

TABLE 1
FORMER PHINNEY 43-10 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
FLR01 @ 3'	3/5/2021	3 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50
BH01 @ 6'	5/14/2021	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 PHINNEY 43-10 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
WH01 @ 2.5'	3/5/2021	2.5 ft. bgs	8.32	0.410	0.407	0.119
BKG01 @ 2.5'	3/5/2021	2.5 ft. bgs	8.25	0.807	0.654	0.318
BH01 @ 2.5'	5/14/2021	2.5 ft. bgs	8.20	0.998	0.376	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 = milligram per liter

ft. = Feet

bgs = Below ground surface

BOLD = Analytical result is in exceedance of applicable standard.

NA = Constituent not analyzed

TABLE 3
FORMER PHINNEY 43-10 WELLHEAD
FIELD DATA SUMMARY TABLE

Sample ID	Date Sampled	Depth	GPS Data ⁽¹⁾ Latitude / Longitude		PDOP Value	VOC Concentration ⁽²⁾ (ppm)
WH01 @ 2.5'	3/5/2021	2.5 ft. bgs	40.499370	-104.528534	1.4	0.1
FLR01 @ 3'	3/5/2021	3 ft. bgs	40.499362	-104.528531	1.1	0.3
WHS01-N @ 0-6"	3/5/2021	0-6 in. bgs	40.499378	-104.528554	1.1	0.7
WHS01-E @ 0-6"	3/5/2021	0-6 in. bgs	40.499374	-104.528499	1.1	0.8
WHS01-S @ 0-6"	3/5/2021	0-6 in. bgs	40.499328	-104.528502	1.1	0.1
WHS01-W @ 0-6"	3/5/2021	0-6 in. bgs	40.499336	-104.528592	1.2	0.2
BKG01 @ 2.5'	3/5/2021	2.5 ft. bgs	40.499514	-104.528638	1.1	0.2
FL01 @ 3'	3/5/2021	3 ft. bgs	40.497147	-104.528607	0.9	0.5
BH01 @ 2.5'	5/14/2021	2.5 ft. bgs	40.499370	-104.528532	NA	0.3
BH01 @ 6'	5/14/2021	6 ft. bgs	40.499370	-104.528532	NA	0.3
BH01 @ 10'	5/14/2021	10 ft. bgs	40.499370	-104.528532	NA	0.0
BH02 @ 2.5'	5/14/2021	2.5 ft. bgs	40.499407	-104.528531	NA	0.1
BH02 @ 6'	5/14/2021	6 ft. bgs	40.499407	-104.528531	NA	0.0
BH02 @ 10'	5/14/2021	10 ft. bgs	40.499407	-104.528531	NA	0.0
BH03 @ 2.5'	5/14/2021	2.5 ft. bgs	40.499369	-104.528584	NA	0.4
BH03 @ 6'	5/14/2021	6 ft. bgs	40.499369	-104.528584	NA	0.6
BH03 @ 10;	5/14/2021	10 ft. bgs	40.499369	-104.528584	NA	0.4
BH04 @ 2.5'	5/14/2021	2.5 ft. bgs	40.499329	-104.528531	NA	0.6
BH04 @ 6'	5/14/2021	6 ft. bgs	40.499329	-104.528531	NA	0.7
BH04 @ 10'	5/14/2021	10 ft. bgs	40.499329	-104.528531	NA	1.0
BH05 @ 2.5'	5/14/2021	2.5 ft. bgs	40.499369	-104.528477	NA	1.2
BH05 @ 6'	5/14/2021	6 ft. bgs	40.499369	-104.528477	NA	0.8
BH05 @ 10'	5/14/2021	10 ft. bgs	40.499369	-104.528477	NA	0.6
BKG02 @ 2.5'	5/14/2021	2.5 ft. bgs	40.499417	-104.528605	NA	0.7
BKG02 @ 6'	5/14/2021	6 ft. bgs	40.499417	-104.528605	NA	0.6
BKG02 @ 10'	5/14/2021	10 ft. bgs	40.499417	-104.528605	NA	0.5

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

bgs = Below ground surface

in. = Inches

NA = Data not collected

Attachment A

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

March 26, 2021

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Phinney 43-10 Wellhead

Work Order #2103116

Enclosed are the results of analyses for samples received by Summit Scientific on 03/05/21 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: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WH01@2.5'	2103116-01	Soil	03/05/21 11:22	03/05/21 17:30
FLR01@3'	2103116-02	Soil	03/05/21 11:24	03/05/21 17:30
BKG01@2.5'	2103116-03	Soil	03/05/21 11:40	03/05/21 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.

