

TABLE 1
FORMER LINKUS 32-24 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 @ 6'	6/4/2021	6 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50

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 groundwater is present.
4. 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 extactable petroleum hydrocarbons - oil range organics
mg/kg = Milligrams per kilogram
TMB = Trimethylbenzene
ft. = Feet
bgs = Below ground surface

TABLE 2
FORMER LINKUS 32-24 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'	6/4/2021	2.5 ft. bgs	7.99	0.574	0.729	0.204

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 LINKUS 32-24 WELLHEAD
FIELD DATA SUMMARY TABLE

Sample ID	Date Sampled	Depth	GPS Data ⁽¹⁾ Latitude / Longitude		PDOP Value	VOC Concentration ⁽²⁾ (ppm)
BKG01 @ 2.5'	6/4/2021	2.5 ft. bgs	40.039306	-104.949325	0.8	0.3
WH01 @ 6'	6/4/2021	6 ft. bgs	40.039411	-104.949291	0.8	0.0
FLR01 @ 2.5'	6/4/2021	2.5 ft. bgs	40.039411	-104.949274	0.9	0.4
FLR01 @ 4'	6/4/2021	4 ft. bgs	40.039404	-104.949263	0.9	0.0
WHS01-N @ 0-6"	6/4/2021	0-6 in. bgs	40.039471	-104.949299	1.0	0.3
WHS01-W @ 0-6"	6/4/2021	0-6 in. bgs	40.039403	-104.949353	0.9	0.1
WHS01-S @ 0-6"	6/4/2021	0-6 in. bgs	40.039363	-104.949279	0.9	0.0
WHS01-E @ 0-6"	6/4/2021	0-6 in. bgs	40.039415	-104.949236	0.8	0.0
FL01-01 @ 3'	6/4/2021	3 ft. bgs	40.038913	-104.949092	0.8	2293

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

NC = Data not collected

Attachment A

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

July 01, 2021

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

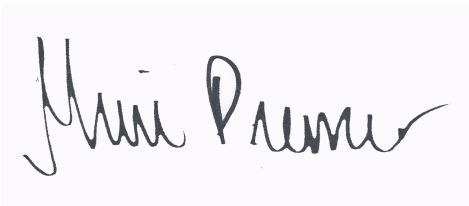
Denver, CO 80203

RE: Linkus 32-24 Wellhead

Work Order #2106116

Enclosed are the results of analyses for samples received by Summit Scientific on 06/04/21 17:15. 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 Premer", is displayed on a light purple rectangular background.

Muri Premer For Paul Shrewsbury
President



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

Project: Linkus 32-24 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/01/21 16:57

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WH01@6'	2106116-01	Soil	06/04/21 09:02	06/04/21 17:15
FLR01@2.5'	2106116-02	Soil	06/04/21 09:08	06/04/21 17:15

Summit Scientific

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S₂

2106116

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: Linkus 32-24 Wellhead
Sampler Name: Cody Miller Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested								Special Instructions
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	GBTEXN - 8260B ⁴¹⁵	TPH - (C6 - C36) ⁴¹⁵	pH, EC, SAR ⁴¹⁵	Boron - HWS ⁴¹⁵	VOC - 915	PAH - 915	Metals - 915	TM13, (124)(135) ⁴¹⁵	
1	WH01 26'	6/4/21	0902	3			X			X				X	X					X	pH, EC, SAR by saturated paste 1 fold
2	FLR01 22.5'	↓	0908	3			X			X					X	X					
3	BKG01 22.5'	↓	0845	1			X			X										X	
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by: Cody Miller	Date/Time: 6/4/21/1540	Received by: Tasman's Lock Box	Date/Time: 6/4/21/1540	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: 6/4/21 1745	Received by: [Signature]	Date/Time: 6/4/21 1745	Sample Integrity: <u>6</u>	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Temperature Upon Receipt: <u>6</u> Samples Intact: <u>Yes</u> No	

Sample Receipt Checklist

S2 Work Order 2106116

Client: POL/Tasman Client Project ID: Linkus 32-24 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)	6
-----------	---

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	On ice.
NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.				
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⁾ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect				
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Record the pH in Comments.				
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

6/4/21
Date/Time



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

Project: Linkus 32-24 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/01/21 16:57

WH01@6'
2106116-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/04/21 09:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEF0226	06/09/21	06/10/21	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: **06/04/21 09:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		89.7 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		130 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		133 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/04/21 09:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEF0227	06/09/21	06/10/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/04/21 09:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		104 %	30-150		"	"	"	"	

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1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Linkus 32-24 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/01/21 16:57

FLR01@2.5'
2106116-02 (Soil)

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Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **06/04/21 09:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.204	0.0100	mg/L	1	BEF0262	06/11/21	06/13/21	EPA 6020B	

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

Date Sampled: **06/04/21 09:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	42.6	0.0604	mg/L dry	1	BEF0216	06/09/21	06/12/21	EPA 6020B	
Magnesium	16.4	0.0604	"	"	"	"	"	"	
Sodium	22.1	0.0604	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **06/04/21 09:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.729	0.00100	units	1	BEF0291	06/14/21	06/14/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/04/21 09:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	82.8		%	1	BEF0139	06/07/21	06/07/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **06/04/21 09:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.574	0.0100	mmhos/cm	1	BEF0237	06/10/21	06/10/21	EPA 120.1	

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

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1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Linkus 32-24 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/01/21 16:57

FLR01@2.5'
2106116-02 (Soil)

Summit Scientific

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

Date Sampled: **06/04/21 09:08**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.99			pH Units	1	BEF0236	06/10/21	06/10/21	EPA 9045D	

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

Project: Linkus 32-24 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/01/21 16:57

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 BEF0226 - EPA 5030 Soil MS

Blank (BEF0226-BLK1)

Prepared: 06/09/21 Analyzed: 06/10/21

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	0.0380		"	0.0400		95.1	23-173			
Surrogate: Toluene-d8	0.0613		"	0.0400		153	20-170			
Surrogate: 4-Bromofluorobenzene	0.0432		"	0.0400		108	21-167			

LCS (BEF0226-BS1)

Prepared: 06/09/21 Analyzed: 06/10/21

Benzene	0.148	0.0020	mg/kg	0.150		98.7	70-130			
Toluene	0.155	0.0050	"	0.150		103	70-130			
Ethylbenzene	0.145	0.0050	"	0.150		96.4	70-130			
m,p-Xylene	0.297	0.010	"	0.300		98.9	70-130			
o-Xylene	0.147	0.0050	"	0.150		98.2	70-130			
1,2,4-Trimethylbenzene	0.141	0.0050	"	0.150		94.1	70-130			
1,3,5-Trimethylbenzene	0.135	0.0050	"	0.150		90.0	70-130			
Naphthalene	0.142	0.0038	"	0.150		94.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0439		"	0.0400		110	23-173			
Surrogate: Toluene-d8	0.0424		"	0.0400		106	20-170			
Surrogate: 4-Bromofluorobenzene	0.0417		"	0.0400		104	21-167			

Matrix Spike (BEF0226-MS1)

Source: 2106071-01

Prepared: 06/09/21 Analyzed: 06/10/21

Benzene	0.161	0.0020	mg/kg	0.150	0.00456	104	70-130			
Toluene	0.176	0.0050	"	0.150	0.00381	115	70-130			
Ethylbenzene	0.166	0.0050	"	0.150	0.00339	108	70-130			
m,p-Xylene	0.351	0.010	"	0.300	0.00846	114	70-130			
o-Xylene	0.172	0.0050	"	0.150	0.00363	112	70-130			
1,2,4-Trimethylbenzene	0.154	0.0050	"	0.150	0.00384	100	70-130			
1,3,5-Trimethylbenzene	0.144	0.0050	"	0.150	0.00312	93.7	70-130			
Naphthalene	0.163	0.0038	"	0.150	0.00570	105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0434		"	0.0400		108	23-173			
Surrogate: Toluene-d8	0.0445		"	0.0400		111	20-170			
Surrogate: 4-Bromofluorobenzene	0.0423		"	0.0400		106	21-167			

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1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Linkus 32-24 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/01/21 16:57

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 BEF0226 - EPA 5030 Soil MS

Matrix Spike Dup (BEF0226-MSD1)	Source: 2106071-01			Prepared: 06/09/21 Analyzed: 06/10/21						
Benzene	0.162	0.0020	mg/kg	0.150	0.00456	105	70-130	0.669	30	
Toluene	0.164	0.0050	"	0.150	0.00381	107	70-130	6.81	30	
Ethylbenzene	0.159	0.0050	"	0.150	0.00339	103	70-130	4.31	30	
m,p-Xylene	0.323	0.010	"	0.300	0.00846	105	70-130	8.30	30	
o-Xylene	0.161	0.0050	"	0.150	0.00363	105	70-130	6.42	30	
1,2,4-Trimethylbenzene	0.143	0.0050	"	0.150	0.00384	92.7	70-130	7.52	30	
1,3,5-Trimethylbenzene	0.142	0.0050	"	0.150	0.00312	92.7	70-130	1.09	30	
Naphthalene	0.161	0.0038	"	0.150	0.00570	104	70-130	1.27	30	
Surrogate: 1,2-Dichloroethane-d4	0.0499		"	0.0400		125	23-173			
Surrogate: Toluene-d8	0.0436		"	0.0400		109	20-170			
Surrogate: 4-Bromofluorobenzene	0.0413		"	0.0400		103	21-167			

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

Project: Linkus 32-24 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/01/21 16:57

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 BEF0227 - EPA 3550A

Blank (BEF0227-BLK1)

Prepared: 06/09/21 Analyzed: 06/10/21

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

LCS (BEF0227-BS1)

Prepared: 06/09/21 Analyzed: 06/10/21

C10-C28 (DRO)	576	50	mg/kg	500	115	70-130
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Matrix Spike (BEF0227-MS1)

Source: 2106071-01

Prepared: 06/09/21 Analyzed: 06/10/21

C10-C28 (DRO)	589	50	mg/kg	500	ND	118	70-130
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Matrix Spike Dup (BEF0227-MSD1)

Source: 2106071-01

Prepared: 06/09/21 Analyzed: 06/10/21

C10-C28 (DRO)	542	50	mg/kg	500	ND	108	70-130	8.27	20
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Summit Scientific

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

Project: Linkus 32-24 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/01/21 16:57

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 BEF0262 - EPA 3050B

Blank (BEF0262-BLK1)

Prepared: 06/11/21 Analyzed: 06/13/21

Boron ND 0.0100 mg/L

LCS (BEF0262-BS1)

Prepared: 06/11/21 Analyzed: 06/13/21

Boron 5.26 0.0100 mg/L 5.00 105 80-120

Duplicate (BEF0262-DUP1)

Source: 2106116-02

Prepared: 06/11/21 Analyzed: 06/13/21

Boron 0.173 0.0100 mg/L 0.204 16.2 20

Matrix Spike (BEF0262-MS1)

Source: 2106116-02

Prepared: 06/11/21 Analyzed: 06/13/21

Boron 5.19 0.0100 mg/L 5.00 0.204 99.7 75-125

Matrix Spike Dup (BEF0262-MSD1)

Source: 2106116-02

Prepared: 06/11/21 Analyzed: 06/13/21

Boron 5.27 0.0100 mg/L 5.00 0.204 101 75-125 1.64 25

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1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Linkus 32-24 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/01/21 16:57

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 BEF0216 - General Preparation

Blank (BEF0216-BLK1)

Prepared: 06/09/21 Analyzed: 06/12/21

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

LCS (BEF0216-BS1)

Prepared: 06/09/21 Analyzed: 06/12/21

Calcium	5.09	0.0500	mg/L wet	5.00	102	70-130
Magnesium	5.35	0.0500	"	5.00	107	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: Linkus 32-24 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/01/21 16:57

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 BEF0139 - General Preparation

Duplicate (BEF0139-DUP1)

Source: 2105160-07

Prepared & Analyzed: 06/07/21

% Solids	98.4	%	87.6	11.6	20
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Summit Scientific

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

Project: Linkus 32-24 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/01/21 16:57

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 BEF0237 - General Preparation

Blank (BEF0237-BLK1)

Prepared & Analyzed: 06/10/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BEF0237-BS1)

Prepared & Analyzed: 06/10/21

Specific Conductance (EC) 0.160 0.0100 mmhos/cm 0.150 107 90-110

Duplicate (BEF0237-DUP1)

Source: 2106099-01

Prepared & Analyzed: 06/10/21

Specific Conductance (EC) 0.527 0.0100 mmhos/cm 0.529 0.455 20

Summit Scientific

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

Project: Linkus 32-24 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:

07/01/21 16:57

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 BEF0236 - General Preparation

LCS (BEF0236-BS1)

Prepared & Analyzed: 06/10/21

pH	9.22	pH Units	9.21	100	95-105
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Duplicate (BEF0236-DUP1)

Source: 2106099-01

Prepared & Analyzed: 06/10/21

pH	8.62	pH Units	8.63	0.116	20
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Summit Scientific

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

Project: Linkus 32-24 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/01/21 16:57

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