG1632838

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00150		0.000500	1	03/13/2021 08:41	WG1633831
Toluene	0.0156		0.00500	1	03/13/2021 08:41	WG1633831
Ethylbenzene	0.0112		0.000500	1	03/13/2021 08:41	WG1633831
Total Xylene	0.239		0.00150	1	03/13/2021 08:41	WG1633831
TPH (GC/FID) Low Fraction	3.70		0.100	1	03/13/2021 08:41	WG1633831



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	104		77.0-120		03/13/2021 08:41	WG1633831
(S) a,a,a-Trifluorotoluene(PID)	101		72.0-128		03/13/2021 08:41	WG1633831

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	28.7		4.00	1	03/16/2021 23:13	WG1635149
(S) o-Terphenyl	38.1		18.0-148		03/16/2021 23:13	WG1635149

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 06:05	WG1635137
Acenaphthene	ND		0.00600	1	03/17/2021 06:05	WG1635137
Acenaphthylene	ND		0.00600	1	03/17/2021 06:05	WG1635137
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 06:05	WG1635137
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 06:05	WG1635137
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 06:05	WG1635137
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 06:05	WG1635137
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 06:05	WG1635137
Chrysene	ND		0.00600	1	03/17/2021 06:05	WG1635137
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 06:05	WG1635137
Fluoranthene	ND		0.00600	1	03/17/2021 06:05	WG1635137
Fluorene	ND		0.00600	1	03/17/2021 06:05	WG1635137
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 06:05	WG1635137
Naphthalene	0.0279		0.0200	1	03/17/2021 06:05	WG1635137
Phenanthrene	ND		0.00600	1	03/17/2021 06:05	WG1635137
Pyrene	ND		0.00600	1	03/17/2021 06:05	WG1635137
1-Methylnaphthalene	0.0249		0.0200	1	03/17/2021 06:05	WG1635137
2-Methylnaphthalene	0.0573		0.0200	1	03/17/2021 06:05	WG1635137
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 06:05	WG1635137
(S) p-Terphenyl-d14	87.5		23.0-120		03/17/2021 06:05	WG1635137
(S) Nitrobenzene-d5	72.1		14.0-149		03/17/2021 06:05	WG1635137
(S) 2-Fluorobiphenyl	59.4		34.0-125		03/17/2021 06:05	WG1635137

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	1.95		1	03/16/2021 08:33	WG1633551

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	10.3		1.00	1	03/15/2021 18:31	WG1632838

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:31	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.52	T8	1	03/15/2021 03:21	WG1634562

Sample Narrative:

L1325290-08 WG1634562: 8.52 at 20.5C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	295		10.0	1	03/11/2021 10:04	WG1632787

Mercury by Method 7471A

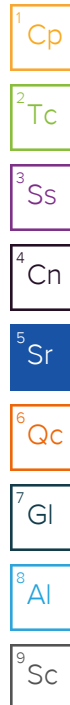
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/12/2021 11:30	WG1632816

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/12/2021 16:38	WG1632838
Barium	68.5		0.500	1	03/12/2021 16:38	WG1632838
Cadmium	ND		0.500	1	03/12/2021 16:38	WG1632838
Chromium	10.3		1.00	1	03/12/2021 16:38	WG1632838
Copper	9.34		2.00	1	03/12/2021 16:38	WG1632838
Lead	6.58		0.500	1	03/12/2021 16:38	WG1632838
Nickel	9.01	Q1	2.00	1	03/12/2021 16:38	WG1632838
Selenium	ND		2.00	1	03/12/2021 16:38	WG1632838
Silver	ND		1.00	1	03/12/2021 16:38	WG1632838
Zinc	29.4		5.00	1	03/12/2021 16:38	WG1632838

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.000896		0.000500	1	03/13/2021 09:03	WG1633831
Toluene	ND		0.00500	1	03/13/2021 09:03	WG1633831
Ethylbenzene	ND		0.000500	1	03/13/2021 09:03	WG1633831
Total Xylene	0.00806		0.00150	1	03/13/2021 09:03	WG1633831
TPH (GC/FID) Low Fraction	0.284		0.100	1	03/13/2021 09:03	WG1633831



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	110		77.0-120		03/13/2021 09:03	WG1633831
(S) a,a,a-Trifluorotoluene(PID)	101		72.0-128		03/13/2021 09:03	WG1633831

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	5.12		4.00	1	03/17/2021 10:13	WG1635150
(S) o-Terphenyl	56.5		18.0-148		03/17/2021 10:13	WG1635150

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 06:22	WG1635137
Acenaphthene	ND		0.00600	1	03/17/2021 06:22	WG1635137
Acenaphthylene	ND		0.00600	1	03/17/2021 06:22	WG1635137
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 06:22	WG1635137
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 06:22	WG1635137
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 06:22	WG1635137
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 06:22	WG1635137
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 06:22	WG1635137
Chrysene	ND		0.00600	1	03/17/2021 06:22	WG1635137
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 06:22	WG1635137
Fluoranthene	ND		0.00600	1	03/17/2021 06:22	WG1635137
Fluorene	ND		0.00600	1	03/17/2021 06:22	WG1635137
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 06:22	WG1635137
Naphthalene	ND		0.0200	1	03/17/2021 06:22	WG1635137
Phenanthrene	ND		0.00600	1	03/17/2021 06:22	WG1635137
Pyrene	ND		0.00600	1	03/17/2021 06:22	WG1635137
1-Methylnaphthalene	ND		0.0200	1	03/17/2021 06:22	WG1635137
2-Methylnaphthalene	ND		0.0200	1	03/17/2021 06:22	WG1635137
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 06:22	WG1635137
(S) p-Terphenyl-d14	90.8		23.0-120		03/17/2021 06:22	WG1635137
(S) Nitrobenzene-d5	66.9		14.0-149		03/17/2021 06:22	WG1635137
(S) 2-Fluorobiphenyl	61.7		34.0-125		03/17/2021 06:22	WG1635137

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	6.19		1	03/16/2021 08:36	WG1633551

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	23.0		1.00	1	03/15/2021 18:31	WG1632838

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:31	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.68	T8	1	03/15/2021 03:21	WG1634562

Sample Narrative:

L1325290-09 WG1634562: 8.68 at 20.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	528		10.0	1	03/11/2021 10:04	WG1632787

Mercury by Method 7471A

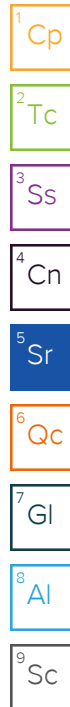
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/12/2021 10:40	WG1632816

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/12/2021 17:28	WG1632838
Barium	95.1		0.500	1	03/12/2021 17:28	WG1632838
Cadmium	0.672		0.500	1	03/12/2021 17:28	WG1632838
Chromium	23.0		1.00	1	03/12/2021 17:28	WG1632838
Copper	21.7		2.00	1	03/12/2021 17:28	WG1632838
Lead	12.4		0.500	1	03/12/2021 17:28	WG1632838
Nickel	21.4		2.00	1	03/12/2021 17:28	WG1632838
Selenium	ND		2.00	1	03/12/2021 17:28	WG1632838
Silver	ND		1.00	1	03/12/2021 17:28	WG1632838
Zinc	74.9		5.00	1	03/12/2021 17:28	WG1632838

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.000500	1	03/13/2021 09:25	WG1633831
Toluene	ND		0.00500	1	03/13/2021 09:25	WG1633831
Ethylbenzene	ND		0.000500	1	03/13/2021 09:25	WG1633831
Total Xylene	0.00940		0.00150	1	03/13/2021 09:25	WG1633831
TPH (GC/FID) Low Fraction	0.112		0.100	1	03/13/2021 09:25	WG1633831



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	110		77.0-120		03/13/2021 09:25	WG1633831
(S) a,a,a-Trifluorotoluene(PID)	103		72.0-128		03/13/2021 09:25	WG1633831

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	03/17/2021 10:27	WG1635150
(S) o-Terphenyl	66.0		18.0-148		03/17/2021 10:27	WG1635150

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/16/2021 14:14	WG1635139
Acenaphthene	ND		0.00600	1	03/16/2021 14:14	WG1635139
Acenaphthylene	ND		0.00600	1	03/16/2021 14:14	WG1635139
Benzo(a)anthracene	ND		0.00600	1	03/16/2021 14:14	WG1635139
Benzo(a)pyrene	ND		0.00600	1	03/16/2021 14:14	WG1635139
Benzo(b)fluoranthene	ND		0.00600	1	03/16/2021 14:14	WG1635139
Benzo(g,h,i)perylene	ND		0.00600	1	03/16/2021 14:14	WG1635139
Benzo(k)fluoranthene	ND		0.00600	1	03/16/2021 14:14	WG1635139
Chrysene	ND		0.00600	1	03/16/2021 14:14	WG1635139
Dibenz(a,h)anthracene	ND		0.00600	1	03/16/2021 14:14	WG1635139
Fluoranthene	ND		0.00600	1	03/16/2021 14:14	WG1635139
Fluorene	ND		0.00600	1	03/16/2021 14:14	WG1635139
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/16/2021 14:14	WG1635139
Naphthalene	ND		0.0200	1	03/16/2021 14:14	WG1635139
Phenanthrene	ND		0.00600	1	03/16/2021 14:14	WG1635139
Pyrene	ND		0.00600	1	03/16/2021 14:14	WG1635139
1-Methylnaphthalene	ND		0.0200	1	03/16/2021 14:14	WG1635139
2-Methylnaphthalene	ND		0.0200	1	03/16/2021 14:14	WG1635139
2-Chloronaphthalene	ND		0.0200	1	03/16/2021 14:14	WG1635139
(S) p-Terphenyl-d14	72.7		23.0-120		03/16/2021 14:14	WG1635139
(S) Nitrobenzene-d5	51.3		14.0-149		03/16/2021 14:14	WG1635139
(S) 2-Fluorobiphenyl	62.0		34.0-125		03/16/2021 14:14	WG1635139

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3631007-1 03/15/21 18:27

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Chromium,Hexavalent	U		0.640	2.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1325025-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1325025-01 03/15/21 18:28 • (DUP) R3631007-3 03/15/21 18:29

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

L1325772-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1325772-02 03/15/21 18:32 • (DUP) R3631007-4 03/15/21 18:32

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

Laboratory Control Sample (LCS)

(LCS) R3631007-2 03/15/21 18:27

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chromium,Hexavalent	24.0	24.1	100	80.0-120	

L1326273-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1326273-01 03/15/21 18:36 • (MS) R3631007-5 03/15/21 18:36 • (MSD) R3631007-6 03/15/21 18:36

	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	%	%		%			%	%
Chromium,Hexavalent	20.0	ND	9.72	9.37	48.6	46.8	1	75.0-125	J6	J6	3.74	20

L1326273-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1326273-01 03/15/21 18:36 • (MS) R3631007-7 03/15/21 18:36

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/kg	mg/kg	mg/kg	%		%	
Chromium,Hexavalent	695	ND	663	95.4	50	75.0-125	