S_2

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310

Page 1 of 1

Project Manager: Mark Longhurst

E-Mail: mark.longhurst@PDCE.com

Phone: 303-487-1228

Project Name: Phinney 43-10 Wellhead

Sampler Name: Kevin Fletcher

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO ₃	None	Other _____	Water	Soil	Air-Canister #	Other _____	Analysis Requested GBTEXN - 8260B <i>915</i> TPH - (C6 - C36) <i>915</i> pH, EC, SAR <i>915</i> Boron - HWS <i>915</i> VOC - 915 PAH - 915 Metals - 915 <i>TMBL(744.33)915</i>	Special Instructions pH, EC, SAR by saturated paste
1	WHOLE @ 2.5'	3/5/21	1122	2			X			X				
2	FLR @ 3'	↓	1124	2			X			X			X	
3	BKCG @ 2.5'	✓	1140	4			X			X				X
4														
5														
6														
7														
8														
9														
10														

Relinquished by: Kevin Fletcher Date/Time: 3/5/21 1700 Received by: Tasman's Lock Box Date/Time: 3/5/21 1700 Turn Around Time (Check)

Same Day — 72 hours Standard X

24 hours —

48 hours —

Sample Integrity:

Temperature Upon Receipt: 3.6

Samples Intact: Yes No

Notes:

Sample Receipt Checklist

S2 Work Order 2103116

Client: PDC / TASMAN

Client Project ID: Phinney 43-10 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)	3.6
-----------	-----

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ? 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 checked="" type="checkbox"/>	<input 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.				

RZ
Custodian Printed Name or Initials


Signature of Custodian

3/5/21
Date/Time



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

Project: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

WH01@2.5'
2103116-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/05/21 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.119	0.0100	mg/L	1	BEC0231	03/11/21	03/13/21	EPA 6020B	

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

Date Sampled: **03/05/21 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	94.1	0.0549	mg/L dry	1	BEC0232	03/11/21	03/16/21	EPA 6020B	
Magnesium	19.5	0.0549	"	"	"	"	"	"	
Sodium	16.6	0.0549	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/05/21 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.407	0.100	units	1	BEC0285	03/16/21	03/17/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/05/21 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.0		%	1	BEC0165	03/09/21	03/10/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/05/21 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.410	0.0100	mmhos/cm	1	BEC0263	03/12/21	03/12/21	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: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

WH01@2.5'
2103116-01 (Soil)

Summit Scientific

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

Date Sampled: **03/05/21 11:22**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.32			pH Units	1	BEC0264	03/12/21	03/12/21	EPA 9045D	

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1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

FLR01@3'
2103116-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/05/21 11:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEC0225	03/11/21	03/12/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **03/05/21 11:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		105 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		113 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/05/21 11:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BEC0159	03/08/21	03/10/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/05/21 11:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		87.4 %	30-150		"	"	"	"	

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1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

BKG01@2.5'
2103116-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/05/21 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.318	0.0100	mg/L	1	BEC0407	03/24/21	03/25/21	EPA 6020B	

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

Date Sampled: **03/05/21 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	92.4	0.0529	mg/L dry	1	BEC0344	03/19/21	03/23/21	EPA 6020B	
Magnesium	27.1	0.0529	"	"	"	"	"	"	
Sodium	27.8	0.0529	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/05/21 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.654	0.100	units	1	BEC0396	03/23/21	03/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/05/21 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.6		%	1	BEC0357	03/22/21	03/23/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/05/21 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.807	0.0100	mmhos/cm	1	BEC0374	03/22/21	03/22/21	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: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

BKG01@2.5'
2103116-03 (Soil)

Summit Scientific

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

Date Sampled: **03/05/21 11:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.25			pH Units	1	BEC0375	03/22/21	03/22/21	EPA 9045D	

Summit Scientific

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

Project: Phinney 43-10 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

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 BEC0225 - EPA 5030 Soil MS

Blank (BEC0225-BLK1)

