

TABLE 1
FORMER BUFFALO GARDEN 41-13 WELLHEAD
SOIL ANALYTICAL RESULTS SUMMARY TABLE
ORGANIC COMPOUNDS

Sample ID	Date Sampled	Depth	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	1, 2, 4-TMB (mg/kg)	1, 3, 5-TMB (mg/kg)	Naphthalene (mg/kg)	TPH ⁽⁴⁾ (mg/kg)
Residential SSL ^(1,2)			1.2	490	5.8	58	30	27	2	500
Protection of Groundwater SSL ^(1,2,3)			0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038	500
FLR01 @ 4'	9/7/2021	4 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50
WH01 @ 6'	9/7/2021	6 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50

Notes:

- Compounds referenced from the COGCC 2 CCR 404-1, Table 915-1, effective January 15, 2021.
- Soil Screening Levels (SSL) referenced from EPA Regional Screening Levels (EPA RSLs) for Chemical Contaminants at Superfund Sites, effective November 2020.
- SSLs are applicable if a pathway for communication with groundwater is present.
- Value calculated by adding TVPH-GRO, TEPH-DRO, and TEPH-ORO concentrations.

COGCC = Colorado Oil and Gas Conservation Commission

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

TVPH-GRO = Total volatile petroleum hydrocarbons - gasoline range organics

TEPH-DRO = Total extractable petroleum hydrocarbons - diesel range organics

TEPH-ORO = Total extractable petroleum hydrocarbons - oil range organics

mg/kg = Milligrams per kilogram

TMB = Trimethylbenzene

ft. = Feet

bgs = Below ground surface

TABLE 2
FORMER BUFFALO GARDEN 41-13 WELLHEAD
SOIL ANALYTICAL RESULTS SUMMARY TABLE
INORGANIC COMPOUNDS

Sample ID	Date Sampled	Depth	pH (units)	EC (mmhos/cm)	SAR (units)	Boron (mg/L)
Soil Suitability for Reclamation Standard ⁽¹⁾			6-8.3	<4	<6	2
FLR01 @ 4'	9/7/2021	4 ft. bgs	9.39	0.256	0.0243	<0.0100
WH01 @ 6'	9/7/2021	6 ft. bgs	9.19	0.304	0.0693	<0.0100
BKG01 @ 2.5'	9/7/2021	2.5 ft. bgs	8.28	NA	NA	NA
BKG01 @ 4'	9/7/2021	4 ft. bgs	8.43	NA	NA	NA
BKG01 @ 6'	9/7/2021	6 ft. bgs	9.06	NA	NA	NA

Notes:

1. Compounds referenced from the COGCC 2 CCR 404-1, Table 915-1, effective January 15, 2021.

COGCC = Colorado Oil and Gas Conservation Commission

EC = Electrical conductivity

SAR = Sodium adsorption ratio

mmhos/cm = millimhos per centimeter

mg/L = milligrams per liter

ft. = Feet

bgs = Below ground surface

BOLD = Analytical result is in exceedance of applicable standard.

BOLD = Analytical result is in exceedance of applicable standard, but within 1.25x background concentration.

TABLE 3
FORMER BUFFALO GARDEN 41-13 WELLHEAD
SOIL ANALYTICAL RESULTS SUMMARY TABLE
ORGANIC COMPOUNDS - PAHs

Sample ID	Date Sampled	Depth	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benz(a) (mg/kg)	Benzo(a) (mg/kg)	Benzo(b) (mg/kg)	Benzo(k) (mg/kg)	Chrysene (mg/kg)	A,H (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	1,2,3-CD (mg/kg)	Pyrene (mg/kg)	1-M (mg/kg)	2-M (mg/kg)
Residential SSL ^(1,2)			360	1,800	1.1	0.11	1.1	11	110	0.11	240	240	1.1	180	18	24
Protection of Groundwater SSL ^(1,2,3)			0.55	5.8	0.011	0.24	0.3	2.9	9	0.096	8.9	0.54	0.98	1.3	0.006	0.019
FLR01 @ 4'	9/7/2021	4 ft. bgs	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
WH01 @ 6'	9/7/2021	6 ft. bgs	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500