L1325290-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1325290-01 03/15/21 03:21 • (DUP) R3630668-2 03/15/21 03:21

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	8.37	8.41	1	0.477		1

Sample Narrative:

OS: 8.37 at 21.9C

DUP: 8.41 at 21.9C

L1326620-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1326620-01 03/15/21 03:21 • (DUP) R3630668-3 03/15/21 03:21

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	8.45	8.43	1	0.237		1

Sample Narrative:

OS: 8.45 at 20.9C

DUP: 8.43 at 20.6C

Laboratory Control Sample (LCS)

(LCS) R3630668-1 03/15/21 03:21

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

Sample Narrative:

LCS: 10.05 at 22.7C



Method Blank (MB)

(MB) R3629583-1 03/11/21 10:04

	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

L1325290-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1325290-06 03/11/21 10:04 • (DUP) R3629583-3 03/11/21 10:04

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	699	715	1	2.26		20

Laboratory Control Sample (LCS)

(LCS) R3629583-2 03/11/21 10:04

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	umhos/cm	umhos/cm	%	%	
Specific Conductance	385	386	100	85.0-115	

Method Blank (MB)

(MB) R3630107-1 03/12/21 10:35

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3630107-2 03/12/21 10:38

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	mg/kg	mg/kg	%	%	
Mercury	0.500	0.463	92.6	80.0-120	

L1325290-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325290-09 03/12/21 10:40 • (MS) R3630107-3 03/12/21 10:43 • (MSD) R3630107-4 03/12/21 10:45

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Mercury	0.500	ND	0.473	0.482	94.7	96.5	1	75.0-125			1.89	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3630361-1 03/12/21 16:32

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Chromium	U		0.133	1.00
Copper	U		0.400	2.00
Lead	U		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

Laboratory Control Sample (LCS)

(LCS) R3630361-2 03/12/21 16:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	95.7	95.7	80.0-120	
Barium	100	102	102	80.0-120	
Cadmium	100	97.2	97.2	80.0-120	
Chromium	100	97.2	97.2	80.0-120	
Copper	100	96.0	96.0	80.0-120	
Lead	100	98.5	98.5	80.0-120	
Nickel	100	100	100	80.0-120	
Selenium	100	103	103	80.0-120	
Silver	20.0	19.1	95.5	80.0-120	
Zinc	100	98.7	98.7	80.0-120	

L1325290-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325290-08 03/12/21 16:38 • (MS) R3630361-5 03/12/21 16:46 • (MSD) R3630361-6 03/12/21 16:49

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	ND	98.7	90.3	98.0	89.6	1	75.0-125			8.88	20
Barium	100	68.5	167	150	98.8	81.6	1	75.0-125			10.9	20
Cadmium	100	ND	101	92.8	101	92.4	1	75.0-125			8.39	20
Chromium	100	10.3	112	103	101	92.3	1	75.0-125			8.48	20
Copper	100	9.34	109	100	100	90.9	1	75.0-125			8.77	20
Lead	100	6.58	110	102	104	95.2	1	75.0-125			7.82	20
Nickel	100	9.01	117	107	108	97.8	1	75.0-125			9.01	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1325290-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325290-08 03/12/21 16:38 • (MS) R3630361-5 03/12/21 16:46 • (MSD) R3630361-6 03/12/21 16:49

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Selenium	100	ND	105	97.0	105	97.0	1	75.0-125			7.93	20
Silver	20.0	ND	19.7	18.1	98.6	90.4	1	75.0-125			8.71	20
Zinc	100	29.4	130	120	101	90.1	1	75.0-125			8.42	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3630405-3 03/13/21 01:40

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	U		0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	105			72.0-128

Laboratory Control Sample (LCS)

(LCS) R3630405-1 03/12/21 23:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.95	90.0	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			106	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			114	72.0-128	

Laboratory Control Sample (LCS)

(LCS) R3630405-2 03/13/21 00:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0458	91.6	76.0-121	
Toluene	0.0500	0.0443	88.6	80.0-120	
Ethylbenzene	0.0500	0.0455	91.0	80.0-124	
Total Xylene	0.150	0.142	94.7	37.0-160	
(S) a,a,a-Trifluorotoluene(FID)			114	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			106	72.0-128	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3631333-3 03/16/21 13:24

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Total Xylene	U		0.000460	0.00150
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	106			72.0-128

Laboratory Control Sample (LCS)

(LCS) R3631333-1 03/16/21 11:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Xylene	0.150	0.167	111	37.0-160	
(S) a,a,a-Trifluorotoluene(FID)			114	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			104	72.0-128	

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3631376-1 03/16/21 12:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	65.2			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3631376-2 03/16/21 13:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	40.8	81.6	50.0-150	
(S) o-Terphenyl			97.0	18.0-148	

L1325290-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325290-02 03/16/21 13:26 • (MS) R3631376-3 03/16/21 13:40 • (MSD) R3631376-4 03/16/21 13:54

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) High Fraction	47.0	ND	26.4	31.4	56.2	66.0	1	50.0-150			17.3	20
(S) o-Terphenyl					66.8	77.4		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3631494-1 03/16/21 20:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	45.0			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3631494-2 03/16/21 21:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	29.7	59.4	50.0-150	
(S) o-Terphenyl			68.8	18.0-148	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3631855-1 03/17/21 09:38

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	57.8			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3631855-2 03/17/21 10:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	36.6	73.2	50.0-150	
(S) o-Terphenyl			83.3	18.0-148	

L1325745-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325745-09 03/17/21 16:48 • (MS) R3631855-3 03/17/21 17:01 • (MSD) R3631855-4 03/17/21 17:15

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) High Fraction	49.5	9.44	42.5	42.4	66.8	66.6	2	50.0-150			0.236	20
(S) o-Terphenyl					75.9	70.3		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3631532-2 03/16/21 23:36

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	67.7			14.0-149
(S) 2-Fluorobiphenyl	65.3			34.0-125
(S) p-Terphenyl-d14	91.7			23.0-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3631532-1 03/16/21 23:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0528	66.0	50.0-126	
Acenaphthene	0.0800	0.0568	71.0	50.0-120	
Acenaphthylene	0.0800	0.0596	74.5	50.0-120	
Benzo(a)anthracene	0.0800	0.0587	73.4	45.0-120	
Benzo(a)pyrene	0.0800	0.0489	61.1	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0535	66.9	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0566	70.8	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0546	68.3	49.0-125	
Chrysene	0.0800	0.0599	74.9	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0528	66.0	47.0-125	
Fluoranthene	0.0800	0.0501	62.6	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3631532-1 03/16/21 23:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0569	71.1	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0521	65.1	46.0-125	
Naphthalene	0.0800	0.0582	72.8	50.0-120	
Phenanthrene	0.0800	0.0528	66.0	47.0-120	
Pyrene	0.0800	0.0617	77.1	43.0-123	
1-Methylnaphthalene	0.0800	0.0562	70.3	51.0-121	
2-Methylnaphthalene	0.0800	0.0527	65.9	50.0-120	
2-Chloronaphthalene	0.0800	0.0542	67.8	50.0-120	
(S) Nitrobenzene-d5			80.3	14.0-149	
(S) 2-Fluorobiphenyl			66.3	34.0-125	
(S) p-Terphenyl-d14			87.1	23.0-120	

L1325290-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325290-03 03/17/21 00:11 • (MS) R3631532-3 03/17/21 00:29 • (MSD) R3631532-4 03/17/21 00:47

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	0.0800	ND	0.0560	0.0537	70.0	67.1	1	10.0-145			4.19	30
Acenaphthene	0.0800	ND	0.0582	0.0595	72.8	74.4	1	14.0-127			2.21	27
Acenaphthylene	0.0800	ND	0.0610	0.0626	76.3	78.3	1	21.0-124			2.59	25
Benzo(a)anthracene	0.0800	ND	0.0597	0.0584	74.6	73.0	1	10.0-139			2.20	30
Benzo(a)pyrene	0.0800	ND	0.0599	0.0602	74.9	75.3	1	10.0-141			0.500	31
Benzo(b)fluoranthene	0.0800	ND	0.0577	0.0566	72.1	70.8	1	10.0-140			1.92	36
Benzo(g,h,i)perylene	0.0800	ND	0.0602	0.0615	75.3	76.9	1	10.0-140			2.14	33
Benzo(k)fluoranthene	0.0800	ND	0.0579	0.0580	72.4	72.5	1	10.0-137			0.173	31
Chrysene	0.0800	ND	0.0623	0.0615	77.9	76.9	1	10.0-145			1.29	30
Dibenz(a,h)anthracene	0.0800	ND	0.0567	0.0560	70.9	70.0	1	10.0-132			1.24	31
Fluoranthene	0.0800	ND	0.0546	0.0536	68.3	67.0	1	10.0-153			1.85	33
Fluorene	0.0800	ND	0.0604	0.0605	75.5	75.6	1	11.0-130			0.165	29
Indeno(1,2,3-cd)pyrene	0.0800	ND	0.0555	0.0566	69.4	70.8	1	10.0-137			1.96	32
Naphthalene	0.0800	ND	0.0599	0.0601	74.9	75.1	1	10.0-135			0.333	27
Phenanthrene	0.0800	ND	0.0562	0.0564	70.3	70.5	1	10.0-144			0.355	31
Pyrene	0.0800	ND	0.0654	0.0652	81.8	81.5	1	10.0-148			0.306	35
1-Methylnaphthalene	0.0800	ND	0.0586	0.0604	73.3	75.5	1	10.0-142			3.03	28
2-Methylnaphthalene	0.0800	ND	0.0560	0.0568	70.0	71.0	1	10.0-137			1.42	28
2-Chloronaphthalene	0.0800	ND	0.0557	0.0562	69.6	70.3	1	29.0-120			0.894	24
(S) Nitrobenzene-d5					73.0	77.0		14.0-149				
(S) 2-Fluorobiphenyl					66.7	67.7		34.0-125				
(S) p-Terphenyl-d14					90.3	92.3		23.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3631390-2 03/16/21 13:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	46.0			14.0-149
(S) 2-Fluorobiphenyl	59.4			34.0-125
(S) p-Terphenyl-d14	69.1			23.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3631390-1 03/16/21 13:34

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0499	62.4	50.0-126	
Acenaphthene	0.0800	0.0480	60.0	50.0-120	
Acenaphthylene	0.0800	0.0513	64.1	50.0-120	
Benzo(a)anthracene	0.0800	0.0494	61.8	45.0-120	
Benzo(a)pyrene	0.0800	0.0440	55.0	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0454	56.8	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0463	57.9	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0463	57.9	49.0-125	
Chrysene	0.0800	0.0493	61.6	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0462	57.8	47.0-125	
Fluoranthene	0.0800	0.0510	63.8	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3631390-1 03/16/21 13:34