Prepared & Analyzed: 03/11/21

Benzene	ND	0.0020	mg/kg								
Toluene	ND	0.0050	"								
Ethylbenzene	ND	0.0050	"								
Xylenes (total)	ND	0.010	"								
1,3,5-Trimethylbenzene	ND	0.0050	"								
1,2,4-Trimethylbenzene	ND	0.0050	"								
Naphthalene	ND	0.0038	"								
Gasoline Range Hydrocarbons	ND	0.50	"								
Surrogate: 1,2-Dichloroethane-d4	0.0311		"	0.0400		77.7		23-173			
Surrogate: Toluene-d8	0.0529		"	0.0400		132		20-170			
Surrogate: 4-Bromofluorobenzene	0.0436		"	0.0400		109		21-167			

LCS (BEC0225-BS1)

Prepared & Analyzed: 03/11/21

Benzene	0.0628	0.0020	mg/kg	0.0750		83.8		70-130			
Toluene	0.0932	0.0050	"	0.0750		124		70-130			
Ethylbenzene	0.0962	0.0050	"	0.0750		128		70-130			
m,p-Xylene	0.187	0.010	"	0.150		125		70-130			
o-Xylene	0.0919	0.0050	"	0.0750		123		70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0230		"	0.0400		57.4		23-173			
Surrogate: Toluene-d8	0.0443		"	0.0400		111		20-170			
Surrogate: 4-Bromofluorobenzene	0.0400		"	0.0400		100		21-167			

Matrix Spike (BEC0225-MS1)

Source: 2103112-01

Prepared & Analyzed: 03/11/21

Benzene	0.0657	0.0020	mg/kg	0.0750	ND	87.6		70-130			
Toluene	0.0932	0.0050	"	0.0750	ND	124		70-130			
Ethylbenzene	0.0940	0.0050	"	0.0750	ND	125		70-130			
m,p-Xylene	0.185	0.010	"	0.150	ND	123		70-130			
o-Xylene	0.0923	0.0050	"	0.0750	ND	123		70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0268		"	0.0400		67.0		23-173			
Surrogate: Toluene-d8	0.0448		"	0.0400		112		20-170			
Surrogate: 4-Bromofluorobenzene	0.0404		"	0.0400		101		21-167			

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1775 Sherman St. STE. 3000
Denver CO, 80203

Project: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

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 BEC0225 - EPA 5030 Soil MS

Matrix Spike Dup (BEC0225-MSD1)	Source: 2103112-01			Prepared & Analyzed: 03/11/21						
Benzene	0.0701	0.0020	mg/kg	0.0750	ND	93.5	70-130	6.54	30	
Toluene	0.0900	0.0050	"	0.0750	ND	120	70-130	3.47	30	
Ethylbenzene	0.0968	0.0050	"	0.0750	ND	129	70-130	2.89	30	
m,p-Xylene	0.184	0.010	"	0.150	ND	123	70-130	0.504	30	
o-Xylene	0.0917	0.0050	"	0.0750	ND	122	70-130	0.652	30	
Surrogate: 1,2-Dichloroethane-d4	0.0273		"	0.0400		68.3	23-173			
Surrogate: Toluene-d8	0.0415		"	0.0400		104	20-170			
Surrogate: 4-Bromofluorobenzene	0.0391		"	0.0400		97.8	21-167			

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: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BEC0159 - EPA 3550A

Blank (BEC0159-BLK1)

Prepared: 03/08/21 Analyzed: 03/10/21

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

LCS (BEC0159-BS1)

Prepared: 03/08/21 Analyzed: 03/10/21

C10-C28 (DRO)	504	50	mg/kg	500	101	70-130
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Matrix Spike (BEC0159-MS1)

Source: 2103112-01

Prepared: 03/08/21 Analyzed: 03/10/21

C10-C28 (DRO)	508	50	mg/kg	500	ND	102	70-130
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Matrix Spike Dup (BEC0159-MSD1)

Source: 2103112-01

Prepared: 03/08/21 Analyzed: 03/10/21

C10-C28 (DRO)	537	50	mg/kg	500	ND	107	70-130	5.49	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: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

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 BEC0231 - EPA 3050B

Blank (BEC0231-BLK1)

