ANALYTICAL REPORT

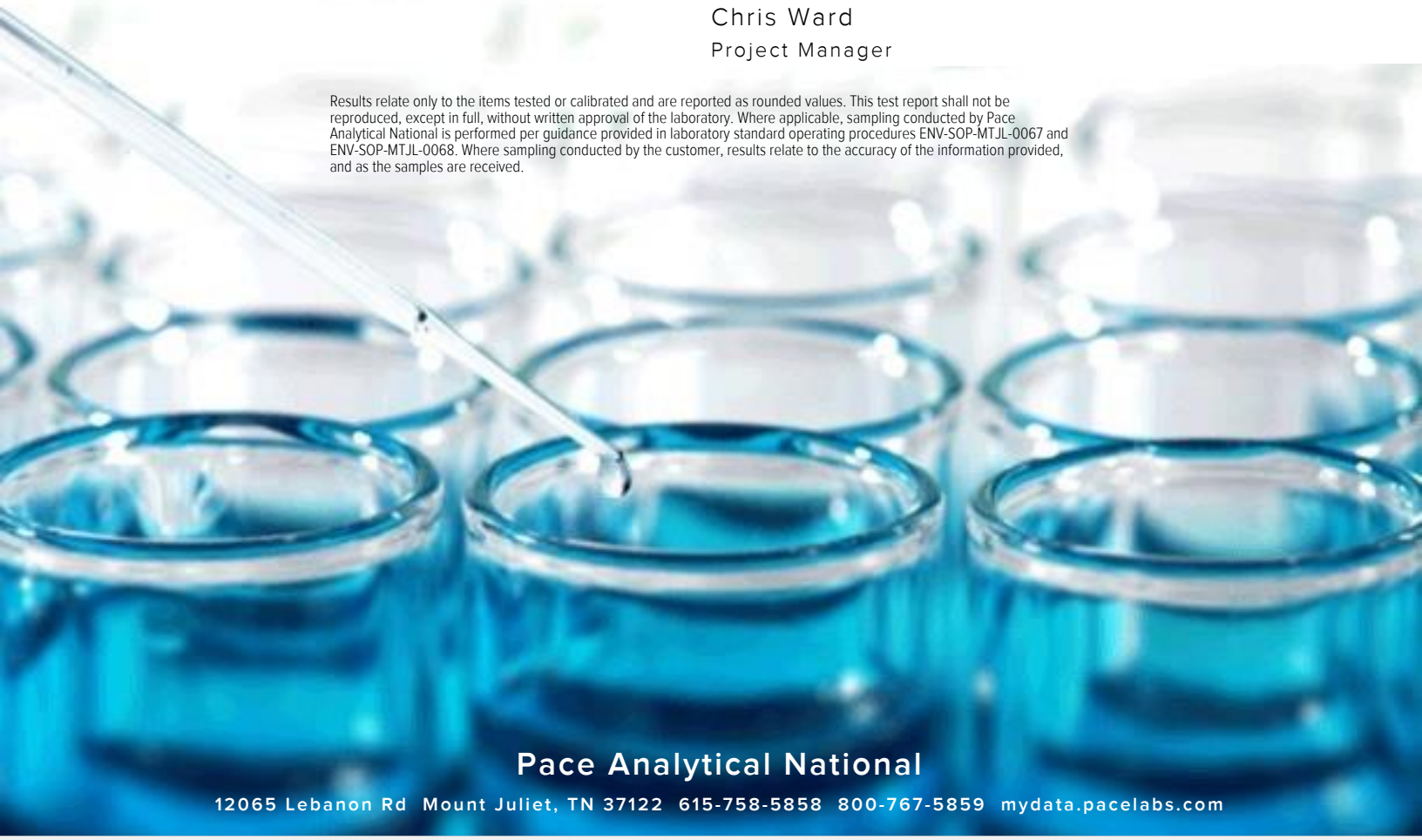
November 05, 2024

Laramie Energy - Grand Junction, CO

Sample Delivery Group:	L1791867
Samples Received:	10/23/2024
Project Number:	CC4" BAKER
Description:	CC4 BAKER Pipe
Site:	CC4" BAKER
Report To:	Matt Kasten 760 Horizon Dr., Ste. 101 Grand Junction, CO 81506

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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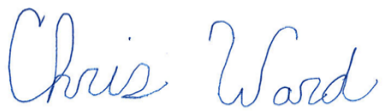
CC4 BAKER POR L1791867-01 Solid

Collected by: Matt Kash
Collected date/time: 10/22/24 09:00
Received date/time: 10/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2391527	1	11/03/24 14:07	11/03/24 14:07	MAP	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2388532	1	10/27/24 15:25	10/27/24 23:47	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2394884	1	11/04/24 07:51	11/04/24 09:35	BRT	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2394888	1	11/04/24 07:58	11/04/24 11:43	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2391532	1	10/30/24 15:16	10/31/24 18:20	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2388925	5	10/29/24 08:14	10/29/24 18:56	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2390591	1	10/25/24 09:13	10/28/24 05:50	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2390257	1	10/25/24 09:13	10/27/24 01:43	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2391995	1	10/30/24 09:40	10/30/24 19:00	KDB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2391607	1	10/29/24 17:29	10/30/24 14:49	MKM	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	31.5		1	11/03/2024 14:07	WG2391527

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	10/27/2024 23:47	WG2388532

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.85	T8	1	11/04/2024 09:35	WG2394884

Sample Narrative:

L1791867-01 WG2394884: 7.85 at 20.2C

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	6690	umhos/cm		10.0	1	11/04/2024 11:43	WG2394888

Sample Narrative:

L1791867-01 WG2394888: at 25C

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	1.66		0.0167	0.200	1	10/31/2024 18:20	WG2391532

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	8.64		0.100	1.00	5	10/29/2024 18:56	WG2388925
Barium	280		0.152	2.50	5	10/29/2024 18:56	WG2388925
Cadmium	0.341	J	0.0855	1.00	5	10/29/2024 18:56	WG2388925
Copper	15.3		0.132	5.00	5	10/29/2024 18:56	WG2388925
Lead	9.87		0.0990	2.00	5	10/29/2024 18:56	WG2388925
Nickel	14.9		0.197	2.50	5	10/29/2024 18:56	WG2388925
Selenium	0.971	J	0.180	2.50	5	10/29/2024 18:56	WG2388925
Silver	U		0.0865	0.500	5	10/29/2024 18:56	WG2388925
Zinc	57.1	B	0.740	25.0	5	10/29/2024 18:56	WG2388925

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.481		0.0217	0.100	1	10/28/2024 05:50	WG2390591
(S) a,a,a-Trifluorotoluene(FID)	*93.3*			*77.0-120*		*10/28/2024 05:50*	WG2390591

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	10/27/2024 01:43	WG2390257
Toluene	0.00183	J	0.00130	0.00500	1	10/27/2024 01:43	WG2390257
Ethylbenzene	U		0.000737	0.00250	1	10/27/2024 01:43	WG2390257
Xylenes, Total	0.00130	J	0.000880	0.00650	1	10/27/2024 01:43	WG2390257
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	10/27/2024 01:43	WG2390257
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	10/27/2024 01:43	WG2390257
(S) Toluene-d8	*105*			*75.0-131*		*10/27/2024 01:43*	WG2390257
(S) 4-Bromofluorobenzene	*93.3*			*67.0-138*		*10/27/2024 01:43*	WG2390257
(S) 1,2-Dichloroethane-d4	*72.3*			*70.0-130*		*10/27/2024 01:43*	WG2390257

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.46	J	1.61	4.00	1	10/30/2024 19:00	WG2391995
C28-C36 Motor Oil Range	16.2		0.274	4.00	1	10/30/2024 19:00	WG2391995
(S) o-Terphenyl	*54.6*			*18.0-148*		*10/30/2024 19:00*	WG2391995

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	10/30/2024 14:49	WG2391607
Anthracene	U		0.00230	0.00600	1	10/30/2024 14:49	WG2391607
Benzo(a)anthracene	U		0.00173	0.00600	1	10/30/2024 14:49	WG2391607
Benzo(b)fluoranthene	U		0.00153	0.00600	1	10/30/2024 14:49	WG2391607
Benzo(k)fluoranthene	U		0.00215	0.00600	1	10/30/2024 14:49	WG2391607
Benzo(a)pyrene	U		0.00179	0.00600	1	10/30/2024 14:49	WG2391607
Chrysene	U		0.00232	0.00600	1	10/30/2024 14:49	WG2391607
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	10/30/2024 14:49	WG2391607
Fluoranthene	U		0.00227	0.00600	1	10/30/2024 14:49	WG2391607
Fluorene	U		0.00205	0.00600	1	10/30/2024 14:49	WG2391607
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	10/30/2024 14:49	WG2391607
1-Methylnaphthalene	U		0.00449	0.0200	1	10/30/2024 14:49	WG2391607
2-Methylnaphthalene	U		0.00427	0.0200	1	10/30/2024 14:49	WG2391607
Naphthalene	U		0.00408	0.0200	1	10/30/2024 14:49	WG2391607
Pyrene	U		0.00200	0.00600	1	10/30/2024 14:49	WG2391607
(S) p-Terphenyl-d14	*56.0*			*23.0-120*		*10/30/2024 14:49*	WG2391607
(S) Nitrobenzene-d5	*66.3*			*14.0-149*		*10/30/2024 14:49*	WG2391607
(S) 2-Fluorobiphenyl	*61.1*			*34.0-125*		*10/30/2024 14:49*	WG2391607

Method Blank (MB)

(MB) R4138262-1 10/27/24 22:18

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	0.540	J	0.255	1.00

L1791883-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1791883-04 10/28/24 01:02 • (DUP) R4138262-7 10/28/24 01:08

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

L1791883-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1791883-07 10/28/24 01:26 • (DUP) R4138262-8 10/28/24 01:32

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

Laboratory Control Sample (LCS)

(LCS) R4138262-2 10/27/24 22:27

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

L1791873-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1791873-01 10/27/24 23:54 • (MS) R4138262-3 10/28/24 00:00 • (MSD) R4138262-4 10/28/24 00:06

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	20.0	U	U	U	0.000	0.000	1	75.0-125	J6	J6	0.000	20

L1791873-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1791873-01 10/27/24 23:54 • (MS) R4138262-5 10/28/24 00:12

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	656	U	339	51.7	50	75.0-125	J6

L1791867-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1791867-01 11/04/24 09:35 • (DUP) R4141519-2 11/04/24 09:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.85	7.86	1	0.127		1

Sample Narrative:

OS: 7.85 at 20.2C

DUP: 7.86 at 20.3C

L1792779-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1792779-01 11/04/24 09:35 • (DUP) R4141519-3 11/04/24 09:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.75	7.80	1	0.643		1

Sample Narrative:

OS: 7.75 at 19.9C

DUP: 7.8 at 20.3C

Laboratory Control Sample (LCS)

(LCS) R4141519-1 11/04/24 09:35

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

Sample Narrative:

LCS: 10.01 at 20C

Method Blank (MB)

(MB) R4141583-1 11/04/24 11:43

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

Sample Narrative:
BLANK: at 25C

L1791877-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1791877-01 11/04/24 11:43 • (DUP) R4141583-3 11/04/24 11:43

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	454	452	1	0.442		20

Sample Narrative:
OS: at 25C
DUP: at 25C

L1792284-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1792284-02 11/04/24 11:43 • (DUP) R4141583-4 11/04/24 11:43

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	265	265	1	0.226		20

Sample Narrative:
OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4141583-2 11/04/24 11:43

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	733	754	103	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R4140537-1 10/31/24 18:12

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

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

(LCS) R4140537-2 10/31/24 18:15 • (LCSD) R4140537-3 10/31/24 18:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.07	1.07	107	107	80.0-120			0.283	20

QUALITY CONTROL SUMMARY

L1791867-01

Method Blank (MB)

(MB) R4139318-1 10/29/24 18:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.100	1.00
Barium	U		0.152	2.50
Cadmium	U		0.0855	1.00
Copper	0.227	J	0.133	5.00
Lead	0.230	J	0.0990	2.00
Nickel	U		0.197	2.50
Selenium	U		0.180	2.50
Silver	U		0.0865	0.500
Zinc	5.77	J	0.740	25.0

Laboratory Control Sample (LCS)

(LCS) R4139318-2 10/29/24 18:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	101	101	80.0-120	
Barium	100	98.5	98.5	80.0-120	
Cadmium	100	101	101	80.0-120	
Copper	100	103	103	80.0-120	
Lead	100	99.3	99.3	80.0-120	
Nickel	100	104	104	80.0-120	
Selenium	100	104	104	80.0-120	
Silver	20.0	20.2	101	80.0-120	
Zinc	100	102	102	80.0-120	

L1791866-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1791866-03 10/29/24 18:18 • (MS) R4139318-5 10/29/24 18:28 • (MSD) R4139318-6 10/29/24 18:32

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	4.08	109	102	105	98.4	5	75.0-125			6.03	20
Barium	100	436	593	499	157	62.9	5	75.0-125	V	V	17.2	20
Cadmium	100	0.148	102	96.4	102	96.2	5	75.0-125			5.35	20
Copper	100	11.2	114	105	103	93.4	5	75.0-125			9.02	20
Lead	100	7.28	108	101	100	93.8	5	75.0-125			6.21	20
Nickel	100	6.84	108	104	102	96.7	5	75.0-125			4.65	20
Selenium	100	0.186	103	98.2	103	98.0	5	75.0-125		E	5.00	20
Silver	20.0	U	20.6	19.7	103	98.5	5	75.0-125			4.46	20
Zinc	100	31.0	130	120	99.1	89.3	5	75.0-125			7.81	20

Method Blank (MB)

(MB) R4139602-3 10/27/24 21:39

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*

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

(LCS) R4139602-1 10/27/24 20:25 • (LCSD) R4139602-2 10/27/24 20:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.00	5.65	4.98	113	99.6	72.0-127			12.6	20
(S) a,a,a-Trifluorotoluene(FID)				*104*	*104*	*77.0-120*				

Method Blank (MB)

(MB) R4138843-2 10/26/24 22:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
Ethylbenzene	U		0.000737	0.00250
Xylenes, Total	U		0.000880	0.00650
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
(S) Toluene-d8	*96.8*			*75.0-131*
(S) 4-Bromofluorobenzene	*93.1*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*83.4*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R4138843-1 10/26/24 21:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.116	92.8	70.0-123	
Toluene	0.125	0.128	102	75.0-121	
Ethylbenzene	0.125	0.133	106	74.0-126	
Xylenes, Total	0.375	0.386	103	72.0-127	
1,2,4-Trimethylbenzene	0.125	0.106	84.8	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.109	87.2	73.0-127	
(S) Toluene-d8			*102*	*75.0-131*	
(S) 4-Bromofluorobenzene			*95.4*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*74.6*	*70.0-130*	

Method Blank (MB)

(MB) R4139953-1 10/30/24 16:39

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	*75.5*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R4139953-2 10/30/24 16:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	40.3	80.6	50.0-150	
(S) o-Terphenyl			*79.7*	*18.0-148*	

L1791876-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1791876-02 10/30/24 21:07 • (MS) R4139953-3 10/30/24 21:21 • (MSD) R4139953-4 10/30/24 21:35

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	49.3	419	250	519	0.000	202	100	50.0-150	J V	J3 V	70.0	20
(S) o-Terphenyl					*61.7*	*92.2*		*18.0-148*	J7	J7		

Method Blank (MB)

(MB) R4141248-2 10/30/24 09:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00209	0.00600
Anthracene	U		0.00230	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
Naphthalene	U		0.00408	0.0200
Pyrene	U		0.00200	0.00600
(S) p-Terphenyl-d14	*81.4*			*23.0-120*
(S) Nitrobenzene-d5	*79.5*			*14.0-149*
(S) 2-Fluorobiphenyl	*79.4*			*34.0-125*

Laboratory Control Sample (LCS)

(LCS) R4141248-1 10/30/24 09:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0494	61.8	50.0-120	
Anthracene	0.0800	0.0489	61.1	50.0-126	
Benzo(a)anthracene	0.0800	0.0491	61.4	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0503	62.9	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0488	61.0	49.0-125	
Benzo(a)pyrene	0.0800	0.0378	47.3	42.0-120	
Chrysene	0.0800	0.0525	65.6	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0492	61.5	47.0-125	
Fluoranthene	0.0800	0.0535	66.9	49.0-129	
Fluorene	0.0800	0.0531	66.4	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0494	61.8	46.0-125	
1-Methylnaphthalene	0.0800	0.0531	66.4	51.0-121	
2-Methylnaphthalene	0.0800	0.0504	63.0	50.0-120	
Naphthalene	0.0800	0.0503	62.9	50.0-120	
Pyrene	0.0800	0.0557	69.6	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R4141248-1 10/30/24 09:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) p-Terphenyl-d14			*81.8*	*23.0-120*	
(S) Nitrobenzene-d5			*85.1*	*14.0-149*	
(S) 2-Fluorobiphenyl			*80.5*	*34.0-125*	

L1791860-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1791860-04 10/30/24 11:18 • (MS) R4141248-3 10/30/24 11:36 • (MSD) R4141248-4 10/30/24 11:53

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 %
Acenaphthene	0.0772	U	0.0433	0.0461	56.1	59.1	1	14.0-127			6.26	27
Anthracene	0.0772	U	0.0438	0.0441	56.7	56.5	1	10.0-145			0.683	30
Benzo(a)anthracene	0.0772	U	0.0409	0.0440	53.0	56.4	1	10.0-139			7.30	30
Benzo(b)fluoranthene	0.0772	U	0.0470	0.0482	60.9	61.8	1	10.0-140			2.52	36
Benzo(k)fluoranthene	0.0772	U	0.0417	0.0461	54.0	59.1	1	10.0-137			10.0	31
Benzo(a)pyrene	0.0772	U	0.0420	0.0454	54.4	58.2	1	10.0-141			7.78	31
Chrysene	0.0772	U	0.0462	0.0498	59.8	63.8	1	10.0-145			7.50	30
Dibenz(a,h)anthracene	0.0772	U	0.0415	0.0445	53.8	57.1	1	10.0-132			6.98	31
Fluoranthene	0.0772	U	0.0469	0.0491	60.8	62.9	1	10.0-153			4.58	33
Fluorene	0.0772	U	0.0462	0.0486	59.8	62.3	1	11.0-130			5.06	29
Indeno(1,2,3-cd)pyrene	0.0772	U	0.0414	0.0455	53.6	58.3	1	10.0-137			9.44	32
1-Methylnaphthalene	0.0772	U	0.0482	0.0493	62.4	63.2	1	10.0-142			2.26	28
2-Methylnaphthalene	0.0772	U	0.0458	0.0454	59.3	58.2	1	10.0-137			0.877	28
Naphthalene	0.0772	U	0.0455	0.0462	58.9	59.2	1	10.0-135			1.53	27
Pyrene	0.0772	U	0.0500	0.0537	64.8	68.8	1	10.0-148			7.14	35
(S) p-Terphenyl-d14					*74.8*	*73.6*		*23.0-120*				
(S) Nitrobenzene-d5					*72.0*	*69.0*		*14.0-149*				
(S) 2-Fluorobiphenyl					*74.4*	*72.9*		*34.0-125*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
T8	Sample(s) received past/too close to holding time expiration.
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	LAO000356
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.

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

Company Name/Address:
Laramie Energy - Grand Junction, CO

760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Billing Information:
Accounts Payable
1401 Seventeenth St, Ste 1400
Denver, CO 80202

Pres Chk

Report to: **Matt Kasten**

Email To: **mkasten@laramie-energy.com**

Project Description: CC4 BAKER Pipe

City/State Collected:

Please Circle: PT MT CT ET

Phone: **970-263-3601**

Client Project # CC4" BAKER

Lab Project # **OXYGJCO-915**

Collected by (print): Matt Kasten

Site/Facility ID # CC4" BAKER

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Quote #

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

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

SDG # L1791867
K229

Acctnum: **OXYGJCO**
Template: **T222244**
Prelogin: **P973164**
PM: **824 - Chris Ward**
PB:

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TABLE915 GRO/DRO/ORO 4ozClr-NoPres	TABLE915 Metals 4ozClr-NoPres	TABLE915 VOCs 4ozClr-NoPres	TABLE915 pH SPCONSAR 2ozClr-NoPres	TABLE915PAHs 4ozClr-NoPres					Remarks	Sample # (lab only)
CC4 BAKER POR	Grab	SS	0-6	10/22/24	900	4	X	X	X	X	X						-01
		SS															
		SS															
		SS															
		SS															
		SS															
		SS															
		SS															
		SS															
		SS															

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

Remarks:

pH ___ Temp ___
Flow ___ Other ___

Samples returned via:
__ UPS __ FedEx __ Courier ___

Tracking #

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	10/22/24	1800		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 4
	10/22/24	1700		
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 10/23/24 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

L1791867

Fed Ex tracking #	Gun ID	Temperature
7315 3202 6578	M5A9	0.6+0.3=0.9
7315 3202 6589	↓	4.8+0.3=5.1

Name

Date