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0510	63.8	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0469	58.6	46.0-125	
Naphthalene	0.0800	0.0460	57.5	50.0-120	
Phenanthrene	0.0800	0.0481	60.1	47.0-120	
Pyrene	0.0800	0.0484	60.5	43.0-123	
1-Methylnaphthalene	0.0800	0.0491	61.4	51.0-121	
2-Methylnaphthalene	0.0800	0.0475	59.4	50.0-120	
2-Chloronaphthalene	0.0800	0.0487	60.9	50.0-120	
(S) Nitrobenzene-d5			47.7	14.0-149	
(S) 2-Fluorobiphenyl			59.8	34.0-125	
(S) p-Terphenyl-d14			64.3	23.0-120	

L1325977-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325977-01 03/16/21 17:51 • (MS) R3631390-3 03/16/21 18:11 • (MSD) R3631390-4 03/16/21 18:31

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	0.0800	ND	0.0463	0.0471	57.9	58.9	1	10.0-145			1.71	30
Acenaphthene	0.0800	ND	0.0477	0.0471	59.6	58.9	1	14.0-127			1.27	27
Acenaphthylene	0.0800	ND	0.0493	0.0494	61.6	61.8	1	21.0-124			0.203	25
Benzo(a)anthracene	0.0800	ND	0.0460	0.0463	57.5	57.9	1	10.0-139			0.650	30
Benzo(a)pyrene	0.0800	ND	0.0462	0.0462	57.8	57.8	1	10.0-141			0.000	31
Benzo(b)fluoranthene	0.0800	ND	0.0473	0.0471	59.1	58.9	1	10.0-140			0.424	36
Benzo(g,h,i)perylene	0.0800	ND	0.0500	0.0506	62.5	63.3	1	10.0-140			1.19	33
Benzo(k)fluoranthene	0.0800	ND	0.0467	0.0468	58.4	58.5	1	10.0-137			0.214	31
Chrysene	0.0800	ND	0.0495	0.0502	61.9	62.8	1	10.0-145			1.40	30
Dibenz(a,h)anthracene	0.0800	ND	0.0446	0.0458	55.8	57.3	1	10.0-132			2.65	31
Fluoranthene	0.0800	ND	0.0517	0.0511	64.6	63.9	1	10.0-153			1.17	33
Fluorene	0.0800	ND	0.0496	0.0498	62.0	62.3	1	11.0-130			0.402	29
Indeno(1,2,3-cd)pyrene	0.0800	ND	0.0458	0.0451	57.3	56.4	1	10.0-137			1.54	32
Naphthalene	0.0800	ND	0.0467	0.0441	58.4	55.1	1	10.0-135			5.73	27
Phenanthrene	0.0800	ND	0.0487	0.0488	60.9	61.0	1	10.0-144			0.205	31
Pyrene	0.0800	ND	0.0515	0.0508	64.4	63.5	1	10.0-148			1.37	35
1-Methylnaphthalene	0.0800	ND	0.0487	0.0474	60.9	59.2	1	10.0-142			2.71	28
2-Methylnaphthalene	0.0800	ND	0.0462	0.0446	57.7	55.7	1	10.0-137			3.52	28
2-Chloronaphthalene	0.0800	ND	0.0479	0.0467	59.6	58.1	1	29.0-120			2.54	24
(S) Nitrobenzene-d5					43.4	43.6		14.0-149				
(S) 2-Fluorobiphenyl					56.1	58.8		34.0-125				
(S) p-Terphenyl-d14					60.1	65.0		23.0-120				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

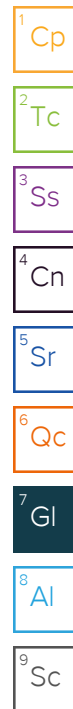
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
T8	Sample(s) received past/too close to holding time expiration.



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122


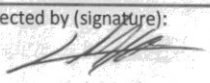
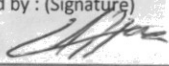
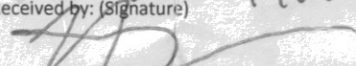

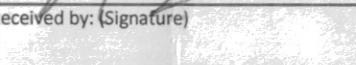
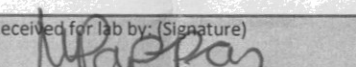
Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	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.



Report to: Matt Kasten		Billing Information: ENTRADA		Pres Chk		Analysis / Container / Preservative										Chain of Custody Page ____ of ____					
		Email To: mkasten@entradainc.com		<div style="text-align: center;">  <p> 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 </p> </div>										<div style="border: 1px solid black; padding: 5px;"> L# 1325290 H073 </div>							
Project Description: Vega Pad 5A		City/State Collected:		COGCC Table 910-1 Soil												Acctnum:					
Phone: Fax:		Client Project # 020-063														Lab Project #		Template:			
Collected by (print): Chance Holder		Site/Facility ID #														P.O. #		Prelogin:			
Collected by (signature): 		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		TSR:	
Immediately Packed on Ice: <input checked="" type="checkbox"/> N <input type="checkbox"/> Y																				PB:	
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs											Shipped Via:			
20210309 - NVSA - SE WALL - 18" - 1010		GRAB	SS	18"	3/9/21	1010	3	<input checked="" type="checkbox"/>										Remarks			
20210309 - NVSA - SWALL - 18" - 1015				18"		1015	3	<input checked="" type="checkbox"/>										Sample # (lab only)			
20210309 - NVSA - SWALL - 18" - 1020				18"		1020	3	<input checked="" type="checkbox"/>										-01			
20210309 - NVSA - NBOT - 14" - 1200				14"		1200	3	<input checked="" type="checkbox"/>										02			
20210309 - NVSA - WT WALL - 16" - 1435				10'		1435	3	<input checked="" type="checkbox"/>										03			
20210309 - NVSA - NW WALL - 18" - 1300				18"		1300	3	<input checked="" type="checkbox"/>										04			
20210309 - NVSA - ET WALL - 10" - 1440				10'		1440	3	<input checked="" type="checkbox"/>										05			
20210309 - NVSA - S BOT - 24" - 1400				24"		1400	3	<input checked="" type="checkbox"/>										06			
20210309 - NVSA - ST WALL - 10" - 1430				10'		1430	3	<input checked="" type="checkbox"/>										07			
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other		Remarks:		pH _____ Temp _____ Flow _____ Other _____										Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> Y <input type="checkbox"/> N							
Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking # 9463 1917 1395																			
Relinquished by: (Signature) 		Date: 3/9/21	Time: 1800	Received by: (Signature) 		Trip Blank Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		HCL / MeOH TBR													
Relinquished by: (Signature) 		Date: 3/5/21	Time: 1730	Received by: (Signature) 		Bottles Received: 27		°C										If preservation required by Login: Date/Time			
Relinquished by: (Signature)		Date:	Time:	Received for lab by: (Signature) 		Date: 3-10-21		Time: 900										Hold:			
																		Condition: NCF 10K			

Entrada Consulting Group

Sample Delivery Group: L1325772
Samples Received: 03/11/2021
Project Number: 020-063
Description: N Vega Pad 5A

Report To: Matt Kasten
240 Mesa Avenue
Grand Junction, CO 81501

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

20210310-NV5A-BF-6"-815 L1325772-01 Solid

Collected by
Chance Holder

Collected date/time
03/10/21 08:15

Received date/time
03/11/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1634598	1	03/18/21 09:39	03/18/21 09:39	CCE	Mt. Juliet, TN
Calculated Results	WG1633812	1	03/12/21 16:33	03/15/21 18:32	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:32	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634563	1	03/14/21 20:40	03/15/21 03:35	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1634060	1	03/13/21 04:01	03/13/21 09:31	AMH	Mt. Juliet, TN
Mercury by Method 7471A	WG1634466	1	03/14/21 12:47	03/14/21 17:29	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1633812	1	03/12/21 16:33	03/13/21 17:21	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1634279	1	03/11/21 22:24	03/16/21 00:35	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1635150	1	03/16/21 23:51	03/17/21 10:40	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635468	1	03/16/21 17:56	03/17/21 07:36	AAT	Mt. Juliet, TN

20210310-NV5A-MBF-6"-1130 L1325772-02 Solid

Collected by
Chance Holder

Collected date/time
03/10/21 11:30

Received date/time
03/11/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1634598	1	03/18/21 09:41	03/18/21 09:41	CCE	Mt. Juliet, TN
Calculated Results	WG1633812	1	03/12/21 16:33	03/15/21 18:32	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:32	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634563	1	03/14/21 20:40	03/15/21 03:35	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1634060	1	03/13/21 04:01	03/13/21 09:31	AMH	Mt. Juliet, TN
Mercury by Method 7471A	WG1634075	1	03/13/21 01:33	03/14/21 16:09	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1633812	1	03/12/21 16:33	03/13/21 17:24	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1634279	100	03/11/21 22:24	03/16/21 03:42	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1635821	1	03/17/21 07:10	03/17/21 18:52	JN	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635468	1	03/16/21 17:56	03/17/21 04:20	AAT	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

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	13.4		1	03/18/2021 09:39	WG1634598

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	11.4		1.00	1	03/15/2021 18:32	WG1633812

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:32	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.35	T8	1	03/15/2021 03:35	WG1634563

Sample Narrative:

L1325772-01 WG1634563: 8.35 at 20.9C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	5640		10.0	1	03/13/2021 09:31	WG1634060

Mercury by Method 7471A

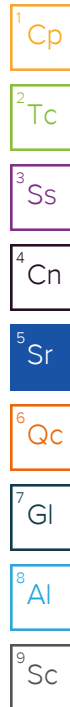
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/14/2021 17:29	WG1634466

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.51		2.00	1	03/13/2021 17:21	WG1633812
Barium	420		0.500	1	03/13/2021 17:21	WG1633812
Cadmium	ND		0.500	1	03/13/2021 17:21	WG1633812
Chromium	11.4		1.00	1	03/13/2021 17:21	WG1633812
Copper	11.3		2.00	1	03/13/2021 17:21	WG1633812
Lead	7.15		0.500	1	03/13/2021 17:21	WG1633812
Nickel	12.0		2.00	1	03/13/2021 17:21	WG1633812
Selenium	ND		2.00	1	03/13/2021 17:21	WG1633812
Silver	ND		1.00	1	03/13/2021 17:21	WG1633812
Zinc	32.7		5.00	1	03/13/2021 17:21	WG1633812

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.000605		0.000500	1	03/16/2021 00:35	WG1634279
Toluene	ND		0.00500	1	03/16/2021 00:35	WG1634279
Ethylbenzene	ND		0.000500	1	03/16/2021 00:35	WG1634279
Total Xylene	ND		0.00150	1	03/16/2021 00:35	WG1634279
TPH (GC/FID) Low Fraction	ND		0.100	1	03/16/2021 00:35	WG1634279



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	111		77.0-120		03/16/2021 00:35	WG1634279
(S) a,a,a-Trifluorotoluene(PID)	102		72.0-128		03/16/2021 00:35	WG1634279

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	03/17/2021 10:40	WG1635150
(S) o-Terphenyl	53.9		18.0-148		03/17/2021 10:40	WG1635150