Prepared: 03/11/21 Analyzed: 03/13/21

Boron ND 0.0100 mg/L

LCS (BEC0231-BS1)

Prepared: 03/11/21 Analyzed: 03/13/21

Boron 5.34 0.0100 mg/L 5.00 107 80-120

Duplicate (BEC0231-DUP1)

Source: 2103112-02

Prepared: 03/11/21 Analyzed: 03/13/21

Boron 0.199 0.0100 mg/L 0.205 2.73 20

Matrix Spike (BEC0231-MS1)

Source: 2103112-02

Prepared: 03/11/21 Analyzed: 03/13/21

Boron 5.37 0.0100 mg/L 5.00 0.205 103 75-125

Matrix Spike Dup (BEC0231-MSD1)

Source: 2103112-02

Prepared: 03/11/21 Analyzed: 03/13/21

Boron 5.74 0.0100 mg/L 5.00 0.205 111 75-125 6.64 25

Batch BEC0407 - EPA 3050B

Blank (BEC0407-BLK1)

Prepared: 03/24/21 Analyzed: 03/25/21

Boron ND 0.0100 mg/L

LCS (BEC0407-BS1)

Prepared: 03/24/21 Analyzed: 03/25/21

Boron 5.71 0.0100 mg/L 5.00 114 80-120

Duplicate (BEC0407-DUP1)

Source: 2103114-03

Prepared: 03/24/21 Analyzed: 03/25/21

Boron 0.237 0.0100 mg/L 0.271 13.6 20

Matrix Spike (BEC0407-MS1)

Source: 2103114-03

Prepared: 03/24/21 Analyzed: 03/25/21

Boron 5.42 0.0100 mg/L 5.00 0.271 103 75-125

Summit Scientific

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

Project: Phinney 43-10 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

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

Summit Scientific

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

Batch BEC0407 - EPA 3050B

Matrix Spike Dup (BEC0407-MSD1)

Source: 2103114-03

Prepared: 03/24/21 Analyzed: 03/25/21

Boron	5.57	0.0100	mg/L	5.00	0.271	106	75-125	2.58	25
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Summit Scientific

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

Project: Phinney 43-10 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

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 BEC0232 - General Preparation

Blank (BEC0232-BLK1)

Prepared: 03/11/21 Analyzed: 03/16/21

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

LCS (BEC0232-BS1)

Prepared: 03/11/21 Analyzed: 03/16/21

Calcium	5.75	0.0500	mg/L wet	5.00	115	70-130
Magnesium	6.12	0.0500	"	5.00	122	70-130
Sodium	6.14	0.0500	"	5.00	123	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: Phinney 43-10 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

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

Summit Scientific

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

Batch BEC0165 - General Preparation

Duplicate (BEC0165-DUP1)		Source: 2103112-02			Prepared: 03/09/21 Analyzed: 03/10/21						
% Solids	83.8		%		83.9			0.0251		20	

Batch BEC0357 - General Preparation

Duplicate (BEC0357-DUP1)		Source: 2103114-03			Prepared: 03/22/21 Analyzed: 03/23/21						
% Solids	90.0		%		90.2			0.217		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: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

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 BEC0263 - General Preparation

Blank (BEC0263-BLK1)

Prepared & Analyzed: 03/12/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BEC0263-BS1)

Prepared & Analyzed: 03/12/21

Specific Conductance (EC) 0.151 0.0100 mmhos/cm 0.150 101 90-110

Duplicate (BEC0263-DUP1)

Source: 2103097-01

Prepared & Analyzed: 03/12/21

Specific Conductance (EC) 0.809 0.0100 mmhos/cm 0.837 3.43 20

Batch BEC0374 - General Preparation

Blank (BEC0374-BLK1)

Prepared & Analyzed: 03/22/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BEC0374-BS1)

Prepared & Analyzed: 03/22/21

Specific Conductance (EC) 0.150 0.0100 mmhos/cm 0.150 100 90-110

Duplicate (BEC0374-DUP1)

Source: 2103180-04

Prepared & Analyzed: 03/22/21

Specific Conductance (EC) 0.466 0.0100 mmhos/cm 0.460 1.34 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: Phinney 43-10 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

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 BEC0264 - General Preparation

LCS (BEC0264-BS1)

Prepared & Analyzed: 03/12/21

pH	9.18		pH Units	9.21		99.7	95-105		
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Duplicate (BEC0264-DUP1)

Source: 2103097-01

Prepared & Analyzed: 03/12/21

pH	8.46		pH Units		8.47			0.118	20
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Batch BEC0375 - General Preparation

LCS (BEC0375-BS1)

Prepared & Analyzed: 03/22/21

pH	9.30		pH Units	9.21		101	95-105		
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Duplicate (BEC0375-DUP1)

Source: 2103180-04

Prepared & Analyzed: 03/22/21

pH	8.09		pH Units		8.10			0.124	20
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Summit Scientific

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

Project: Phinney 43-10 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/26/21 09:53

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

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

May 21, 2021

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

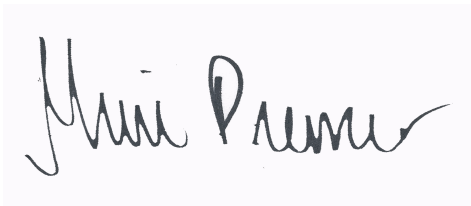
Denver, CO 80203

RE: Phinney 43-10 Wellhead

Work Order #2105210

Enclosed are the results of analyses for samples received by Summit Scientific on 05/14/21 18:12. 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: Phinney 43-10 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
05/21/21 11:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01@2.5'	2105210-01	Soil	05/14/21 10:10	05/14/21 18:12
BH01@6'	2105210-07	Soil	05/14/21 11:46	05/14/21 18:12

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.

2105210.1

Page 1 of 2

Phone: 303-487-1228				Project Number:																		
Sampler Name: <u>Cody Miller</u>				Preservative				Matrix				Analysis Requested				Special Instructions						
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	GBIENN - 8260B	TPH - (C6 - C36)	pH, EC, SAR	Boron - HWS	VOC - 915	PAH - 915	Metals - 915	Metals - 915	Special Instructions	
1	BH01 @ 2.5'	5/14/21	1010	1			X			X					X							pH, EC, SAR by saturated paste
2	BH02 @ 2.5'		1019	1			X			X												
3	BH03 @ 2.5'		1030	1			X			X												
4	BH04 @ 2.5'		1041	1			X			X												
5	BH05 @ 2.5'		1052	1			X			X												
6	BK02 @ 2.5'		1100	1			X			X			X	X						X		
7	BH01 @ 6'		1146	2			X			X												
8	BH02 @ 6'		1153	1			X			X												
9	BH03 @ 6'		1158	1			X			X												
10	BH04 @ 6'	✓	1205	1			X			X												

Relinquished by: Cody Miller Date/Time: 5/14/21 1630

Received by: Tasman's Lock Box Date/Time: 5/14/21 11630

Turn Around Time (Check) X

Same Day X 72 hours

24 hours Standard

48 hours

Sample Integrity: 8

Temperature Upon Receipt:

Samples Intact: Yes No

Relinquished by: Tasman's Lock Box Date/Time: 5/14/21 1745

Received by: Date/Time: 5/14/21 1745

Notes:

Summit Scientific

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Page 2 of 2

Client: PDC / Tasman Project Manager: Mark Longhurst
Address: 6855 W 119th Ave E-Mail: mark.longhurst@PDC.com
City/State/Zip: Broomfield/ CO/ 80020 Project Name: Phinney 43-10 Wellhead
Phone: 303-487-1228 Project Number:
Sampler Name: Lody Miller

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	TPH - (C6 - C36)	pH, EC, SAR	Boron - HWS	VOC - 915	PAH - 915		Metals - 915
1	BH05 26'	5/14/21	1213	1			X			X										X
2	BK002 26'		1220	1			X			X									X	
3	BH01 210'		1343	2			X			X									X	
4	BH02 210'		1350	1			X			X									X	
5	BH03 210'		1355	1			X			X									X	
6	BH04 210'		1400	1			X			X									X	
7	BH05 210'		1406	1			X			X									X	
8	BK002 210'		1412	1			X			X									X	
9																				
10																				

Relinquished by: Lody Miller Date/Time: 5/14/21 1630

Relinquished by: Tasman's Lock Box Date/Time: 5/14/21 1745

Relinquished by: _____ Date/Time: _____

Received by: Tasman's Lock Box Date/Time: 5/14/21 1630

Received by: John Ben Date/Time: 5/14/21 1745

Received by: _____ Date/Time: _____

Turn Around Time (Check)
 Same Day X 72 hours _____
 24 hours _____ Standard _____
 48 hours _____

Sample Integrity: 8

Temperature Upon Receipt: _____

Samples Intact: Yes No

Notes:

Sample Receipt Checklist

S2 Work Order 2105210

Client: PDC / Tasman Client Project ID: Phinney 43-10 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)	<u>8</u>
-----------	----------

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Same day.</u>
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

Grah Bar
Signature of Custodian

5/14/21
Date/Time



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

Project: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
05/21/21 11:22

BH01@2.5'
2105210-01 (Soil)

Summit Scientific

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

Date Sampled: **05/14/21 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	80.8	0.0538	mg/L dry	1	BEE0292	05/17/21	05/19/21	EPA 6020B	
Magnesium	20.5	0.0538	"	"	"	"	"	"	
Sodium	14.6	0.0538	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **05/14/21 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.376	0.00100	units	1	BEE0337	05/19/21	05/19/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **05/14/21 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.9		%	1	BEE0300	05/18/21	05/18/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **05/14/21 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.998	0.0100	mmhos/cm	1	BEE0307	05/18/21	05/18/21	EPA 120.1	

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

Date Sampled: **05/14/21 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.20		pH Units	1	BEE0304	05/18/21	05/18/21	EPA 9045D	

Summit Scientific

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

Project: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
05/21/21 11:22

BH01@6'
2105210-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **05/14/21 11:46**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEE0265	05/14/21	05/14/21	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: **05/14/21 11:46**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		82.6 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		86.9 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **05/14/21 11:46**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BEE0266	05/14/21	05/15/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **05/14/21 11:46**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		106 %	30-150		"	"	"	"	

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: Phinney 43-10 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
05/21/21 11:22

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 BEE0265 - EPA 5030 Soil MS

Blank (BEE0265-BLK1)

Prepared & Analyzed: 05/14/21

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	0.0324		"	0.0400		81.0	23-173			
Surrogate: Toluene-d8	0.0388		"	0.0400		97.1	20-170			
Surrogate: 4-Bromofluorobenzene	0.0330		"	0.0400		82.6	21-167			

LCS (BEE0265-BS1)

Prepared & Analyzed: 05/14/21

Benzene	0.0873	0.0020	mg/kg	0.100		87.3	70-130			
Toluene	0.0895	0.0050	"	0.100		89.5	70-130			
Ethylbenzene	0.113	0.0050	"	0.100		113	70-130			
m,p-Xylene	0.237	0.010	"	0.200		118	70-130			
o-Xylene	0.112	0.0050	"	0.100		112	70-130			
1,2,4-Trimethylbenzene	0.110	0.0050	"	0.100		110	70-130			
1,3,5-Trimethylbenzene	0.111	0.0050	"	0.100		111	70-130			
Naphthalene	0.108	0.0038	"	0.100		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0328		"	0.0400		82.0	23-173			
Surrogate: Toluene-d8	0.0389		"	0.0400		97.3	20-170			
Surrogate: 4-Bromofluorobenzene	0.0324		"	0.0400		80.9	21-167			

Matrix Spike (BEE0265-MS1)

Source: 2105210-07

Prepared & Analyzed: 05/14/21

Benzene	0.0927	0.0020	mg/kg	0.100	ND	92.7	70-130			
Toluene	0.0981	0.0050	"	0.100	ND	98.1	70-130			
Ethylbenzene	0.113	0.0050	"	0.100	ND	113	70-130			
m,p-Xylene	0.245	0.010	"	0.200	0.00429	120	70-130			
o-Xylene	0.110	0.0050	"	0.100	ND	110	70-130			
1,2,4-Trimethylbenzene	0.112	0.0050	"	0.100	ND	112	70-130			
1,3,5-Trimethylbenzene	0.113	0.0050	"	0.100	ND	113	70-130			
Naphthalene	0.122	0.0038	"	0.100	ND	122	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0357		"	0.0400		89.2	23-173			
Surrogate: Toluene-d8	0.0393		"	0.0400		98.2	20-170			
Surrogate: 4-Bromofluorobenzene	0.0337		"	0.0400		84.2	21-167			

Summit Scientific

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

Project: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
05/21/21 11:22

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 BEE0265 - EPA 5030 Soil MS

Matrix Spike Dup (BEE0265-MSD1)		Source: 2105210-07			Prepared & Analyzed: 05/14/21					
Benzene	0.0895	0.0020	mg/kg	0.100	ND	89.5	70-130	3.46	30	
Toluene	0.0969	0.0050	"	0.100	ND	96.9	70-130	1.26	30	
Ethylbenzene	0.104	0.0050	"	0.100	ND	104	70-130	8.73	30	
m,p-Xylene	0.225	0.010	"	0.200	0.00429	111	70-130	8.15	30	
o-Xylene	0.111	0.0050	"	0.100	ND	111	70-130	0.597	30	
1,2,4-Trimethylbenzene	0.110	0.0050	"	0.100	ND	110	70-130	1.78	30	
1,3,5-Trimethylbenzene	0.109	0.0050	"	0.100	ND	109	70-130	4.19	30	
Naphthalene	0.125	0.0038	"	0.100	ND	125	70-130	2.72	30	
<hr/>										
Surrogate: 1,2-Dichloroethane-d4	0.0353		"	0.0400		88.4	23-173			
Surrogate: Toluene-d8	0.0374		"	0.0400		93.4	20-170			
Surrogate: 4-Bromofluorobenzene	0.0336		"	0.0400		84.1	21-167			

Summit Scientific

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

Project: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
05/21/21 11:22

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 BEE0266 - EPA 3550A

Blank (BEE0266-BLK1)

Prepared: 05/14/21 Analyzed: 05/15/21

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

LCS (BEE0266-BS1)

Prepared: 05/14/21 Analyzed: 05/15/21

C10-C28 (DRO)	442	50	mg/kg	500	88.4	70-130
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Matrix Spike (BEE0266-MS1)

Source: 2105210-07

Prepared: 05/14/21 Analyzed: 05/15/21

C10-C28 (DRO)	492	50	mg/kg	500	13.3	95.7	70-130
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Matrix Spike Dup (BEE0266-MSD1)

Source: 2105210-07

Prepared: 05/14/21 Analyzed: 05/15/21

C10-C28 (DRO)	417	50	mg/kg	500	13.3	80.8	70-130	16.4	20
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Summit Scientific

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

Project: Phinney 43-10 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
05/21/21 11:22

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 BEE0292 - General Preparation

Blank (BEE0292-BLK1)

Prepared: 05/17/21 Analyzed: 05/19/21

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

LCS (BEE0292-BS1)

Prepared: 05/17/21 Analyzed: 05/19/21

Calcium	5.00	0.0500	mg/L wet	5.00	99.9	70-130
Magnesium	5.31	0.0500	"	5.00	106	70-130
Sodium	4.99	0.0500	"	5.00	99.8	70-130

Summit Scientific

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

Project: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
05/21/21 11:22

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 BEE0300 - General Preparation

Duplicate (BEE0300-DUP1)		Source: 2105200-01			Prepared & Analyzed: 05/18/21					
% Solids	92.9		%		94.2		1.42		20	

Summit Scientific

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

Project: Phinney 43-10 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
05/21/21 11:22

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 BEE0307 - General Preparation

Blank (BEE0307-BLK1)

Prepared & Analyzed: 05/18/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BEE0307-BS1)

Prepared & Analyzed: 05/18/21

Specific Conductance (EC) 0.164 0.0100 mmhos/cm 0.150 109 90-110

Duplicate (BEE0307-DUP1)

Source: 2105208-01

Prepared & Analyzed: 05/18/21

Specific Conductance (EC) 0.921 0.0100 mmhos/cm 0.920 0.174 20

Summit Scientific

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

Project: Phinney 43-10 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
05/21/21 11:22

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

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

Batch BEE0304 - General Preparation

LCS (BEE0304-BS1)

Prepared & Analyzed: 05/18/21

pH	9.26	pH Units	9.21	101	95-105
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Duplicate (BEE0304-DUP1)

Source: 2105208-01

Prepared & Analyzed: 05/18/21

pH	8.81	pH Units	8.82	0.113	20
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Summit Scientific

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

Project: Phinney 43-10 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
05/21/21 11:22

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