Notes:

1. Compounds referenced from the COGCC 2 CCR 404-1, Table 915-1, effective January 15, 2021.
2. Soil Screening Levels (SSL) referenced from EPA Regional Screening Levels (EPA RSLs) for Chemical Contaminants at Superfund Sites, effective November 2020.
3. SSLs are applicable if a pathway for communication with

COGCC = Colorado Oil and Gas Conservation Commission

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

PAHs = Polycyclic aromatic hydrocarbons

Benzo(a) = Benzantracene

Benzo(a) = Benzopyrene

Benzo(b) = Benzofluoranthene

Benzo(k) = Benzofluoranthene

A,H = Dibenzoanthracene

1,2,3-CD = Indenopyrene

M = Methylnaphthalene

mg/kg = Milligrams per kilogram

ft. = Feet

bgs = Below ground surface

TABLE 4
FORMER BUFFALO GARDEN 41-13 WELLHEAD
FIELD DATA SUMMARY TABLE

Sample ID	Date Sampled	Depth	GPS Data ⁽¹⁾ Latitude / Longitude		PDOP Value	VOC Concentration ⁽²⁾ (ppm)
FLR01 @ 4'	9/7/2021	4 ft. bgs	40.144543	-104.943808	1.4	0.0
WH01 @ 6'	9/7/2021	6 ft. bgs	40.144540	-104.943791	1.3	0.1
WHS01-N @ 0-6"	9/7/2021	0-6 in. bgs	40.144567	-104.943783	1.1	0.4
WHS01-W @ 0-6"	9/7/2021	0-6 in. bgs	40.144544	-104.943830	1.1	0.2
WHS01-S @ 0-6"	9/7/2021	0-6 in. bgs	40.144504	-104.943803	1.1	0.2
WHS01-E @ 0-6"	9/7/2021	0-6 in. bgs	40.144529	-104.943755	1.0	0.4
BKG01 @ 2.5'	9/7/2021	2.5' bgs	40.144164	-104.943966	1.5	0.4
BKG01 @ 4'	9/7/2021	4 ft. bgs	40.144164	-104.943966	1.5	1.0
BKG01 @ 6'	9/7/2021	6 ft. bgs	40.144164	-104.943966	1.5	0.6
FL01-01 @ 5'	9/7/2021	5 ft. bgs	40.144314	-104.944059	1.1	0.1
FL01-02 @ 5'	9/7/2021	5 ft. bgs	40.144120	-104.944253	1.3	0.5
FL01-03 @ 3'	9/7/2021	3 ft. bgs	40.144008	-104.944399	1.2	0.2

Notes:

1. Global Positioning System (GPS) data is provided in decimal degrees using World Geodetic System (WGS) 84 UTM Zone 13 North.

2. Volatile organic compound (VOC) concentrations are measured in the field using a photoionization detector (PID).

PDOP = Position Dilution of Precision

ppm = Parts per million

ft. = Feet

in. = Inches

bgs = Below ground surface

Attachment A

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 01, 2021

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

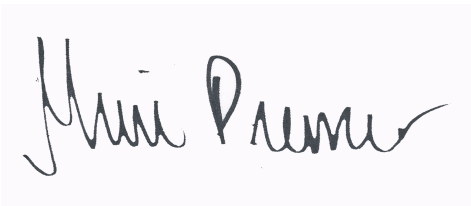
Denver, CO 80203

RE: Buffalo Gardens 41-13 Wellhead

Work Order #2109092

Enclosed are the results of analyses for samples received by Summit Scientific on 09/07/21 21:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Muri Premier", is displayed on a light purple rectangular background.

Muri Premier For Paul Shrewsbury
President



PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FLR01@4'	2109092-01	Soil	09/07/21 09:10	09/07/21 21:05
WH01@6'	2109092-02	Soil	09/07/21 09:12	09/07/21 21:05
BKG01@2.5'	2109092-03	Soil	09/07/21 12:58	09/07/21 21:05
BKG01@4'	2109092-04	Soil	09/07/21 13:00	09/07/21 21:05
BKG01@6'	2109092-05	Soil	09/07/21 13:04	09/07/21 21:05

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

2109092

Summit Scientific

1601 Table Mountain Drive • Golden, Colorado 80403
303.277.9510

Page 1 of 1

Client: PDM - Tasman

Project Manager: Mark Loughran

Address: 6855 W 179th Ave

E-Mail: mark.loughran@PDMT.com

City/State/Zip: Greenwood, CO 80420

Phone: 303.387.1228

Project Name: Buffalo Gardens 41-13 W/W Wellhead

Sampler Name: Dylan Brightwell

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis Requested										Special Instructions	
					HCl	HNO ₃	None	Other	Water	Soil	Var. material	Other	GC/MS - 8260B	GC/MS - 8260B	GC/MS - 8260B	GC/MS - 8260B	GC/MS - 8260B	GC/MS - 8260B	GC/MS - 8260B	GC/MS - 8260B	GC/MS - 8260B	GC/MS - 8260B	GC/MS - 8260B
1	FLRci @ 4'	9/7/21	9:10	2			X						X	X	X	X	X	X	X	X	X		
2	W hel @ 6'		9:12	3			X			X			X	X	X	X	X	X	X	X	X		
3	Bkci @ 2.5'		12:58	1			X			X													
4	Bkci @ 4'		13:00	1			X			X													
5	Bkci @ 6'	↓	13:04	1			X			X													
6																							
7																							
8																							
9																							
10																							

Relinquished by: Date/Time:

Received by:

Date/Time:

Turn Around Time (Check):

Notes:

Dylan Brightwell 9/7/21 16:45

Tasman's Luck Box

9/7/21 16:45

Same Day 72 hours

24 hours Standard X

48 hours

Sample Integrity

Temperature Upon Receipt:

Samples Intact: Yes No

Relinquished by: Date/Time:

Received by:

Date/Time:

Tasman's Luck Box

Relinquished by: Date/Time:

Received by:

Date/Time:

Sample Receipt Checklist

S2 Work Order _____

Client: PDC/Tasman Client Project ID Buffalo Gardens 41-13 Wellhead

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other _____ Airbill #: _____

☐ ☒ ☐ ☐ ☐

Matrix (check all that apply): ☐ Air ☒ Soil/Solid ☐ Water ☐ Other: _____
(Describe)

Temp (°C)	4.2
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Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact ⁽¹⁾ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any): 				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				

WG

Custodian Printed Name or Initials

Signature of Custodian

9/2/21

Date/Time



PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

FLR01@4'
2109092-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/07/21 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEI0160	09/08/21	09/09/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/07/21 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.4 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/07/21 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEI0161	09/08/21	09/09/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/07/21 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		117 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

FLR01@4'
2109092-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/07/21 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEI0139	09/08/21	09/10/21	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/07/21 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		48.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		47.9 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/07/21 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	0.0100	mg/L	1	BEI0244	09/13/21	09/14/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **09/07/21 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

FLR01@4'
2109092-01 (Soil)

Summit Scientific

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Calcium	11.0	0.0529	mg/L dry	1	BEI0197	09/09/21	09/13/21	EPA 6020B
Magnesium	1.80	0.0529	"	"	"	"	"	"
Sodium	0.330	0.0529	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **09/07/21 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0243	0.00100	units	1	BEI0263	09/13/21	09/13/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/07/21 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.6		%	1	BEI0245	09/13/21	09/13/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/07/21 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.256	0.0100	mmhos/cm	1	BEI0198	09/09/21	09/10/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **09/07/21 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.39		pH Units	1	BEI0199	09/09/21	09/13/21	EPA 9045D	

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

WH01@6'
2109092-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/07/21 09:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEI0160	09/08/21	09/09/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/07/21 09:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		115 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		105 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/07/21 09:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BEI0161	09/08/21	09/09/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/07/21 09:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		115 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

WH01@6'
2109092-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/07/21 09:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEI0139	09/08/21	09/10/21	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/07/21 09:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		46.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		43.9 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/07/21 09:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	0.0100	mg/L	1	BEI0244	09/13/21	09/14/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **09/07/21 09:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

WH01@6'
2109092-02 (Soil)

Summit Scientific

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Calcium	57.6	0.0571	mg/L dry	1	BEI0197	09/09/21	09/13/21	EPA 6020B
Magnesium	4.15	0.0571	"	"	"	"	"	"
Sodium	2.02	0.0571	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **09/07/21 09:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0693	0.00100	units	1	BEI0263	09/13/21	09/13/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/07/21 09:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.6		%	1	BEI0245	09/13/21	09/13/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/07/21 09:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.304	0.0100	mmhos/cm	1	BEI0198	09/09/21	09/10/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **09/07/21 09:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.19		pH Units	1	BEI0199	09/09/21	09/13/21	EPA 9045D	

Summit Scientific

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

BKG01@2.5'
2109092-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **09/07/21 12:58**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.28			pH Units	1	BEI0656	09/30/21	09/30/21	EPA 9045D	I-04

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

BKG01@4'
2109092-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **09/07/21 13:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.43			pH Units	1	BEI0656	09/30/21	09/30/21	EPA 9045D	I-04

Summit Scientific

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

BKG01@6'
2109092-05 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **09/07/21 13:04**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	9.06			pH Units	1	BEI0656	09/30/21	09/30/21	EPA 9045D	I-04

Summit Scientific

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BEI0160 - EPA 5030 Soil MS

Blank (BEI0160-BLK1)

Prepared: 09/08/21 Analyzed: 09/09/21

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0393		"	0.0400		98.2	23-173			
Surrogate: Toluene-d8	0.0422		"	0.0400		106	20-170			
Surrogate: 4-Bromofluorobenzene	0.0400		"	0.0400		100	21-167			

LCS (BEI0160-BS1)

Prepared: 09/08/21 Analyzed: 09/09/21

Benzene	0.0656	0.0020	mg/kg	0.0750		87.5	70-130			
Toluene	0.0766	0.0050	"	0.0750		102	70-130			
Ethylbenzene	0.0805	0.0050	"	0.0750		107	70-130			
m,p-Xylene	0.163	0.010	"	0.150		109	70-130			
o-Xylene	0.0864	0.0050	"	0.0750		115	70-130			
1,2,4-Trimethylbenzene	0.0867	0.0050	"	0.0750		116	70-130			
1,3,5-Trimethylbenzene	0.0811	0.0050	"	0.0750		108	70-130			
Naphthalene	0.0933	0.0038	"	0.0750		124	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0333		"	0.0400		83.3	23-173			
Surrogate: Toluene-d8	0.0378		"	0.0400		94.6	20-170			
Surrogate: 4-Bromofluorobenzene	0.0400		"	0.0400		100	21-167			

Matrix Spike (BEI0160-MS1)

Source: 2109063-01

Prepared: 09/08/21 Analyzed: 09/09/21

Benzene	0.0596	0.0020	mg/kg	0.0750	ND	79.4	70-130			
Toluene	0.0712	0.0050	"	0.0750	ND	95.0	70-130			
Ethylbenzene	0.0709	0.0050	"	0.0750	ND	94.5	70-130			
m,p-Xylene	0.146	0.010	"	0.150	ND	97.5	70-130			
o-Xylene	0.0769	0.0050	"	0.0750	ND	103	70-130			
1,2,4-Trimethylbenzene	0.0778	0.0050	"	0.0750	ND	104	70-130			
1,3,5-Trimethylbenzene	0.0720	0.0050	"	0.0750	ND	96.0	70-130			
Naphthalene	0.0921	0.0038	"	0.0750	ND	123	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0319		"	0.0400		79.7	23-173			
Surrogate: Toluene-d8	0.0389		"	0.0400		97.3	20-170			
Surrogate: 4-Bromofluorobenzene	0.0387		"	0.0400		96.8	21-167			

Summit Scientific

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BEI0160 - EPA 5030 Soil MS

Matrix Spike Dup (BEI0160-MSD1)	Source: 2109063-01			Prepared: 09/08/21 Analyzed: 09/09/21						
Benzene	0.0650	0.0020	mg/kg	0.0750	ND	86.6	70-130	8.62	30	
Toluene	0.0816	0.0050	"	0.0750	ND	109	70-130	13.5	30	
Ethylbenzene	0.0784	0.0050	"	0.0750	ND	105	70-130	10.1	30	
m,p-Xylene	0.163	0.010	"	0.150	ND	109	70-130	10.8	30	
o-Xylene	0.0860	0.0050	"	0.0750	ND	115	70-130	11.1	30	
1,2,4-Trimethylbenzene	0.0888	0.0050	"	0.0750	ND	118	70-130	13.2	30	
1,3,5-Trimethylbenzene	0.0816	0.0050	"	0.0750	ND	109	70-130	12.6	30	
Naphthalene	0.0734	0.0038	"	0.0750	ND	97.9	70-130	22.5	30	
Surrogate: 1,2-Dichloroethane-d4	0.0363		"	0.0400		90.8	23-173			
Surrogate: Toluene-d8	0.0404		"	0.0400		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0412		"	0.0400		103	21-167			

Summit Scientific

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD	
		Limit	Units		Result	%REC	Limits	RPD	Limit	Notes

Batch BEI0161 - EPA 3550A

Blank (BEI0161-BLK1)

Prepared: 09/08/21 Analyzed: 09/10/21

C10-C28 (DRO)	ND	50	mg/kg
C28-C36 (ORO)	ND	50	"

LCS (BEI0161-BS1)

Prepared: 09/08/21 Analyzed: 09/10/21

C10-C28 (DRO)	595	50	mg/kg	500	119	70-130
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Matrix Spike (BEI0161-MS1)

Source: 2109063-01

Prepared: 09/08/21 Analyzed: 09/10/21

C10-C28 (DRO)	614	50	mg/kg	500	13.0	120	70-130
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Matrix Spike Dup (BEI0161-MSD1)

Source: 2109063-01

Prepared: 09/08/21 Analyzed: 09/10/21

C10-C28 (DRO)	603	50	mg/kg	500	13.0	118	70-130	1.80	20
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Summit Scientific

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Reporting			Spike		Source		%REC		RPD	
	Result	Limit	Units	Level		Result		%REC	Limits	RPD	Limit

Batch BEI0139 - EPA 5030 Soil MS

Blank (BEI0139-BLK1)

Prepared: 09/08/21 Analyzed: 09/10/21

Acenaphthene	ND	0.00500	mg/kg								
Anthracene	ND	0.00500	"								
Benzo (a) anthracene	ND	0.00500	"								
Benzo (a) pyrene	ND	0.00500	"								
Benzo (b) fluoranthene	ND	0.00500	"								
Benzo (k) fluoranthene	ND	0.00500	"								
Chrysene	ND	0.00500	"								
Dibenz (a,h) anthracene	ND	0.00500	"								
Fluoranthene	ND	0.00500	"								
Fluorene	ND	0.00500	"								
Indeno (1,2,3-cd) pyrene	ND	0.00500	"								
Pyrene	ND	0.00500	"								
1-Methylnaphthalene	ND	0.00500	"								
2-Methylnaphthalene	ND	0.00500	"								
Surrogate: 2-Methylnaphthalene-d10	0.0209		"	0.0333		62.6		40-150			
Surrogate: Fluoranthene-d10	0.0143		"	0.0333		43.0		40-150			

LCS (BEI0139-BS1)

Prepared: 09/08/21 Analyzed: 09/10/21

Acenaphthene	0.0277	0.00500	mg/kg	0.0333		83.0		31-137			
Anthracene	0.0268	0.00500	"	0.0333		80.5		30-120			
Benzo (a) anthracene	0.0264	0.00500	"	0.0333		79.3		30-120			
Benzo (a) pyrene	0.0307	0.00500	"	0.0333		92.2		30-120			
Benzo (b) fluoranthene	0.0301	0.00500	"	0.0333		90.3		30-120			
Benzo (k) fluoranthene	0.0308	0.00500	"	0.0333		92.4		30-120			
Chrysene	0.0258	0.00500	"	0.0333		77.3		30-120			
Dibenz (a,h) anthracene	0.0227	0.00500	"	0.0333		68.2		30-120			
Fluoranthene	0.0289	0.00500	"	0.0333		86.6		30-120			
Fluorene	0.0292	0.00500	"	0.0333		87.6		30-120			
Indeno (1,2,3-cd) pyrene	0.0234	0.00500	"	0.0333		70.3		30-120			
Pyrene	0.0245	0.00500	"	0.0333		73.4		35-142			
1-Methylnaphthalene	0.0289	0.00500	"	0.0333		86.7		35-142			
2-Methylnaphthalene	0.0272	0.00500	"	0.0333		81.6		35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0216		"	0.0333		64.8		40-150			
Surrogate: Fluoranthene-d10	0.0152		"	0.0333		45.7		40-150			

Summit Scientific

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Reporting			Spike Level	Source		%REC		RPD	
	Result	Limit	Units		Result	%REC	Limits	RPD	Limit	Notes

Batch BEI0139 - EPA 5030 Soil MS

Matrix Spike (BEI0139-MS1)

Source: 2108059-02

Prepared: 09/08/21 Analyzed: 09/10/21

Acenaphthene	0.0218	0.00500	mg/kg	0.0333	ND	65.3	31-137		
Anthracene	0.0185	0.00500	"	0.0333	ND	55.6	30-120		
Benzo (a) anthracene	0.0192	0.00500	"	0.0333	ND	57.6	30-120		
Benzo (a) pyrene	0.0217	0.00500	"	0.0333	ND	65.1	30-120		
Benzo (b) fluoranthene	0.0215	0.00500	"	0.0333	ND	64.6	30-120		
Benzo (k) fluoranthene	0.0229	0.00500	"	0.0333	ND	68.8	30-120		
Chrysene	0.0186	0.00500	"	0.0333	ND	55.9	30-120		
Dibenz (a,h) anthracene	0.0151	0.00500	"	0.0333	ND	45.4	30-120		
Fluoranthene	0.0207	0.00500	"	0.0333	ND	62.1	30-120		
Fluorene	0.0224	0.00500	"	0.0333	ND	67.1	30-120		
Indeno (1,2,3-cd) pyrene	0.0159	0.00500	"	0.0333	ND	47.8	30-120		
Pyrene	0.0185	0.00500	"	0.0333	ND	55.5	35-142		
1-Methylnaphthalene	0.0206	0.00500	"	0.0333	ND	61.7	15-130		
2-Methylnaphthalene	0.0214	0.00500	"	0.0333	ND	64.2	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0164		"	0.0333		49.2	40-150		
Surrogate: Fluoranthene-d10	0.0173		"	0.0333		52.0	40-150		

Matrix Spike Dup (BEI0139-MSD1)

Source: 2108059-02

Prepared: 09/08/21 Analyzed: 09/10/21

Acenaphthene	0.0265	0.00500	mg/kg	0.0333	ND	79.5	31-137	19.5	30
Anthracene	0.0191	0.00500	"	0.0333	ND	57.3	30-120	3.08	30
Benzo (a) anthracene	0.0254	0.00500	"	0.0333	ND	76.3	30-120	27.9	30
Benzo (a) pyrene	0.0294	0.00500	"	0.0333	ND	88.1	30-120	30.0	30
Benzo (b) fluoranthene	0.0285	0.00500	"	0.0333	ND	85.4	30-120	27.7	30
Benzo (k) fluoranthene	0.0301	0.00500	"	0.0333	ND	90.2	30-120	26.9	30
Chrysene	0.0248	0.00500	"	0.0333	ND	74.3	30-120	28.3	30
Dibenz (a,h) anthracene	0.0146	0.00500	"	0.0333	ND	43.7	30-120	3.84	30
Fluoranthene	0.0268	0.00500	"	0.0333	ND	80.4	30-120	25.6	30
Fluorene	0.0273	0.00500	"	0.0333	ND	81.8	30-120	19.8	30
Indeno (1,2,3-cd) pyrene	0.0152	0.00500	"	0.0333	ND	45.6	30-120	4.79	30
Pyrene	0.0238	0.00500	"	0.0333	ND	71.5	35-142	25.2	30
1-Methylnaphthalene	0.0289	0.00500	"	0.0333	ND	86.8	15-130	33.8	50
2-Methylnaphthalene	0.0250	0.00500	"	0.0333	ND	74.9	15-130	15.5	50
Surrogate: 2-Methylnaphthalene-d10	0.0193		"	0.0333		58.0	40-150		
Surrogate: Fluoranthene-d10	0.0142		"	0.0333		42.6	40-150		

Summit Scientific

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BEI0244 - EPA 3050B

Blank (BEI0244-BLK1)

Prepared: 09/13/21 Analyzed: 09/14/21

Boron ND 0.0100 mg/L

LCS (BEI0244-BS1)

Prepared: 09/13/21 Analyzed: 09/14/21

Boron 4.88 0.0100 mg/L 5.00 97.6 80-120

Duplicate (BEI0244-DUP1)

Source: 2109091-02

Prepared: 09/13/21 Analyzed: 09/14/21

Boron ND 0.0100 mg/L ND 20

Matrix Spike (BEI0244-MS1)

Source: 2109091-02

Prepared: 09/13/21 Analyzed: 09/14/21

Boron 5.00 0.0100 mg/L 5.00 ND 100 75-125

Matrix Spike Dup (BEI0244-MSD1)

Source: 2109091-02

Prepared: 09/13/21 Analyzed: 09/14/21

Boron 4.70 0.0100 mg/L 5.00 ND 94.0 75-125 6.22 25

Summit Scientific

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BEI0197 - General Preparation

Blank (BEI0197-BLK1)

Prepared: 09/09/21 Analyzed: 09/13/21

Calcium	ND	0.0500	mg/L wet
Magnesium	ND	0.0500	"
Sodium	ND	0.0500	"

LCS (BEI0197-BS1)

Prepared: 09/09/21 Analyzed: 09/13/21

Calcium	5.57	0.0500	mg/L wet	5.00	111	70-130
Magnesium	4.91	0.0500	"	5.00	98.3	70-130
Sodium	4.79	0.0500	"	5.00	95.8	70-130

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD	
		Limit	Units		Result	%REC	Limits	RPD	Limit	Notes

Batch BEI0245 - General Preparation

Duplicate (BEI0245-DUP1)

Source: 2109091-02

Prepared & Analyzed: 09/13/21

% Solids	96.1	%	96.2	0.0998	20
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Summit Scientific

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control
Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD	
		Limit	Units		Result	%REC	Limits	RPD	Limit	Notes

Batch BEI0198 - General Preparation

Blank (BEI0198-BLK1)

Prepared: 09/09/21 Analyzed: 09/10/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BEI0198-BS1)

Prepared: 09/09/21 Analyzed: 09/10/21

Specific Conductance (EC) 0.139 0.0100 mmhos/cm 0.150 92.5 90-110

Duplicate (BEI0198-DUP1)

Source: 2109063-01

Prepared: 09/09/21 Analyzed: 09/10/21

Specific Conductance (EC) 1.46 0.0100 mmhos/cm 1.46 0.137 20

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BEI0199 - General Preparation

LCS (BEI0199-BS1) Prepared: 09/09/21 Analyzed: 09/13/21

pH	9.34	pH Units	9.21	101	95-105
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Duplicate (BEI0199-DUP1) Source: 2109063-01 Prepared: 09/09/21 Analyzed: 09/13/21

pH	7.82	pH Units	7.99	2.15	20
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Batch BEI0656 - General Preparation

LCS (BEI0656-BS1) Prepared & Analyzed: 09/30/21

pH	9.13	pH Units	9.21	99.1	95-105
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Duplicate (BEI0656-DUP1) Source: 2109092-03 Prepared & Analyzed: 09/30/21

pH	8.29	pH Units	8.28	0.121	20
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Summit Scientific

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PDC Energy
1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Buffalo Gardens 41-13 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/01/21 14:02

Notes and Definitions

I-04 Sample was analyzed out of recommended holding time per clients request.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference