

TABLE 1
FORMER SLW 21-19 WELLHEAD
SOIL ANALYTICAL RESULTS SUMMARY TABLE

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
WH01 @ 5'	6/24/2021	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 SLW 21-19 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 @ 2.5'	6/24/2021	2.5 ft. bgs	7.96	0.844	1.75	0.175

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 = milligram per liter

ft. = Feet

bgs = Below ground surface

TABLE 3
FORMER SLW 21-19 WELLHEAD
FIELD DATA SUMMARY TABLE

Sample ID	Date Sampled	Depth	GPS Data ⁽¹⁾ Latitude / Longitude		PDOP Value	VOC Concentration ⁽²⁾ (ppm)
WH01 @ 5'	6/24/2021	5 ft. bgs	40.390585	-104.481398	0.9	0.5
FLR01 @ 2.5'	6/24/2021	2.5 ft. bgs	40.390579	-104.481405	0.9	0.2
FLR01 @ 4'	6/24/2021	4 ft. bgs	40.390580	-104.481390	0.9	0.3
BKG01 @ 2.5'	6/24/2021	2.5 ft. bgs	40.390601	-104.481514	0.9	0.2
WHS01-N @ 0-6"	6/24/2021	0-6 in. bgs	40.390625	-104.481388	0.9	0.2
WHS01-W @ 0-6"	6/24/2021	0-6 in. bgs	40.390597	-104.481454	0.9	0.1
WHS01-S @ 0-6"	6/24/2021	0-6 in. bgs	40.390558	-104.481411	0.9	0.1
WHS01-E @ 0-6"	6/24/2021	0-6 in. bgs	40.390579	-104.481365	0.9	0.0
FL01-01 @ 4'	6/24/2021	4 ft. bgs	40.390295	-104.480471	0.9	0.4
FL01-02 @ 3'	6/24/2021	3 ft. bgs	40.390116	-104.479760	0.9	0.5
FL01-03 @ 3'	6/24/2021	3 ft. bgs	40.389937	-104.479729	0.9	0.4
FL01-04 @ 4'	6/24/2021	4 ft. bgs	40.389189	-104.479710	0.9	0.6
FL01-05 @ 3'	6/24/2021	3 ft. bgs	40.388241	-104.479771	0.9	0.7

Notes:

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

NC = Data not collected

Attachment A

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

July 02, 2021

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: SLW 21-19 Wellhead

Work Order #2106446

Enclosed are the results of analyses for samples received by Summit Scientific on 06/24/21 17:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', with a stylized, flowing script.

Paul Shrewsbury

President



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

Project: SLW 21-19 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
07/02/21 15:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WH01@5'	2106446-01	Soil	06/24/21 08:40	06/24/21 17:30
FLR01@2.5'	2106446-02	Soil	06/24/21 08:44	06/24/21 17:30

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.

Summit Scientific

2106446

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310

Page 1 of 1

Client: PDC / Tasman

Project Manager: Mark Longhurst

Address: 6855 W 119th Ave

E-Mail: mark.longhurst@PDCE.com

City/State/Zip: Broomfield/ CO/ 80020

Phone: 303-487-1228

Project Name: SLW 21-19 Wellhead

Sampler Name: Cody Miller

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested								Special Instructions	
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	GBTEXN - 8260B ⁹¹⁵	TPH - (C6 - C36) ⁹¹⁵	pH, EC, SAR ⁹¹⁵	Boron - HWS ⁹¹⁵	VOC - 915	PAH - 915	Metals - 915	Metals - 915 (1,3,5) ⁹¹⁵		
1	WH01 2.5'	6/24/21	0840	3			X			X				X	X						X	pH, EC, SAR by saturated paste Hold
2	FLR01 22.5'	↓	0844	1			X			X					X	X						
3	BKG01 22.5'	↓	0848	1			X			X											X	
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Relinquished by: Cody Miller	Date/Time: 6/24/21 1130	Received by: Tasman's Lock Box	Date/Time: 6/24/21 1130	Turn Around Time (Check) Same Day _____ 72 hours _____ 24 hours _____ Standard <u>X</u> 48 hours _____	Notes:
Relinquished by: Tasman's Lock Box	Date/Time: 6/24/21 1730	Received by: [Signature]	Date/Time: 6/24/21 1730	Sample Integrity: <u>7</u>	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Temperature Upon Receipt: _____ Samples Intact: <u>Yes</u> No	

Sample Receipt Checklist

S2 Work Order 2106446

Client: PDC / Tasman

Client Project ID: SLW 21-19 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)

7

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"/>	<u>On ice.</u>
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.

JB

Custodian Printed Name or Initials

[Signature]

Signature of Custodian

6/24/21

Date/Time



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

Project: SLW 21-19 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/02/21 15:06

WH01@5'
2106446-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/24/21 08:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEF0542	06/25/21	06/25/21	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: **06/24/21 08:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		113 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		114 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		86.4 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/24/21 08:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEF0532	06/25/21	06/27/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/24/21 08:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		97.8 %	30-150		"	"	"	"	

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

Project: SLW 21-19 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/02/21 15:06

FLR01@2.5'
2106446-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **06/24/21 08:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.175	0.0100	mg/L	1	BEF0605	06/30/21	07/01/21	EPA 6020B	

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

Date Sampled: **06/24/21 08:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	62.7	0.0546	mg/L dry	1	BEF0562	06/28/21	06/30/21	EPA 6020B	
Magnesium	21.8	0.0546	"	"	"	"	"	"	
Sodium	63.0	0.0546	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **06/24/21 08:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.75	0.00100	units	1	BEG0046	07/02/21	07/02/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/24/21 08:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.5		%	1	BEF0604	06/30/21	07/01/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **06/24/21 08:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.844	0.0100	mmhos/cm	1	BEF0578	06/29/21	06/29/21	EPA 120.1	

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

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

Project: SLW 21-19 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/02/21 15:06

FLR01@2.5'
2106446-02 (Soil)

Summit Scientific

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

Date Sampled: **06/24/21 08:44**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.96			pH Units	1	BEF0577	06/29/21	06/29/21	EPA 9045D	

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

Project: SLW 21-19 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/02/21 15:06

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 BEF0542 - EPA 5030 Soil MS

Blank (BEF0542-BLK1)

Prepared & Analyzed: 06/25/21

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	0.0339		"	0.0400		84.8	23-173			
Surrogate: Toluene-d8	0.0494		"	0.0400		124	20-170			
Surrogate: 4-Bromofluorobenzene	0.0330		"	0.0400		82.5	21-167			

LCS (BEF0542-BS1)

Prepared & Analyzed: 06/25/21

Benzene	0.123	0.0020	mg/kg	0.150		82.0	70-130			
Toluene	0.128	0.0050	"	0.150		85.0	70-130			
Ethylbenzene	0.134	0.0050	"	0.150		89.3	70-130			
m,p-Xylene	0.265	0.010	"	0.300		88.2	70-130			
o-Xylene	0.131	0.0050	"	0.150		87.4	70-130			
1,2,4-Trimethylbenzene	0.146	0.0050	"	0.150		97.1	70-130			
1,3,5-Trimethylbenzene	0.151	0.0050	"	0.150		101	70-130			
Naphthalene	0.150	0.0038	"	0.150		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0378		"	0.0400		94.4	23-173			
Surrogate: Toluene-d8	0.0388		"	0.0400		97.0	20-170			
Surrogate: 4-Bromofluorobenzene	0.0368		"	0.0400		92.0	21-167			

Matrix Spike (BEF0542-MS1)

Source: 2106425-01

Prepared & Analyzed: 06/25/21

Benzene	0.122	0.0020	mg/kg	0.150	ND	81.4	70-130			
Toluene	0.111	0.0050	"	0.150	ND	74.2	70-130			
Ethylbenzene	0.118	0.0050	"	0.150	ND	78.5	70-130			
m,p-Xylene	0.224	0.010	"	0.300	ND	74.6	70-130			
o-Xylene	0.111	0.0050	"	0.150	ND	73.8	70-130			
1,2,4-Trimethylbenzene	0.120	0.0050	"	0.150	ND	79.9	70-130			
1,3,5-Trimethylbenzene	0.130	0.0050	"	0.150	ND	86.9	70-130			
Naphthalene	0.132	0.0038	"	0.150	ND	88.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0437		"	0.0400		109	23-173			
Surrogate: Toluene-d8	0.0350		"	0.0400		87.4	20-170			
Surrogate: 4-Bromofluorobenzene	0.0369		"	0.0400		92.3	21-167			

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

Project: SLW 21-19 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/02/21 15:06

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 BEF0542 - EPA 5030 Soil MS

Matrix Spike Dup (BEF0542-MSD1)	Source: 2106425-01			Prepared & Analyzed: 06/25/21						
Benzene	0.123	0.0020	mg/kg	0.150	ND	81.8	70-130	0.564	30	
Toluene	0.124	0.0050	"	0.150	ND	82.5	70-130	10.7	30	
Ethylbenzene	0.130	0.0050	"	0.150	ND	86.4	70-130	9.48	30	
m,p-Xylene	0.254	0.010	"	0.300	ND	84.6	70-130	12.6	30	
o-Xylene	0.126	0.0050	"	0.150	ND	84.0	70-130	12.9	30	
1,2,4-Trimethylbenzene	0.132	0.0050	"	0.150	ND	88.2	70-130	9.92	30	
1,3,5-Trimethylbenzene	0.138	0.0050	"	0.150	ND	92.1	70-130	5.77	30	
Naphthalene	0.152	0.0038	"	0.150	ND	101	70-130	13.5	30	
Surrogate: 1,2-Dichloroethane-d4	0.0390		"	0.0400		97.5	23-173			
Surrogate: Toluene-d8	0.0386		"	0.0400		96.4	20-170			
Surrogate: 4-Bromofluorobenzene	0.0374		"	0.0400		93.5	21-167			

Summit Scientific

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

Project: SLW 21-19 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/02/21 15:06

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BEF0532 - EPA 3550A

Blank (BEF0532-BLK1)

Prepared: 06/25/21 Analyzed: 06/27/21

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

LCS (BEF0532-BS1)

Prepared: 06/25/21 Analyzed: 06/27/21

C10-C28 (DRO)	504	50	mg/kg	500	101	70-130					
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Matrix Spike (BEF0532-MS1)

Source: 2106412-01

Prepared: 06/25/21 Analyzed: 06/27/21

C10-C28 (DRO)	474	50	mg/kg	500	14.6	91.9	70-130				
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Matrix Spike Dup (BEF0532-MSD1)

Source: 2106412-01

Prepared: 06/25/21 Analyzed: 06/27/21

C10-C28 (DRO)	480	50	mg/kg	500	14.6	93.0	70-130	1.22	20		
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Summit Scientific

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

Project: SLW 21-19 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/02/21 15:06

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 BEF0605 - EPA 3050B

Blank (BEF0605-BLK1)

Prepared: 06/30/21 Analyzed: 07/01/21

Boron ND 0.0100 mg/L

LCS (BEF0605-BS1)

Prepared: 06/30/21 Analyzed: 07/01/21

Boron 5.17 0.0100 mg/L 5.00 103 80-120

Duplicate (BEF0605-DUP1)

Source: 2106380-06

Prepared: 06/30/21 Analyzed: 07/01/21

Boron 0.466 0.0100 mg/L 0.508 8.69 20

Matrix Spike (BEF0605-MS1)

Source: 2106380-06

Prepared: 06/30/21 Analyzed: 07/01/21

Boron 5.63 0.0100 mg/L 5.00 0.508 102 75-125

Matrix Spike Dup (BEF0605-MSD1)

Source: 2106380-06

Prepared: 06/30/21 Analyzed: 07/01/21

Boron 5.70 0.0100 mg/L 5.00 0.508 104 75-125 1.24 25

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

Project: SLW 21-19 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
07/02/21 15:06

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

Summit Scientific

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

Batch BEF0562 - General Preparation

Blank (BEF0562-BLK1)

Prepared: 06/28/21 Analyzed: 06/29/21

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

LCS (BEF0562-BS1)

Prepared: 06/28/21 Analyzed: 06/29/21

Calcium	5.02	0.0500	mg/L wet	5.00	100	70-130
Magnesium	5.67	0.0500	"	5.00	113	70-130
Sodium	5.08	0.0500	"	5.00	102	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: SLW 21-19 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/02/21 15:06

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 BEF0604 - General Preparation

Duplicate (BEF0604-DUP1)		Source: 2106380-06		Prepared: 06/30/21 Analyzed: 07/01/21	
% Solids	92.7		%	92.9	0.197 20

Summit Scientific

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

Project: SLW 21-19 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/02/21 15:06

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 BEF0578 - General Preparation

Blank (BEF0578-BLK1)

Prepared & Analyzed: 06/29/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BEF0578-BS1)

Prepared & Analyzed: 06/29/21

Specific Conductance (EC) 0.142 0.0100 mmhos/cm 0.150 94.8 90-110

Duplicate (BEF0578-DUP1)

Source: 2106414-01

Prepared & Analyzed: 06/29/21

Specific Conductance (EC) 2.83 0.0100 mmhos/cm 2.82 0.248 20

Summit Scientific

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

Project: SLW 21-19 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:

07/02/21 15:06

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

Summit Scientific

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

Batch BEF0577 - General Preparation

LCS (BEF0577-BS1)

Prepared & Analyzed: 06/29/21

pH	9.28	pH Units	9.21	101	95-105
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Duplicate (BEF0577-DUP1)

Source: 2106414-01

Prepared & Analyzed: 06/29/21

pH	6.71	pH Units	6.71	0.00	20
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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: SLW 21-19 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
07/02/21 15:06

Notes and Definitions

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