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 07:36	WG1635468
Acenaphthene	ND		0.00600	1	03/17/2021 07:36	WG1635468
Acenaphthylene	ND		0.00600	1	03/17/2021 07:36	WG1635468
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 07:36	WG1635468
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 07:36	WG1635468
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 07:36	WG1635468
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 07:36	WG1635468
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 07:36	WG1635468
Chrysene	ND		0.00600	1	03/17/2021 07:36	WG1635468
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 07:36	WG1635468
Fluoranthene	ND		0.00600	1	03/17/2021 07:36	WG1635468
Fluorene	ND		0.00600	1	03/17/2021 07:36	WG1635468
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 07:36	WG1635468
Naphthalene	ND		0.0200	1	03/17/2021 07:36	WG1635468
Phenanthrene	ND		0.00600	1	03/17/2021 07:36	WG1635468
Pyrene	ND		0.00600	1	03/17/2021 07:36	WG1635468
1-Methylnaphthalene	ND		0.0200	1	03/17/2021 07:36	WG1635468
2-Methylnaphthalene	ND		0.0200	1	03/17/2021 07:36	WG1635468
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 07:36	WG1635468
(S) p-Terphenyl-d14	74.7		23.0-120		03/17/2021 07:36	WG1635468
(S) Nitrobenzene-d5	59.4		14.0-149		03/17/2021 07:36	WG1635468
(S) 2-Fluorobiphenyl	61.5		34.0-125		03/17/2021 07:36	WG1635468

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	8.96		1	03/18/2021 09:41	WG1634598

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	17.4		1.00	1	03/15/2021 18:32	WG1633812

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:32	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.27	T8	1	03/15/2021 03:35	WG1634563

Sample Narrative:

L1325772-02 WG1634563: 8.27 at 21C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	3920		10.0	1	03/13/2021 09:31	WG1634060

Mercury by Method 7471A

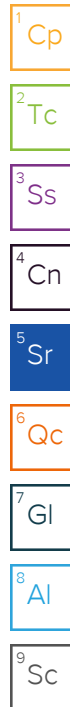
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/14/2021 16:09	WG1634075

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.63		2.00	1	03/13/2021 17:24	WG1633812
Barium	257		0.500	1	03/13/2021 17:24	WG1633812
Cadmium	ND		0.500	1	03/13/2021 17:24	WG1633812
Chromium	17.4		1.00	1	03/13/2021 17:24	WG1633812
Copper	16.9		2.00	1	03/13/2021 17:24	WG1633812
Lead	9.33		0.500	1	03/13/2021 17:24	WG1633812
Nickel	17.6		2.00	1	03/13/2021 17:24	WG1633812
Selenium	ND		2.00	1	03/13/2021 17:24	WG1633812
Silver	ND		1.00	1	03/13/2021 17:24	WG1633812
Zinc	51.0		5.00	1	03/13/2021 17:24	WG1633812

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.0500	100	03/16/2021 03:42	WG1634279
Toluene	ND		0.500	100	03/16/2021 03:42	WG1634279
Ethylbenzene	0.624		0.0500	100	03/16/2021 03:42	WG1634279
Total Xylene	9.82		0.150	100	03/16/2021 03:42	WG1634279
TPH (GC/FID) Low Fraction	227		10.0	100	03/16/2021 03:42	WG1634279



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	108		77.0-120		03/16/2021 03:42	WG1634279
(S) a,a,a-Trifluorotoluene(PID)	105		72.0-128		03/16/2021 03:42	WG1634279

Sample Narrative:

L1325772-02 WG1634279: Non-target compounds too high to run at a lower dilution.

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	51.5		4.00	1	03/17/2021 18:52	WG1635821
(S) o-Terphenyl	52.1		18.0-148		03/17/2021 18:52	WG1635821

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 04:20	WG1635468
Acenaphthene	ND		0.00600	1	03/17/2021 04:20	WG1635468
Acenaphthylene	ND		0.00600	1	03/17/2021 04:20	WG1635468
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 04:20	WG1635468
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 04:20	WG1635468
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 04:20	WG1635468
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 04:20	WG1635468
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 04:20	WG1635468
Chrysene	ND		0.00600	1	03/17/2021 04:20	WG1635468
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 04:20	WG1635468
Fluoranthene	ND		0.00600	1	03/17/2021 04:20	WG1635468
Fluorene	ND		0.00600	1	03/17/2021 04:20	WG1635468
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 04:20	WG1635468
Naphthalene	0.0743		0.0200	1	03/17/2021 04:20	WG1635468
Phenanthrene	ND		0.00600	1	03/17/2021 04:20	WG1635468
Pyrene	ND		0.00600	1	03/17/2021 04:20	WG1635468
1-Methylnaphthalene	0.0635		0.0200	1	03/17/2021 04:20	WG1635468
2-Methylnaphthalene	0.174		0.0200	1	03/17/2021 04:20	WG1635468
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 04:20	WG1635468
(S) p-Terphenyl-d14	89.1		23.0-120		03/17/2021 04:20	WG1635468
(S) Nitrobenzene-d5	112		14.0-149		03/17/2021 04:20	WG1635468
(S) 2-Fluorobiphenyl	70.4		34.0-125		03/17/2021 04:20	WG1635468

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3631007-1 03/15/21 18:27

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Chromium,Hexavalent	U		0.640	2.00

L1325025-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1325025-01 03/15/21 18:28 • (DUP) R3631007-3 03/15/21 18:29

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

L1325772-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1325772-02 03/15/21 18:32 • (DUP) R3631007-4 03/15/21 18:32

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

Laboratory Control Sample (LCS)

(LCS) R3631007-2 03/15/21 18:27

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chromium,Hexavalent	24.0	24.1	100	80.0-120	

L1326273-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1326273-01 03/15/21 18:36 • (MS) R3631007-5 03/15/21 18:36 • (MSD) R3631007-6 03/15/21 18:36

	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	%	%		%			%	%
Chromium,Hexavalent	20.0	ND	9.72	9.37	48.6	46.8	1	75.0-125	J6	J6	3.74	20

L1326273-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1326273-01 03/15/21 18:36 • (MS) R3631007-7 03/15/21 18:36

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/kg	mg/kg	mg/kg	%		%	
Chromium,Hexavalent	695	ND	663	95.4	50	75.0-125	

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L1325300-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1325300-01 03/15/21 03:35 • (DUP) R3630669-2 03/15/21 03:35

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	8.29	8.26	1	0.363		1

Sample Narrative:

OS: 8.29 at 19.9C

DUP: 8.26 at 19.8C



L1325921-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1325921-01 03/15/21 03:35 • (DUP) R3630669-3 03/15/21 03:35

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	9.62	9.64	1	0.208		1

Sample Narrative:

OS: 9.62 at 20.7C

DUP: 9.64 at 21.1C

Laboratory Control Sample (LCS)

(LCS) R3630669-1 03/15/21 03:35

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

Sample Narrative:

LCS: 10.04 at 20.3C

Method Blank (MB)

(MB) R3630336-1 03/13/21 09:31

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

L1324834-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1324834-02 03/13/21 09:31 • (DUP) R3630336-3 03/13/21 09:31

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	3420	3420	1	0.000		20

L1326082-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1326082-02 03/13/21 09:31 • (DUP) R3630336-4 03/13/21 09:31

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	42.3	42.9	1	1.41		20

Laboratory Control Sample (LCS)

(LCS) R3630336-2 03/13/21 09:31

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	385	383	99.5	85.0-115	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3630623-1 03/14/21 15:48

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3630623-2 03/14/21 15:50

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Mercury	0.500	0.464	92.7	80.0-120	

L1325922-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325922-07 03/14/21 15:52 • (MS) R3630623-3 03/14/21 15:54 • (MSD) R3630623-4 03/14/21 15:56

	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	%	%		%			%	%
Mercury	0.500	ND	0.481	0.480	96.2	95.9	1	75.0-125			0.257	20

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3630624-1 03/14/21 16:45

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3630624-2 03/14/21 16:47

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Mercury	0.500	0.458	91.5	80.0-120	

L1323380-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1323380-01 03/14/21 16:53 • (MS) R3630624-3 03/14/21 16:55 • (MSD) R3630624-4 03/14/21 16:57

	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	%	%		%			%	%
Mercury	0.500	ND	0.425	0.481	84.9	96.3	1	75.0-125			12.5	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3630525-1 03/13/21 16:02

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Chromium	U		0.133	1.00
Copper	U		0.400	2.00
Lead	U		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) R3630525-2 03/13/21 16:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	102	102	80.0-120	
Barium	100	105	105	80.0-120	
Cadmium	100	101	101	80.0-120	
Chromium	100	102	102	80.0-120	
Copper	100	101	101	80.0-120	
Lead	100	104	104	80.0-120	
Nickel	100	105	105	80.0-120	
Selenium	100	104	104	80.0-120	
Silver	20.0	18.5	92.4	80.0-120	
Zinc	100	102	102	80.0-120	

L1325745-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325745-10 03/13/21 16:07 • (MS) R3630525-5 03/13/21 16:16 • (MSD) R3630525-6 03/13/21 16:19

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	3.55	115	114	111	110	1	75.0-125			1.19	20
Barium	100	189	343	277	154	88.0	1	75.0-125	J5	J3	21.4	20
Cadmium	100	ND	110	108	110	108	1	75.0-125			1.90	20
Chromium	100	17.3	113	112	95.8	94.4	1	75.0-125			1.28	20
Copper	100	22.8	134	135	111	112	1	75.0-125			1.06	20
Lead	100	56.8	175	167	118	111	1	75.0-125			4.59	20
Nickel	100	7.85	119	117	111	109	1	75.0-125			1.23	20

L1325745-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325745-10 03/13/21 16:07 • (MS) R3630525-5 03/13/21 16:16 • (MSD) R3630525-6 03/13/21 16:19

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Selenium	100	ND	114	113	114	113	1	75.0-125			1.27	20
Silver	20.0	ND	20.8	20.4	104	102	1	75.0-125			1.90	20
Zinc	100	66.6	166	171	99.7	104	1	75.0-125			2.65	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3631278-3 03/15/21 18:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	U		0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	115			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	106			72.0-128

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

(LCS) R3631278-1 03/15/21 17:24 • (LCSD) R3631278-2 03/15/21 17:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	4.26	4.17	77.5	75.8	72.0-127			2.14	20
(S) a,a,a-Trifluorotoluene(FID)				97.4	97.9	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				106	107	72.0-128				

Laboratory Control Sample (LCS)

(LCS) R3631278-4 03/15/21 22:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0526	105	76.0-121	
Toluene	0.0500	0.0496	99.2	80.0-120	
Ethylbenzene	0.0500	0.0494	98.8	80.0-124	
Total Xylene	0.150	0.154	103	37.0-160	
(S) a,a,a-Trifluorotoluene(FID)			114	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			106	72.0-128	

1
Cp

2
Tc

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Ss

4
Cn

5
Sr

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Qc

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Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3631855-1 03/17/21 09:38

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	57.8			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3631855-2 03/17/21 10:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	36.6	73.2	50.0-150	
(S) o-Terphenyl			83.3	18.0-148	

L1325745-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325745-09 03/17/21 16:48 • (MS) R3631855-3 03/17/21 17:01 • (MSD) R3631855-4 03/17/21 17:15

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) High Fraction	49.5	9.44	42.5	42.4	66.8	66.6	2	50.0-150			0.236	20
(S) o-Terphenyl					75.9	70.3		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3631849-1 03/17/21 15:36

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	63.4			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3631849-2 03/17/21 15:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	42.9	85.8	50.0-150	
(S) o-Terphenyl			73.3	18.0-148	

L1326428-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1326428-10 03/17/21 21:16 • (MS) R3631849-3 03/17/21 21:29 • (MSD) R3631849-4 03/17/21 21:42

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) High Fraction	48.6	207	205	209	0.000	4.04	1	50.0-150	V	V	1.93	20
(S) o-Terphenyl					44.3	53.9		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3631550-2 03/17/21 01:04

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	70.7			14.0-149
(S) 2-Fluorobiphenyl	74.2			34.0-125
(S) p-Terphenyl-d14	90.3			23.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3631550-1 03/17/21 00:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0527	65.9	50.0-126	
Acenaphthene	0.0800	0.0590	73.8	50.0-120	
Acenaphthylene	0.0800	0.0595	74.4	50.0-120	
Benzo(a)anthracene	0.0800	0.0546	68.3	45.0-120	
Benzo(a)pyrene	0.0800	0.0476	59.5	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0581	72.6	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0611	76.4	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0570	71.3	49.0-125	
Chrysene	0.0800	0.0603	75.4	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0538	67.3	47.0-125	
Fluoranthene	0.0800	0.0570	71.3	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3631550-1 03/17/21 00:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0588	73.5	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0549	68.6	46.0-125	
Naphthalene	0.0800	0.0566	70.8	50.0-120	
Phenanthrene	0.0800	0.0549	68.6	47.0-120	
Pyrene	0.0800	0.0615	76.9	43.0-123	
1-Methylnaphthalene	0.0800	0.0601	75.1	51.0-121	
2-Methylnaphthalene	0.0800	0.0572	71.5	50.0-120	
2-Chloronaphthalene	0.0800	0.0567	70.9	50.0-120	
(S) Nitrobenzene-d5			74.8	14.0-149	
(S) 2-Fluorobiphenyl			75.5	34.0-125	
(S) p-Terphenyl-d14			86.3	23.0-120	

L1325470-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325470-01 03/17/21 01:22 • (MS) R3631550-3 03/17/21 01:40 • (MSD) R3631550-4 03/17/21 01:58

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	0.0800	ND	0.0531	0.0502	66.4	62.8	1	10.0-145			5.61	30
Acenaphthene	0.0800	ND	0.0575	0.0543	71.9	67.9	1	14.0-127			5.72	27
Acenaphthylene	0.0800	ND	0.0572	0.0556	71.5	69.5	1	21.0-124			2.84	25
Benzo(a)anthracene	0.0800	ND	0.0554	0.0521	69.3	65.1	1	10.0-139			6.14	30
Benzo(a)pyrene	0.0800	ND	0.0549	0.0510	68.6	63.8	1	10.0-141			7.37	31
Benzo(b)fluoranthene	0.0800	ND	0.0574	0.0543	71.8	67.9	1	10.0-140			5.55	36
Benzo(g,h,i)perylene	0.0800	ND	0.0603	0.0567	75.4	70.9	1	10.0-140			6.15	33
Benzo(k)fluoranthene	0.0800	ND	0.0581	0.0540	72.6	67.5	1	10.0-137			7.31	31
Chrysene	0.0800	ND	0.0594	0.0557	74.3	69.6	1	10.0-145			6.43	30
Dibenz(a,h)anthracene	0.0800	ND	0.0538	0.0498	67.3	62.3	1	10.0-132			7.72	31
Fluoranthene	0.0800	ND	0.0567	0.0535	70.9	66.9	1	10.0-153			5.81	33
Fluorene	0.0800	ND	0.0583	0.0557	72.9	69.6	1	11.0-130			4.56	29
Indeno(1,2,3-cd)pyrene	0.0800	ND	0.0550	0.0503	68.8	62.9	1	10.0-137			8.93	32
Naphthalene	0.0800	0.185	0.213	0.170	35.0	0.000	1	10.0-135		J6	22.5	27
Phenanthrene	0.0800	ND	0.0563	0.0534	70.4	66.8	1	10.0-144			5.29	31
Pyrene	0.0800	ND	0.0597	0.0572	74.6	71.5	1	10.0-148			4.28	35
1-Methylnaphthalene	0.0800	0.154	0.213	0.181	73.8	33.7	1	10.0-142			16.2	28
2-Methylnaphthalene	0.0800	0.264	0.335	0.279	88.8	18.8	1	10.0-137			18.2	28
2-Chloronaphthalene	0.0800	ND	0.0570	0.0542	71.3	67.8	1	29.0-120			5.04	24
(S) Nitrobenzene-d5					64.0	60.0		14.0-149				
(S) 2-Fluorobiphenyl					70.3	67.4		34.0-125				
(S) p-Terphenyl-d14					83.3	78.3		23.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

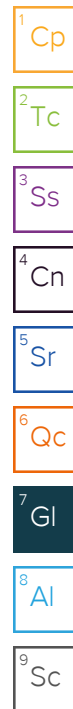
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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.
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
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ACCREDITATIONS & LOCATIONS

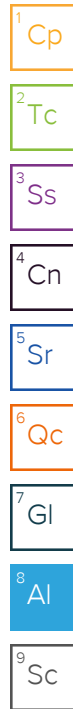
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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.



Entrada Consulting Group

Sample Delivery Group: L1325776
Samples Received: 03/11/2021
Project Number: 020-063
Description: N Vega Pad 5A

Report To: Matt Kasten
240 Mesa Avenue
Grand Junction, CO 81501

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

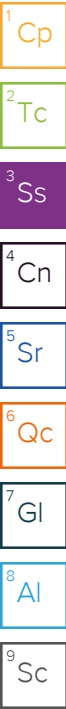
20210310-NV5A-NEWALL-18"-910 L1325776-01 Solid

Collected by
Chance Holder

Collected date/time
03/10/21 09:10

Received date/time
03/11/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1634598	1	03/18/21 09:44	03/18/21 09:44	CCE	Mt. Juliet, TN
Calculated Results	WG1633814	1	03/12/21 16:26	03/15/21 18:33	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:33	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634563	1	03/14/21 20:40	03/15/21 03:35	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1634060	1	03/13/21 04:01	03/13/21 09:31	AMH	Mt. Juliet, TN
Mercury by Method 7471A	WG1634466	1	03/14/21 12:47	03/14/21 17:31	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1633814	1	03/12/21 16:26	03/14/21 11:43	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1634279	1	03/11/21 22:24	03/16/21 00:58	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1635821	1	03/17/21 07:10	03/17/21 16:02	JN	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635468	1	03/16/21 17:56	03/17/21 04:38	AAT	Mt. Juliet, TN



20210310-NV5A-NTBOT-14'-1015 L1325776-02 Solid

Collected by
Chance Holder

Collected date/time
03/10/21 10:15

Received date/time
03/11/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1634598	1	03/18/21 09:47	03/18/21 09:47	CCE	Mt. Juliet, TN
Calculated Results	WG1633814	1	03/12/21 16:26	03/15/21 18:33	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:33	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634563	1	03/14/21 20:40	03/15/21 03:35	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1634060	1	03/13/21 04:01	03/13/21 09:31	AMH	Mt. Juliet, TN
Mercury by Method 7471A	WG1634466	1	03/14/21 12:47	03/14/21 17:32	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1633814	1	03/12/21 16:26	03/14/21 11:46	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1634279	1	03/11/21 22:24	03/16/21 01:52	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1636248	1	03/17/21 08:30	03/18/21 04:41	JN	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635468	1	03/16/21 17:56	03/17/21 04:56	AAT	Mt. Juliet, TN

20210310-NV5A-NTEWALL-10'-1030 L1325776-03 Solid

Collected by
Chance Holder

Collected date/time
03/10/21 10:30

Received date/time
03/11/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1634598	1	03/18/21 09:49	03/18/21 09:49	CCE	Mt. Juliet, TN
Calculated Results	WG1633814	1	03/12/21 16:26	03/15/21 18:33	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:33	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634563	1	03/14/21 20:40	03/15/21 03:35	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1634060	1	03/13/21 04:01	03/13/21 09:31	AMH	Mt. Juliet, TN
Mercury by Method 7471A	WG1634466	1	03/14/21 12:47	03/14/21 17:34	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1633814	1	03/12/21 16:26	03/14/21 11:49	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1634279	1.01	03/11/21 22:24	03/16/21 02:14	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1636248	1	03/17/21 08:30	03/18/21 04:55	JN	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635468	1	03/16/21 17:56	03/17/21 05:14	AAT	Mt. Juliet, TN

20210310-NV5A-NTWWALL-10'-1035 L1325776-04 Solid

Collected by
Chance Holder

Collected date/time
03/10/21 10:35

Received date/time
03/11/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1634598	1	03/18/21 09:52	03/18/21 09:52	CCE	Mt. Juliet, TN
Calculated Results	WG1633814	1	03/12/21 16:26	03/15/21 18:33	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:33	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634563	1	03/14/21 20:40	03/15/21 03:35	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1634060	1	03/13/21 04:01	03/13/21 09:31	AMH	Mt. Juliet, TN
Mercury by Method 7471A	WG1634466	1	03/14/21 12:47	03/14/21 17:36	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1633814	1	03/12/21 16:26	03/14/21 11:52	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1634279	1	03/11/21 22:24	03/16/21 02:36	JAH	Mt. Juliet, TN

SAMPLE SUMMARY

20210310-NV5A-NTWWALL-10'-1035 L1325776-04 Solid

Collected by
Chance Holder

Collected date/time
03/10/21 10:35

Received date/time
03/11/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1636248	1	03/17/21 08:30	03/18/21 05:08	JN	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635468	1	03/16/21 17:56	03/17/21 05:32	AAT	Mt. Juliet, TN

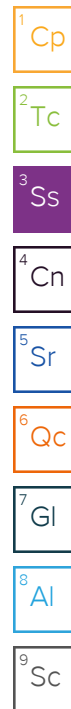
20210310-NV5A-NWALL-10'-1115 L1325776-05 Solid

Collected by
Chance Holder

Collected date/time
03/10/21 11:15

Received date/time
03/11/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1634598	1	03/18/21 09:55	03/18/21 09:55	CCE	Mt. Juliet, TN
Calculated Results	WG1633814	1	03/12/21 16:26	03/15/21 18:34	KPS	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1634592	1	03/15/21 00:17	03/15/21 18:34	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1634563	1	03/14/21 20:40	03/15/21 03:35	KPS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1634060	1	03/13/21 04:01	03/13/21 09:31	AMH	Mt. Juliet, TN
Mercury by Method 7471A	WG1634466	1	03/14/21 12:47	03/14/21 17:42	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1633814	1	03/12/21 16:26	03/14/21 11:55	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1634279	1	03/11/21 22:24	03/16/21 02:58	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1636248	1	03/17/21 08:30	03/18/21 07:01	JN	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1635468	1	03/16/21 17:56	03/17/21 05:50	AAT	Mt. Juliet, TN

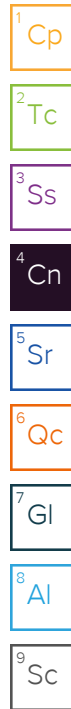


CASE NARRATIVE

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	2.11		1	03/18/2021 09:44	WG1634598

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	17.5		1.00	1	03/15/2021 18:33	WG1633814

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:33	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.64	T8	1	03/15/2021 03:35	WG1634563

Sample Narrative:

L1325776-01 WG1634563: 8.64 at 20.8C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	344		10.0	1	03/13/2021 09:31	WG1634060

Mercury by Method 7471A

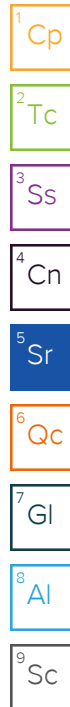
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/14/2021 17:31	WG1634466

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/14/2021 11:43	WG1633814
Barium	245		0.500	1	03/14/2021 11:43	WG1633814
Cadmium	ND		0.500	1	03/14/2021 11:43	WG1633814
Chromium	17.5		1.00	1	03/14/2021 11:43	WG1633814
Copper	23.9		2.00	1	03/14/2021 11:43	WG1633814
Lead	14.7		0.500	1	03/14/2021 11:43	WG1633814
Nickel	31.1		2.00	1	03/14/2021 11:43	WG1633814
Selenium	ND		2.00	1	03/14/2021 11:43	WG1633814
Silver	ND		1.00	1	03/14/2021 11:43	WG1633814
Zinc	52.1		5.00	1	03/14/2021 11:43	WG1633814

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00159		0.000500	1	03/16/2021 00:58	WG1634279
Toluene	ND		0.00500	1	03/16/2021 00:58	WG1634279
Ethylbenzene	ND		0.000500	1	03/16/2021 00:58	WG1634279
Total Xylene	0.00172		0.00150	1	03/16/2021 00:58	WG1634279
TPH (GC/FID) Low Fraction	ND		0.100	1	03/16/2021 00:58	WG1634279



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	109		77.0-120		03/16/2021 00:58	WG1634279
(S) a,a,a-Trifluorotoluene(PID)	102		72.0-128		03/16/2021 00:58	WG1634279

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	17.0		4.00	1	03/17/2021 16:02	WG1635821
(S) o-Terphenyl	42.5		18.0-148		03/17/2021 16:02	WG1635821

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 04:38	WG1635468
Acenaphthene	ND		0.00600	1	03/17/2021 04:38	WG1635468
Acenaphthylene	ND		0.00600	1	03/17/2021 04:38	WG1635468
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 04:38	WG1635468
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 04:38	WG1635468
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 04:38	WG1635468
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 04:38	WG1635468
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 04:38	WG1635468
Chrysene	ND		0.00600	1	03/17/2021 04:38	WG1635468
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 04:38	WG1635468
Fluoranthene	ND		0.00600	1	03/17/2021 04:38	WG1635468
Fluorene	ND		0.00600	1	03/17/2021 04:38	WG1635468
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 04:38	WG1635468
Naphthalene	ND		0.0200	1	03/17/2021 04:38	WG1635468
Phenanthrene	ND		0.00600	1	03/17/2021 04:38	WG1635468
Pyrene	ND		0.00600	1	03/17/2021 04:38	WG1635468
1-Methylnaphthalene	ND		0.0200	1	03/17/2021 04:38	WG1635468
2-Methylnaphthalene	ND		0.0200	1	03/17/2021 04:38	WG1635468
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 04:38	WG1635468
(S) p-Terphenyl-d14	90.2		23.0-120		03/17/2021 04:38	WG1635468
(S) Nitrobenzene-d5	70.0		14.0-149		03/17/2021 04:38	WG1635468
(S) 2-Fluorobiphenyl	73.8		34.0-125		03/17/2021 04:38	WG1635468

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	1.86		1	03/18/2021 09:47	WG1634598

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	23.6		1.00	1	03/15/2021 18:33	WG1633814

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:33	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.77	T8	1	03/15/2021 03:35	WG1634563

Sample Narrative:

L1325776-02 WG1634563: 8.77 at 20C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	286		10.0	1	03/13/2021 09:31	WG1634060

Mercury by Method 7471A

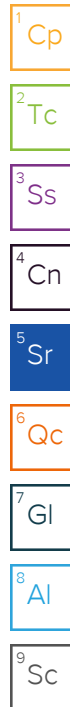
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/14/2021 17:32	WG1634466

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/14/2021 11:46	WG1633814
Barium	131		0.500	1	03/14/2021 11:46	WG1633814
Cadmium	ND		0.500	1	03/14/2021 11:46	WG1633814
Chromium	23.6		1.00	1	03/14/2021 11:46	WG1633814
Copper	24.5		2.00	1	03/14/2021 11:46	WG1633814
Lead	12.9		0.500	1	03/14/2021 11:46	WG1633814
Nickel	19.6		2.00	1	03/14/2021 11:46	WG1633814
Selenium	ND		2.00	1	03/14/2021 11:46	WG1633814
Silver	ND		1.00	1	03/14/2021 11:46	WG1633814
Zinc	87.4		5.00	1	03/14/2021 11:46	WG1633814

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00884		0.000500	1	03/16/2021 01:52	WG1634279
Toluene	0.141		0.00500	1	03/16/2021 01:52	WG1634279
Ethylbenzene	0.00825		0.000500	1	03/16/2021 01:52	WG1634279
Total Xylene	0.194		0.00150	1	03/16/2021 01:52	WG1634279
TPH (GC/FID) Low Fraction	1.06		0.100	1	03/16/2021 01:52	WG1634279



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	107		77.0-120		03/16/2021 01:52	WG1634279
(S) a,a,a-Trifluorotoluene(PID)	99.3		72.0-128		03/16/2021 01:52	WG1634279

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	03/18/2021 04:41	WG1636248
(S) o-Terphenyl	69.5		18.0-148		03/18/2021 04:41	WG1636248

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 04:56	WG1635468
Acenaphthene	ND		0.00600	1	03/17/2021 04:56	WG1635468
Acenaphthylene	ND		0.00600	1	03/17/2021 04:56	WG1635468
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 04:56	WG1635468
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 04:56	WG1635468
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 04:56	WG1635468
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 04:56	WG1635468
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 04:56	WG1635468
Chrysene	ND		0.00600	1	03/17/2021 04:56	WG1635468
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 04:56	WG1635468
Fluoranthene	ND		0.00600	1	03/17/2021 04:56	WG1635468
Fluorene	ND		0.00600	1	03/17/2021 04:56	WG1635468
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 04:56	WG1635468
Naphthalene	ND		0.0200	1	03/17/2021 04:56	WG1635468
Phenanthrene	ND		0.00600	1	03/17/2021 04:56	WG1635468
Pyrene	ND		0.00600	1	03/17/2021 04:56	WG1635468
1-Methylnaphthalene	ND		0.0200	1	03/17/2021 04:56	WG1635468
2-Methylnaphthalene	ND		0.0200	1	03/17/2021 04:56	WG1635468
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 04:56	WG1635468
(S) p-Terphenyl-d14	86.3		23.0-120		03/17/2021 04:56	WG1635468
(S) Nitrobenzene-d5	66.1		14.0-149		03/17/2021 04:56	WG1635468
(S) 2-Fluorobiphenyl	68.3		34.0-125		03/17/2021 04:56	WG1635468

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	4.25		1	03/18/2021 09:49	WG1634598

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	21.2		1.00	1	03/15/2021 18:33	WG1633814

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:33	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.50	T8	1	03/15/2021 03:35	WG1634563

Sample Narrative:

L1325776-03 WG1634563: 8.5 at 21.1C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	525		10.0	1	03/13/2021 09:31	WG1634060

Mercury by Method 7471A

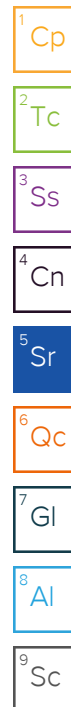
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/14/2021 17:34	WG1634466

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/14/2021 11:49	WG1633814
Barium	144		0.500	1	03/14/2021 11:49	WG1633814
Cadmium	ND		0.500	1	03/14/2021 11:49	WG1633814
Chromium	21.2		1.00	1	03/14/2021 11:49	WG1633814
Copper	22.9		2.00	1	03/14/2021 11:49	WG1633814
Lead	12.1		0.500	1	03/14/2021 11:49	WG1633814
Nickel	18.2		2.00	1	03/14/2021 11:49	WG1633814
Selenium	ND		2.00	1	03/14/2021 11:49	WG1633814
Silver	ND		1.00	1	03/14/2021 11:49	WG1633814
Zinc	68.3		5.00	1	03/14/2021 11:49	WG1633814

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.000505	1.01	03/16/2021 02:14	WG1634279
Toluene	ND		0.00505	1.01	03/16/2021 02:14	WG1634279
Ethylbenzene	ND		0.000505	1.01	03/16/2021 02:14	WG1634279
Total Xylene	ND		0.00152	1.01	03/16/2021 02:14	WG1634279
TPH (GC/FID) Low Fraction	ND		0.101	1.01	03/16/2021 02:14	WG1634279



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	109		77.0-120		03/16/2021 02:14	WG1634279
(S) a,a,a-Trifluorotoluene(PID)	103		72.0-128		03/16/2021 02:14	WG1634279

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	03/18/2021 04:55	WG1636248
(S) o-Terphenyl	69.5		18.0-148		03/18/2021 04:55	WG1636248

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 05:14	WG1635468
Acenaphthene	ND		0.00600	1	03/17/2021 05:14	WG1635468
Acenaphthylene	ND		0.00600	1	03/17/2021 05:14	WG1635468
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 05:14	WG1635468
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 05:14	WG1635468
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 05:14	WG1635468
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 05:14	WG1635468
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 05:14	WG1635468
Chrysene	ND		0.00600	1	03/17/2021 05:14	WG1635468
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 05:14	WG1635468
Fluoranthene	ND		0.00600	1	03/17/2021 05:14	WG1635468
Fluorene	ND		0.00600	1	03/17/2021 05:14	WG1635468
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 05:14	WG1635468
Naphthalene	ND		0.0200	1	03/17/2021 05:14	WG1635468
Phenanthrene	ND		0.00600	1	03/17/2021 05:14	WG1635468
Pyrene	ND		0.00600	1	03/17/2021 05:14	WG1635468
1-Methylnaphthalene	ND		0.0200	1	03/17/2021 05:14	WG1635468
2-Methylnaphthalene	ND		0.0200	1	03/17/2021 05:14	WG1635468
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 05:14	WG1635468
(S) p-Terphenyl-d14	83.1		23.0-120		03/17/2021 05:14	WG1635468
(S) Nitrobenzene-d5	64.6		14.0-149		03/17/2021 05:14	WG1635468
(S) 2-Fluorobiphenyl	65.9		34.0-125		03/17/2021 05:14	WG1635468

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	3.43		1	03/18/2021 09:52	WG1634598

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	19.2		1.00	1	03/15/2021 18:33	WG1633814

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	3.72		2.00	1	03/15/2021 18:33	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.80	T8	1	03/15/2021 03:35	WG1634563

Sample Narrative:

L1325776-04 WG1634563: 8.8 at 20.9C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	323		10.0	1	03/13/2021 09:31	WG1634060

Mercury by Method 7471A

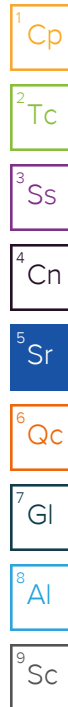
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/14/2021 17:36	WG1634466

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/14/2021 11:52	WG1633814
Barium	116		0.500	1	03/14/2021 11:52	WG1633814
Cadmium	ND		0.500	1	03/14/2021 11:52	WG1633814
Chromium	22.9		1.00	1	03/14/2021 11:52	WG1633814
Copper	24.4		2.00	1	03/14/2021 11:52	WG1633814
Lead	13.1		0.500	1	03/14/2021 11:52	WG1633814
Nickel	20.0		2.00	1	03/14/2021 11:52	WG1633814
Selenium	ND		2.00	1	03/14/2021 11:52	WG1633814
Silver	ND		1.00	1	03/14/2021 11:52	WG1633814
Zinc	70.2		5.00	1	03/14/2021 11:52	WG1633814

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00130		0.000500	1	03/16/2021 02:36	WG1634279
Toluene	ND		0.00500	1	03/16/2021 02:36	WG1634279
Ethylbenzene	0.00141		0.000500	1	03/16/2021 02:36	WG1634279
Total Xylene	0.141		0.00150	1	03/16/2021 02:36	WG1634279
TPH (GC/FID) Low Fraction	1.60		0.100	1	03/16/2021 02:36	WG1634279



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	99.6		77.0-120		03/16/2021 02:36	WG1634279
(S) a,a,a-Trifluorotoluene(PID)	99.0		72.0-128		03/16/2021 02:36	WG1634279

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	03/18/2021 05:08	WG1636248
(S) o-Terphenyl	76.7		18.0-148		03/18/2021 05:08	WG1636248

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 05:32	WG1635468
Acenaphthene	ND		0.00600	1	03/17/2021 05:32	WG1635468
Acenaphthylene	ND		0.00600	1	03/17/2021 05:32	WG1635468
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 05:32	WG1635468
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 05:32	WG1635468
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 05:32	WG1635468
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 05:32	WG1635468
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 05:32	WG1635468
Chrysene	ND		0.00600	1	03/17/2021 05:32	WG1635468
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 05:32	WG1635468
Fluoranthene	ND		0.00600	1	03/17/2021 05:32	WG1635468
Fluorene	ND		0.00600	1	03/17/2021 05:32	WG1635468
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 05:32	WG1635468
Naphthalene	ND		0.0200	1	03/17/2021 05:32	WG1635468
Phenanthrene	ND		0.00600	1	03/17/2021 05:32	WG1635468
Pyrene	ND		0.00600	1	03/17/2021 05:32	WG1635468
1-Methylnaphthalene	ND		0.0200	1	03/17/2021 05:32	WG1635468
2-Methylnaphthalene	ND		0.0200	1	03/17/2021 05:32	WG1635468
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 05:32	WG1635468
(S) p-Terphenyl-d14	79.6		23.0-120		03/17/2021 05:32	WG1635468
(S) Nitrobenzene-d5	64.7		14.0-149		03/17/2021 05:32	WG1635468
(S) 2-Fluorobiphenyl	65.5		34.0-125		03/17/2021 05:32	WG1635468

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	9.81		1	03/18/2021 09:55	WG1634598

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	23.5		1.00	1	03/15/2021 18:34	WG1633814

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	03/15/2021 18:34	WG1634592

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.73	T8	1	03/15/2021 03:35	WG1634563

Sample Narrative:

L1325776-05 WG1634563: 8.73 at 20.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	885		10.0	1	03/13/2021 09:31	WG1634060

Mercury by Method 7471A

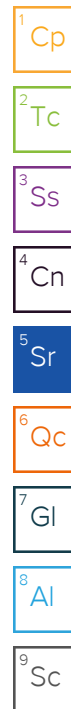
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	03/14/2021 17:42	WG1634466

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	03/14/2021 11:55	WG1633814
Barium	115		0.500	1	03/14/2021 11:55	WG1633814
Cadmium	ND		0.500	1	03/14/2021 11:55	WG1633814
Chromium	23.5		1.00	1	03/14/2021 11:55	WG1633814
Copper	25.8		2.00	1	03/14/2021 11:55	WG1633814
Lead	13.3		0.500	1	03/14/2021 11:55	WG1633814
Nickel	20.2		2.00	1	03/14/2021 11:55	WG1633814
Selenium	ND		2.00	1	03/14/2021 11:55	WG1633814
Silver	ND		1.00	1	03/14/2021 11:55	WG1633814
Zinc	76.1		5.00	1	03/14/2021 11:55	WG1633814

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.000500	1	03/16/2021 02:58	WG1634279
Toluene	ND		0.00500	1	03/16/2021 02:58	WG1634279
Ethylbenzene	ND		0.000500	1	03/16/2021 02:58	WG1634279
Total Xylene	0.00470		0.00150	1	03/16/2021 02:58	WG1634279
TPH (GC/FID) Low Fraction	0.228		0.100	1	03/16/2021 02:58	WG1634279



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	109		77.0-120		03/16/2021 02:58	WG1634279
(S) a,a,a-Trifluorotoluene(PID)	101		72.0-128		03/16/2021 02:58	WG1634279

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	03/18/2021 07:01	WG1636248
(S) o-Terphenyl	80.2		18.0-148		03/18/2021 07:01	WG1636248

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/17/2021 05:50	WG1635468
Acenaphthene	ND		0.00600	1	03/17/2021 05:50	WG1635468
Acenaphthylene	ND		0.00600	1	03/17/2021 05:50	WG1635468
Benzo(a)anthracene	ND		0.00600	1	03/17/2021 05:50	WG1635468
Benzo(a)pyrene	ND		0.00600	1	03/17/2021 05:50	WG1635468
Benzo(b)fluoranthene	ND		0.00600	1	03/17/2021 05:50	WG1635468
Benzo(g,h,i)perylene	ND		0.00600	1	03/17/2021 05:50	WG1635468
Benzo(k)fluoranthene	ND		0.00600	1	03/17/2021 05:50	WG1635468
Chrysene	ND		0.00600	1	03/17/2021 05:50	WG1635468
Dibenz(a,h)anthracene	ND		0.00600	1	03/17/2021 05:50	WG1635468
Fluoranthene	ND		0.00600	1	03/17/2021 05:50	WG1635468
Fluorene	ND		0.00600	1	03/17/2021 05:50	WG1635468
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/17/2021 05:50	WG1635468
Naphthalene	ND		0.0200	1	03/17/2021 05:50	WG1635468
Phenanthrene	ND		0.00600	1	03/17/2021 05:50	WG1635468
Pyrene	ND		0.00600	1	03/17/2021 05:50	WG1635468
1-Methylnaphthalene	ND		0.0200	1	03/17/2021 05:50	WG1635468
2-Methylnaphthalene	ND		0.0200	1	03/17/2021 05:50	WG1635468
2-Chloronaphthalene	ND		0.0200	1	03/17/2021 05:50	WG1635468
(S) p-Terphenyl-d14	83.8		23.0-120		03/17/2021 05:50	WG1635468
(S) Nitrobenzene-d5	65.9		14.0-149		03/17/2021 05:50	WG1635468
(S) 2-Fluorobiphenyl	67.1		34.0-125		03/17/2021 05:50	WG1635468

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3631007-1 03/15/21 18:27

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Chromium,Hexavalent	U		0.640	2.00

L1325025-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1325025-01 03/15/21 18:28 • (DUP) R3631007-3 03/15/21 18:29

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

L1325772-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1325772-02 03/15/21 18:32 • (DUP) R3631007-4 03/15/21 18:32

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

Laboratory Control Sample (LCS)

(LCS) R3631007-2 03/15/21 18:27

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chromium,Hexavalent	24.0	24.1	100	80.0-120	

L1326273-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1326273-01 03/15/21 18:36 • (MS) R3631007-5 03/15/21 18:36 • (MSD) R3631007-6 03/15/21 18:36

	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	%	%		%			%	%
Chromium,Hexavalent	20.0	ND	9.72	9.37	48.6	46.8	1	75.0-125	J6	J6	3.74	20

L1326273-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1326273-01 03/15/21 18:36 • (MS) R3631007-7 03/15/21 18:36

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/kg	mg/kg	mg/kg	%		%	
Chromium,Hexavalent	695	ND	663	95.4	50	75.0-125	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3630669-1 03/15/21 03:35

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

Sample Narrative:

LCS: 10.04 at 20.3C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3630336-1 03/13/21 09:31

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

Laboratory Control Sample (LCS)

(LCS) R3630336-2 03/13/21 09:31

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	385	383	99.5	85.0-115	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3630624-1 03/14/21 16:45

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3630624-2 03/14/21 16:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Mercury	0.500	0.458	91.5	80.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3630598-1 03/14/21 11:01

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Chromium	U		0.133	1.00
Copper	U		0.400	2.00
Lead	0.219	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

Laboratory Control Sample (LCS)

(LCS) R3630598-2 03/14/21 11:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	106	106	80.0-120	
Barium	100	111	111	80.0-120	
Cadmium	100	107	107	80.0-120	
Chromium	100	109	109	80.0-120	
Copper	100	108	108	80.0-120	
Lead	100	108	108	80.0-120	
Nickel	100	109	109	80.0-120	
Selenium	100	108	108	80.0-120	
Silver	20.0	19.2	96.2	80.0-120	
Zinc	100	108	108	80.0-120	

L1325757-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325757-01 03/14/21 11:07 • (MS) R3630598-5 03/14/21 11:15 • (MSD) R3630598-6 03/14/21 11:18

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	4.52	106	105	102	100	1	75.0-125			1.18	20
Barium	100	190	255	223	65.3	33.5	1	75.0-125	J6	J6	13.3	20
Cadmium	100	ND	105	105	105	105	1	75.0-125			0.0994	20
Chromium	100	24.3	128	127	104	103	1	75.0-125			0.765	20
Copper	100	13.3	121	119	108	106	1	75.0-125			1.27	20
Lead	100	14.4	121	121	107	107	1	75.0-125			0.113	20
Nickel	100	24.1	130	131	106	107	1	75.0-125			0.799	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1325757-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325757-01 03/14/21 11:07 • (MS) R3630598-5 03/14/21 11:15 • (MSD) R3630598-6 03/14/21 11:18

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 %
Selenium	100	ND	105	104	105	104	1	75.0-125			0.722	20
Silver	20.0	ND	18.7	18.7	93.3	93.5	1	75.0-125			0.150	20
Zinc	100	44.8	143	147	98.7	102	1	75.0-125			2.19	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3631278-3 03/15/21 18:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	U		0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	115			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	106			72.0-128

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

(LCS) R3631278-1 03/15/21 17:24 • (LCSD) R3631278-2 03/15/21 17:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	4.26	4.17	77.5	75.8	72.0-127			2.14	20
(S) a,a,a-Trifluorotoluene(FID)				97.4	97.9	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				106	107	72.0-128				

Laboratory Control Sample (LCS)

(LCS) R3631278-4 03/15/21 22:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0526	105	76.0-121	
Toluene	0.0500	0.0496	99.2	80.0-120	
Ethylbenzene	0.0500	0.0494	98.8	80.0-124	
Total Xylene	0.150	0.154	103	37.0-160	
(S) a,a,a-Trifluorotoluene(FID)			114	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			106	72.0-128	

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3631849-1 03/17/21 15:36

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	63.4			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3631849-2 03/17/21 15:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	42.9	85.8	50.0-150	
(S) o-Terphenyl			73.3	18.0-148	

L1326428-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1326428-10 03/17/21 21:16 • (MS) R3631849-3 03/17/21 21:29 • (MSD) R3631849-4 03/17/21 21:42

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) High Fraction	48.6	207	205	209	0.000	4.04	1	50.0-150	V	V	1.93	20
(S) o-Terphenyl					44.3	53.9		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3632081-1 03/18/21 04:15

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	85.6			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3632081-2 03/18/21 04:28

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	38.9	77.8	50.0-150	
(S) o-Terphenyl			86.9	18.0-148	

L1325907-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1325907-01 03/18/21 05:22 • (MS) R3632081-3 03/18/21 05:40 • (MSD) R3632081-4 03/18/21 05:54

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) High Fraction	50.0	ND	33.8	36.0	63.0	67.4	1	50.0-150			6.30	20
(S) o-Terphenyl					73.6	69.7		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3631550-2 03/17/21 01:04

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	70.7			14.0-149
(S) 2-Fluorobiphenyl	74.2			34.0-125
(S) p-Terphenyl-d14	90.3			23.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3631550-1 03/17/21 00:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0527	65.9	50.0-126	
Acenaphthene	0.0800	0.0590	73.8	50.0-120	
Acenaphthylene	0.0800	0.0595	74.4	50.0-120	
Benzo(a)anthracene	0.0800	0.0546	68.3	45.0-120	
Benzo(a)pyrene	0.0800	0.0476	59.5	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0581	72.6	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0611	76.4	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0570	71.3	49.0-125	
Chrysene	0.0800	0.0603	75.4	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0538	67.3	47.0-125	
Fluoranthene	0.0800	0.0570	71.3	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3631550-1 03/17/21 00:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Fluorene	0.0800	0.0588	73.5	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0549	68.6	46.0-125	
Naphthalene	0.0800	0.0566	70.8	50.0-120	
Phenanthrene	0.0800	0.0549	68.6	47.0-120	
Pyrene	0.0800	0.0615	76.9	43.0-123	
1-Methylnaphthalene	0.0800	0.0601	75.1	51.0-121	
2-Methylnaphthalene	0.0800	0.0572	71.5	50.0-120	
2-Chloronaphthalene	0.0800	0.0567	70.9	50.0-120	
(S) Nitrobenzene-d5			74.8	14.0-149	
(S) 2-Fluorobiphenyl			75.5	34.0-125	
(S) p-Terphenyl-d14			86.3	23.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

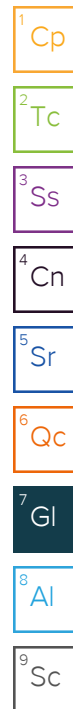
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ACCREDITATIONS & LOCATIONS

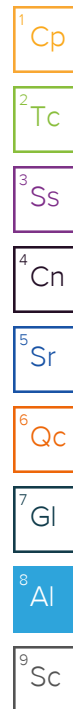
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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.



[illegible]

April 07, 2021

Entrada Consulting Group

Sample Delivery Group: L1333242
Samples Received: 04/01/2021
Project Number: NORTH VEGA 5A
Description: North Vega 5A

Report To: Stuart Hall
240 Mesa Avenue
Grand Junction, CO 81501

Entire Report Reviewed By:



Chris Ward
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 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

20210331-NV5A-SEBOT-3.5-910 L1333242-01 Solid

Collected by
Chance Holder

Collected date/time
03/31/21 09:10

Received date/time
04/01/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG1646034	1	04/07/21 03:00	04/07/21 10:09	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1644476	1	04/03/21 07:33	04/03/21 10:41	AMH	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

20210331-NV5A-NSEWALL-3-915 L1333242-02 Solid

Collected by
Chance Holder

Collected date/time
03/31/21 09:15

Received date/time
04/01/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG1646034	1	04/07/21 03:00	04/07/21 10:09	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1644476	1	04/03/21 07:33	04/03/21 10:41	AMH	Mt. Juliet, TN

⁴ Cn

⁵ Sr

⁶ Qc

20210331-NV5A-SEWALL-3-900 L1333242-03 Solid

Collected by
Chance Holder

Collected date/time
03/31/21 09:00

Received date/time
04/01/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG1646034	1	04/07/21 03:00	04/07/21 10:09	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1644476	1	04/03/21 07:33	04/03/21 10:41	AMH	Mt. Juliet, TN

⁷ Gl

⁸ Al

⁹ Sc

20210331-NV5A-WWALL-3-1015 L1333242-04 Solid

Collected by
Chance Holder

Collected date/time
03/31/21 10:15

Received date/time
04/01/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG1646034	1	04/07/21 03:00	04/07/21 10:09	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1644476	1	04/03/21 07:33	04/03/21 10:41	AMH	Mt. Juliet, TN

20210331-NV5A-SWWALL-3-1020 L1333242-05 Solid

Collected by
Chance Holder

Collected date/time
03/31/21 10:20

Received date/time
04/01/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG1646034	1	04/07/21 03:00	04/07/21 10:09	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1644476	1	04/03/21 07:33	04/03/21 10:41	AMH	Mt. Juliet, TN

20210331-NV5A-WBOT-3.5-1025 L1333242-06 Solid

Collected by
Chance Holder

Collected date/time
03/31/21 10:25

Received date/time
04/01/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG1646034	1	04/07/21 03:00	04/07/21 10:09	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1644476	1	04/03/21 07:33	04/03/21 10:41	AMH	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



Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.40	T8	1	04/07/2021 10:09	WG1646034

Sample Narrative:

L1333242-01 WG1646034: 7.4 at 21.1C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	282		10.0	1	04/03/2021 10:41	WG1644476

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.86	T8	1	04/07/2021 10:09	WG1646034

Sample Narrative:

L1333242-02 WG1646034: 7.86 at 21C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	429		10.0	1	04/03/2021 10:41	WG1644476

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.40	T8	1	04/07/2021 10:09	WG1646034

Sample Narrative:

L1333242-03 WG1646034: 8.4 at 21C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	304		10.0	1	04/03/2021 10:41	WG1644476

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.94	T8	1	04/07/2021 10:09	WG1646034

Sample Narrative:

L1333242-04 WG1646034: 8.94 at 20.9C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	579		10.0	1	04/03/2021 10:41	WG1644476

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.23	T8	1	04/07/2021 10:09	WG1646034

Sample Narrative:

L1333242-05 WG1646034: 8.23 at 21C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	2480		10.0	1	04/03/2021 10:41	WG1644476

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.76	T8	1	04/07/2021 10:09	WG1646034

Sample Narrative:

L1333242-06 WG1646034: 8.76 at 21C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	644		10.0	1	04/03/2021 10:41	WG1644476

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3638880-1 04/07/21 10:09

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: 10.07 at 20.8C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3637782-1 04/03/21 10:41

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

L1333039-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1333039-02 04/03/21 10:41 • (DUP) R3637782-3 04/03/21 10:41

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Specific Conductance	130	126	1	2.50		20

L1333242-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1333242-06 04/03/21 10:41 • (DUP) R3637782-4 04/03/21 10:41

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Specific Conductance	644	632	1	1.88		20

Laboratory Control Sample (LCS)

(LCS) R3637782-2 04/03/21 10:41

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Specific Conductance	741	741	100	85.0-115	

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.



Company Name/Address:

Entrada Consulting Group**330 Grand Avenue, Suite C
Grand Junction, CO 81501**

Billing Information:

Report to:

Stuart Hall

Email To:

shall@entradainc.com

Project

Description:

NORTH VEGA SA

City/State

Collected:

Phone: **970-712-7329**

Client Project #

NORTH VEGA SA

Lab Project #

Fax:

Collected by (print):

CHANCE HOLDER

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

____ Same Day200%

____ Next Day100%

____ Two Day50%

____ Three Day25%

Date Results Needed

Email? ____ No ☒ YesFAX? ☒ No ____ YesNo.
of
Cnts

Immediately

Packed on Ice N ____ Y ☒

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No.
of
Cnts

20210331-NVSA-SEBOT-3.5'-910

GRAB

SS

3.5'

3/3/21

910

3

20210331-NVSA-NSEWALL-3'-915

3'

915

3

20210331-NVSA-SFWALL-3'-900

3'

900

3

20210331-NVSA-WWALL-3'-1015

3'

1015

3

20210331-NVSA-SWALL-3'-1020

3'

1020

3

20210331-NVSA-WBOT-3.5'-1025

3.5'

1025

3

Sample Receipt ChecklistCOC Seal Present/Intact: ☒ Y ☒ N If ApplicableCOC Signed/Accurate: ☒ Y ☒ N VOA Zero Headspace: ☒ Y ☒ NBottles arrive intact: ☒ Y ☒ N Pres. Correct/Check: ☒ Y ☒ NCorrect bottles used: ☒ Y ☒ NSufficient volume sent: ☒ Y ☒ NRAD Screen <0.5 mR/hr: ☒ Y ☒ N

Analysis / Container / Preservative

Chain of Custody Page 1 of 1



YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859L# **L1333242****B233**

Acctnum:

Template:

Prelogin:

TSR:

Cooler:

Shipped Via:

Rem./Contaminant

Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cnts	BTEX	TPH DRO/GRO	PAH	SAR, Specific Conductivity, pH	RCRA8 Metals + Cu, Ni,	Cr3, Cr6	Arsenic	pH / EC	Rem./Contaminant	Sample # (lab only)
20210331-NVSA-SEBOT-3.5'-910	GRAB	SS	3.5'	3/3/21	910	3								X		-01
20210331-NVSA-NSEWALL-3'-915			3'		915	3								X		-02
20210331-NVSA-SFWALL-3'-900			3'		900	3								X		-03
20210331-NVSA-WWALL-3'-1015			3'		1015	3								X		-04
20210331-NVSA-SWALL-3'-1020			3'		1020	3								X		-05
20210331-NVSA-WBOT-3.5'-1025			3.5'		1025	3								X		-06

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

Remarks:

9883 0083 9507

pH _____ Temp _____

Flow _____ Other _____

Hold #

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Samples returned via: ☐ UPS

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Bottles Received:

COC Seal Intact: ____ Y ☒ N ____ NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: Time:

pH Checked:

NCF: