

TABLE 1
FORMER DINNER 6-5-14 WELLHEAD
SOIL ANALYTICAL RESULTS SUMMARY TABLE
CONTAMINANTS OF CONCERN

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)	1-M (mg/kg)	2-M (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Selenium (mg/kg)
Residential SSL ^(1,2)			1.2	490	5.8	58	30	27	2	500	18	24	0.68	15,000	390
Protection of Groundwater SSL ^(1,2,3)			0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038	500	0.006	0.019	0.29	82	0.26
WC01 @ 10'	3/13/2023	10 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	0.30	<0.0050	<0.0038	5.4	0.00501	0.0156	5.11	91.8	0.555
WH01 @ 6'	3/13/2023	6 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	NA	NA	NA
FLR01 @ 4'	3/13/2023	4 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	NA	NA	NA
FL01-01 @ 4'	3/14/2023	4 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	NA	NA	NA	NA	NA

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
M = Methylnaphthalene
mg/kg = Milligrams per kilogram
TMB = Trimethylbenzene
NA = constituent not analyzed
ft. = Feet
bgs = Below ground surface
= Source material characterization sample.
BOLD = Analytical result is in exceedance of applicable standard and above 1.25x background concentration.

TABLE 2
FORMER DINNER 6-5-14 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
WC01 @ 10'	3/13/2023	10 ft. bgs	7.59	0.584	1.70	0.162
WH01 @ 6'	3/13/2023	6 ft. bgs	7.80	0.482	1.24	0.166
FLR01 @ 4'	3/13/2023	4 ft. bgs	7.78	0.691	2.19	0.0954

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

= Source material characterization sample.

TABLE 3
FORMER DINNER 6-5-14 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
WC01 @ 10'	3/13/2023	10 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	0.00501	0.0156
WH01 @ 6'	3/13/2023	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
FLR01 @ 4'	3/13/2023	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

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.

COGCC = Colorado Oil and Gas Conservation Commission

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

PAHs = Polycyclic aromatic hydrocarbons

Benz(a) = Benzanthracene

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

= Source material characterization sample.

bgs = Below ground surface

TABLE 4
FORMER DINNER 6-5-14 WELLHEAD
SOIL ANALYTICAL RESULTS SUMMARY TABLE
METALS

Sample ID	Date Sampled	Depth	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
Residential SSL ^(1,2)			0.68	15,000	71	0.3	3,100	400	1,500	390	390	23,000
Protection of Groundwater SSL ^(1,2,3)			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
WC01 @ 10'	3/13/2023	10 ft. bgs	5.11	91.8	0.277	<0.30 ⁽⁴⁾	9.40	7.33	11.0	0.555	0.0414	30.9

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.
 - Compound falls within COGCC Table 915-1 Footnote 9.
- COGCC = Colorado Oil and Gas Conservation Commission
(<) = Analytical result is less than the indicated laboratory reporting limit.
mg/kg = Milligrams per kilogram
ft. = Feet
bgs = Below ground surface
= Source material characterization sample.
BOLD = Analytical result is in exceedance of applicable standard.

TABLE 5
FORMER DINNER 6-5-14 WELLHEAD
FIELD DATA SUMMARY TABLE

Sample ID	Date Sampled	Depth	GPS Data ⁽¹⁾ Latitude / Longitude		PDOP Value	VOC Concentration ⁽²⁾ (ppm)
WC01 @ 10'	3/13/2023	10 ft. bgs	40.304977	-104.738477	0.9	1,076
WH01 @ 6'	3/13/2023	6 ft. bgs	40.309537	-104.738060	NC	0.1
FLR01 @ 4'	3/13/2023	4 ft. bgs	40.309525	-104.738057	0.9	0.2
WHS01-N @ 0-6"	3/13/2023	0-6 in. Bgs	40.309577	-104.738058	0.9	0.1
WHS01-W @ 0-6"	3/13/2023	0-6 in. Bgs	40.309546	-104.738087	0.8	0.0
WHS01-S @ 0-6"	3/13/2023	0-6 in. Bgs	40.309467	-104.738033	0.8	0.2
WHS01-E @ 0-6"	3/13/2023	0-6 in. Bgs	40.309536	-104.738010	0.9	0.0
BKG01 @ 4'	3/13/2023	4 ft. bgs	40.309545	-104.737944	0.8	0.0
BKG01 @ 6'	3/13/2023	6 ft. bgs	40.309545	-104.737944	0.8	0.0
FL01-01 @ 4'	3/14/2023	4 ft. bgs	40.309017	-104.738516	0.9	0.7
TP01 @ 1'	3/15/2023	1 ft. bgs	40.304994	-104.738505	0.9	0.0
TP01 @ 2'	3/15/2023	2 ft. bfs	40.304994	-104.738505	0.9	0.1
TP01 @ 3'	3/15/2023	3 ft. bgs	40.304994	-104.738505	0.9	0.1
TP01 @ 4'	3/15/2023	4 ft. bgs	40.304994	-104.738505	0.9	0.0
TP01 @ 5'	3/15/2023	5 ft. bgs	40.304994	-104.738505	0.9	0.1
TP01 @ 6'	3/15/2023	6 ft. bgs	40.304994	-104.738505	0.9	0.7
TP01 @ 7'	3/15/2023	7 ft. bgs	40.304994	-104.738505	0.9	5.3
TP01 @ 8'	3/15/2023	8 ft. bgs	40.304994	-104.738505	0.9	5.4
TP01 @ 9'	3/15/2023	9 ft. bgs	40.304994	-104.738505	0.9	10.8
TP02 @ 1'	3/15/2023	1 ft. bgs	40.304991	-104.738445	1.0	0.3
TP02 @ 2'	3/15/2023	2 ft. bfs	40.304991	-104.738445	1.0	0.0
TP02 @ 3'	3/15/2023	3 ft. bgs	40.304991	-104.738445	1.0	0.5
TP02 @ 4'	3/15/2023	4 ft. bgs	40.304991	-104.738445	1.0	0.4
TP02 @ 5'	3/15/2023	5 ft. bgs	40.304991	-104.738445	1.0	1.8
TP02 @ 6'	3/15/2023	6 ft. bgs	40.304991	-104.738445	1.0	52.1
TP02 @ 7'	3/15/2023	7 ft. bgs	40.304991	-104.738445	1.0	26.9
TP02 @ 8'	3/15/2023	8 ft. bgs	40.304991	-104.738445	1.0	369
TP02 @ 9'	3/15/2023	9 ft. bgs	40.304991	-104.738445	1.0	1,028
TP03 @ 1'	3/15/2023	1 ft. bgs	40.304969	-104.738509	0.9	0.0
TP03 @ 2'	3/15/2023	2 ft. bfs	40.304969	-104.738509	0.9	0.0
TP03 @ 3'	3/15/2023	3 ft. bgs	40.304969	-104.738509	0.9	0.2
TP03 @ 4'	3/15/2023	4 ft. bgs	40.304969	-104.738509	0.9	0.0
TP03 @ 5'	3/15/2023	5 ft. bgs	40.304969	-104.738509	0.9	2.4
TP04 @ 1'	3/15/2023	1 ft. bgs	40.304965	-104.738455	1.0	0.1
TP04 @ 2'	3/15/2023	2 ft. bfs	40.304965	-104.738455	1.0	3.8
TP04 @ 3'	3/15/2023	3 ft. bgs	40.304965	-104.738455	1.0	31.1
TP04 @ 4'	3/15/2023	4 ft. bgs	40.304965	-104.738455	1.0	81.7
TP04 @ 5'	3/15/2023	5 ft. bgs	40.304965	-104.738455	1.0	78.0

TABLE 5
FORMER DINNER 6-5-14 WELLHEAD
FIELD DATA SUMMARY TABLE

Sample ID	Date Sampled	Depth	GPS Data ⁽¹⁾ Latitude / Longitude	PDOP Value	VOC Concentration ⁽²⁾ (ppm)
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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

 = Source material characterization sample.

NC = Data not collected

ATTACHMENT A

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80401

303.277.9310

March 21, 2023

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Dinner 6-5-14 Wellhead

Work Order # 2303314

Enclosed are the results of analyses for samples received by Summit Scientific on 03/13/23 18:03. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Sheely". The signature is fluid and cursive, with the first name "Scott" and last name "Sheely" clearly distinguishable.

Scott Sheely For Paul Shrewsbury

President



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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

ANALYTICAL REPORT FOR SAMPLES

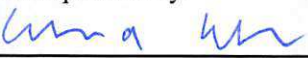
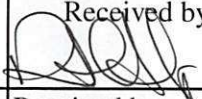
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WC01@10'	2303314-01	Soil	03/13/23 16:02	03/13/23 18:03

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.

Client: PDC / Tasman		Send Data To: Project Manager: Mark Longhurst		Send Invoice To: Company: PDC Energy	
Address: 6855 W 119th Ave		E-Mail: mark.longhurst@PDCE.com		Project Name/Location:	
City/State/Zip: Broomfield / CO / 80220				AFE#:	
Phone: 303-487-1228		Project Name: Dinner 6-5-14 Wellhead		PO/Billing Codes:	
Sampler Name: Emilia Wozniak		Project Number:		Contact: Mark Longhurst	

					Preservative				Matrix				Analysis Requested							Special Instructions	
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other _____	Water	Soil	Air-Canister #	Other _____	BTEXN - 8260B	TPH - (C6 - C36)	1,2,4 & 1,3,5-TMB	Boron - HWS	pH, EC, SAR	PAH - 915			
1	WC01 @ 10'	3/13/23	1602	2			X			X			X	X	X	X	X	X	X	X	
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					

Relinquished by: 	Date/Time: 3/13/23 1750	Received by: Tasman's Lockbox	Date/Time: 3/13/23 1750	TAT Business Days	Field DO	Notes: Run WC01 for BTEXN, TPH, TMB on same day. The rest on 48 hour.
Relinquished by: Tasman's Lockbox	Date/Time: 3/13/23 1750	Received by: 	Date/Time: 3/13/23 1750	Same Day <input checked="" type="checkbox"/>	Field EC	
				1 Day <input type="checkbox"/>	Field ORP	
				2 Days <input type="checkbox"/>	Field pH	
				3 Days <input type="checkbox"/>	Field Temp.	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Standard <input type="checkbox"/>	Field Turb.	
Temperature Upon Receipt: 9.1		Corrected Temperature: 6		IR gun #: /		HNO3 lot #:

S₂

Sample Receipt Checklist

S2 Work Order#

2303314

Client: Prof. AsmanClient Project ID: Dinner Co-5-14 WellheadShipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐

Airbill #: _____

☐ ☒ ☐ ☐ ☐

Matrix (Check all that apply)

Air

☐

Soil

☒

Solid

Water

☐

Other

☐

Temp (°C)

Thermometer #

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ice
If custody seals are present, are they intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Same day
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<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"/>	
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<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"/>	
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"/>	
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, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<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.

AS
Custodian Printed Name

3/13/23
Date/Time



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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

WC01@10'
2303314-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/13/23 16:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGC0342	03/13/23	03/14/23	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	0.30	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	5.4	0.50		"	"	"	"	"	"	

Date Sampled: **03/13/23 16:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		98.1 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		92.8 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		119 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/13/23 16:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0343	03/13/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/13/23 16:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		121 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

WC01@10'
2303314-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/13/23 16:02**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500		mg/kg	1	BGC0426	03/15/23	03/17/23	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	0.00501	0.00500		"	"	"	"	"	"	
2-Methylnaphthalene	0.0156	0.00500		"	"	"	"	"	"	

Date Sampled: **03/13/23 16:02**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		99.4 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		80.6 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/13/23 16:02**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.162	0.0100		mg/L	1	BGC0381	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/13/23 16:02**

Analyte	Result	Reporting Limit	MDL	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: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

WC01@10'
2303314-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	5.11	0.236	0.199	mg/kg dry	1	BGC0374	03/13/23	03/15/23	EPA 6020B
Barium	91.8	0.471	0.372	"	"	"	"	"	"
Cadmium	0.277	0.236	0.00848	"	"	"	"	"	"
Copper	9.40	0.471	0.0246	"	"	"	"	"	"
Lead	7.33	0.236	0.0647	"	"	"	"	"	"
Nickel	11.0	0.471	0.0719	"	"	"	"	"	"
Selenium	0.555	0.260	0.175	"	"	"	"	"	"
Silver	0.0414	0.0236	0.00315	"	"	"	"	"	"
Zinc	30.9	0.471	0.313	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/13/23 16:02**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0393	03/14/23	03/14/23	EPA 7196A	

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

Date Sampled: **03/13/23 16:02**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	48.2	0.0589		mg/L dry	1	BGC0371	03/13/23	03/16/23	EPA 6020B	
Magnesium	18.1	0.0589		"	"	"	"	"	"	
Sodium	54.5	0.0589		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/13/23 16:02**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.70	0.00100		units	1	BGC0529	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

WC01@10'
2303314-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/13/23 16:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	84.9			%	1	BGC0385	03/14/23	03/15/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/13/23 16:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.584	0.0100		mmhos/cm	1	BGC0400	03/14/23	03/15/23	EPA 120.1	

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

Date Sampled: **03/13/23 16:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	7.59			pH Units	1	BGC0401	03/14/23	03/15/23	EPA 9045D	

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

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 BGC0342 - EPA 5030 Soil MS

Blank (BGC0342-BLK1)

Prepared: 03/13/23 Analyzed: 03/14/23

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	0.0430		"	0.0400		107	50-150			
Surrogate: Toluene-d8	0.0420		"	0.0400		105	50-150			
Surrogate: 4-Bromofluorobenzene	0.0398		"	0.0400		99.6	50-150			

Blank (BGC0342-BLK2)

Prepared: 03/13/23 Analyzed: 03/14/23

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	0.0425		"	0.0400		106	50-150			
Surrogate: Toluene-d8	0.0424		"	0.0400		106	50-150			
Surrogate: 4-Bromofluorobenzene	0.0413		"	0.0400		103	50-150			

LCS (BGC0342-BS1)

Prepared: 03/13/23 Analyzed: 03/14/23

Benzene	0.127	0.0020	mg/kg	0.125		101	70-130			
Toluene	0.138	0.0050	"	0.125		110	70-130			
Ethylbenzene	0.127	0.0050	"	0.125		102	70-130			
m,p-Xylene	0.253	0.010	"	0.250		101	70-130			
o-Xylene	0.117	0.0050	"	0.125		93.8	70-130			
1,2,4-Trimethylbenzene	0.123	0.0050	"	0.125		98.7	70-130			
1,3,5-Trimethylbenzene	0.124	0.0050	"	0.125		99.1	70-130			
Naphthalene	0.101	0.0038	"	0.125		80.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0410		"	0.0400		103	50-150			
Surrogate: Toluene-d8	0.0430		"	0.0400		108	50-150			
Surrogate: 4-Bromofluorobenzene	0.0408		"	0.0400		102	50-150			

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

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 BGC0342 - EPA 5030 Soil MS

LCS (BGC0342-BS2)

Prepared: 03/13/23 Analyzed: 03/14/23

Benzene	0.132	0.0020	mg/kg	0.125		106	70-130
Toluene	0.139	0.0050	"	0.125		111	70-130
Ethylbenzene	0.131	0.0050	"	0.125		105	70-130
m,p-Xylene	0.260	0.010	"	0.250		104	70-130
o-Xylene	0.119	0.0050	"	0.125		95.5	70-130
1,2,4-Trimethylbenzene	0.124	0.0050	"	0.125		98.9	70-130
1,3,5-Trimethylbenzene	0.127	0.0050	"	0.125		101	70-130
Naphthalene	0.105	0.0038	"	0.125		84.2	70-130
Surrogate: 1,2-Dichloroethane-d4	0.0408		"	0.0400		102	50-150
Surrogate: Toluene-d8	0.0427		"	0.0400		107	50-150
Surrogate: 4-Bromofluorobenzene	0.0403		"	0.0400		101	50-150

Matrix Spike (BGC0342-MS1)

Source: 2303225-02

Prepared: 03/13/23 Analyzed: 03/14/23

Benzene	0.130	0.0020	mg/kg	0.125	ND	104	70-130
Toluene	0.138	0.0050	"	0.125	ND	110	70-130
Ethylbenzene	0.129	0.0050	"	0.125	ND	103	70-130
m,p-Xylene	0.257	0.010	"	0.250	ND	103	70-130
o-Xylene	0.121	0.0050	"	0.125	ND	96.7	70-130
1,2,4-Trimethylbenzene	0.125	0.0050	"	0.125	ND	100	70-130
1,3,5-Trimethylbenzene	0.126	0.0050	"	0.125	ND	101	70-130
Naphthalene	0.110	0.0038	"	0.125	ND	88.2	70-130
Surrogate: 1,2-Dichloroethane-d4	0.0441		"	0.0400		110	50-150
Surrogate: Toluene-d8	0.0428		"	0.0400		107	50-150
Surrogate: 4-Bromofluorobenzene	0.0402		"	0.0400		100	50-150

Matrix Spike (BGC0342-MS2)

Source: 2303225-01

Prepared: 03/13/23 Analyzed: 03/14/23

Benzene	0.130	0.0020	mg/kg	0.125	ND	104	70-130
Toluene	0.136	0.0050	"	0.125	ND	109	70-130
Ethylbenzene	0.129	0.0050	"	0.125	ND	103	70-130
m,p-Xylene	0.257	0.010	"	0.250	ND	103	70-130
o-Xylene	0.118	0.0050	"	0.125	ND	94.6	70-130
1,2,4-Trimethylbenzene	0.125	0.0050	"	0.125	ND	99.6	70-130
1,3,5-Trimethylbenzene	0.126	0.0050	"	0.125	ND	101	70-130
Naphthalene	0.113	0.0038	"	0.125	ND	90.5	70-130
Surrogate: 1,2-Dichloroethane-d4	0.0434		"	0.0400		108	50-150
Surrogate: Toluene-d8	0.0418		"	0.0400		104	50-150
Surrogate: 4-Bromofluorobenzene	0.0406		"	0.0400		101	50-150

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

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 BGC0342 - EPA 5030 Soil MS

Matrix Spike Dup (BGC0342-MSD1)

Source: 2303225-02

Prepared: 03/13/23 Analyzed: 03/14/23

Benzene	0.130	0.0020	mg/kg	0.125	ND	104	70-130	0.208	30	
Toluene	0.136	0.0050	"	0.125	ND	109	70-130	0.898	30	
Ethylbenzene	0.130	0.0050	"	0.125	ND	104	70-130	0.696	30	
m,p-Xylene	0.258	0.010	"	0.250	ND	103	70-130	0.361	30	
o-Xylene	0.119	0.0050	"	0.125	ND	95.3	70-130	1.48	30	
1,2,4-Trimethylbenzene	0.123	0.0050	"	0.125	ND	98.5	70-130	1.79	30	
1,3,5-Trimethylbenzene	0.124	0.0050	"	0.125	ND	98.9	70-130	2.04	30	
Naphthalene	0.110	0.0038	"	0.125	ND	87.6	70-130	0.628	30	
Surrogate: 1,2-Dichloroethane-d4	0.0440		"	0.0400		110	50-150			
Surrogate: Toluene-d8	0.0423		"	0.0400		106	50-150			
Surrogate: 4-Bromofluorobenzene	0.0403		"	0.0400		101	50-150			

Matrix Spike Dup (BGC0342-MSD2)

Source: 2303225-01

Prepared: 03/13/23 Analyzed: 03/14/23

Benzene	0.127	0.0020	mg/kg	0.125	ND	101	70-130	2.80	30	
Toluene	0.140	0.0050	"	0.125	ND	112	70-130	2.81	30	
Ethylbenzene	0.129	0.0050	"	0.125	ND	104	70-130	0.186	30	
m,p-Xylene	0.260	0.010	"	0.250	ND	104	70-130	1.09	30	
o-Xylene	0.121	0.0050	"	0.125	ND	96.7	70-130	2.18	30	
1,2,4-Trimethylbenzene	0.126	0.0050	"	0.125	ND	100	70-130	0.792	30	
1,3,5-Trimethylbenzene	0.126	0.0050	"	0.125	ND	101	70-130	0.452	30	
Naphthalene	0.112	0.0038	"	0.125	ND	89.5	70-130	1.07	30	
Surrogate: 1,2-Dichloroethane-d4	0.0438		"	0.0400		109	50-150			
Surrogate: Toluene-d8	0.0424		"	0.0400		106	50-150			
Surrogate: 4-Bromofluorobenzene	0.0411		"	0.0400		103	50-150			

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BGC0343 - EPA 3550A

Blank (BGC0343-BLK1)

Prepared: 03/13/23 Analyzed: 03/14/23

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	13.5		"	12.5		108	30-150			

Blank (BGC0343-BLK2)

Prepared: 03/13/23 Analyzed: 03/14/23

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	13.9		"	12.5		111	30-150			

LCS (BGC0343-BS1)

Prepared: 03/13/23 Analyzed: 03/14/23

C10-C28 (DRO)	543	50	mg/kg	500		109	70-130			
Surrogate: o-Terphenyl	13.9		"	12.5		111	30-150			

LCS (BGC0343-BS2)

Prepared: 03/13/23 Analyzed: 03/14/23

C10-C28 (DRO)	594	50	mg/kg	500		119	70-130			
Surrogate: o-Terphenyl	15.4		"	12.5		124	30-150			

Matrix Spike (BGC0343-MS1)

Source: 2303225-02

Prepared: 03/13/23 Analyzed: 03/14/23

C10-C28 (DRO)	599	50	mg/kg	500	12.7	117	70-130			
Surrogate: o-Terphenyl	15.1		"	12.5		121	30-150			

Matrix Spike (BGC0343-MS2)

Source: 2303225-01

Prepared: 03/13/23 Analyzed: 03/14/23

C10-C28 (DRO)	587	50	mg/kg	500	11.3	115	70-130			
Surrogate: o-Terphenyl	13.5		"	12.5		108	30-150			

Matrix Spike Dup (BGC0343-MSD1)

Source: 2303225-02

Prepared: 03/13/23 Analyzed: 03/14/23

C10-C28 (DRO)	602	50	mg/kg	500	12.7	118	70-130	0.499	20	
Surrogate: o-Terphenyl	13.9		"	12.5		111	30-150			

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BGC0343 - EPA 3550A

Matrix Spike Dup (BGC0343-MSD2)

Source: 2303225-01

Prepared: 03/13/23 Analyzed: 03/14/23

C10-C28 (DRO)	551	50	mg/kg	500	11.3	108	70-130	6.22	20	
Surrogate: o-Terphenyl	15.4		"	12.5		124	30-150			

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

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 BGC0426 - EPA 5030 Soil MS

Blank (BGC0426-BLK1)

Prepared: 03/15/23 Analyzed: 03/17/23

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	0.0375		"	0.0333		112	40-150			
Surrogate: Fluoranthene-d10	0.0321		"	0.0333		96.2	40-150			

LCS (BGC0426-BS1)

Prepared: 03/15/23 Analyzed: 03/17/23

Acenaphthene	0.0354	0.00500	mg/kg	0.0333	106	31-137				
Anthracene	0.0358	0.00500	"	0.0333	107	30-120				
Benzo (a) anthracene	0.0253	0.00500	"	0.0333	76.0	30-120				
Benzo (a) pyrene	0.0300	0.00500	"	0.0333	90.0	30-120				
Benzo (b) fluoranthene	0.0269	0.00500	"	0.0333	80.6	30-120				
Benzo (k) fluoranthene	0.0311	0.00500	"	0.0333	93.3	30-120				
Chrysene	0.0275	0.00500	"	0.0333	82.6	30-120				
Dibenz (a,h) anthracene	0.0348	0.00500	"	0.0333	104	30-120				
Fluoranthene	0.0334	0.00500	"	0.0333	100	30-120				
Fluorene	0.0396	0.00500	"	0.0333	119	30-120				
Indeno (1,2,3-cd) pyrene	0.0316	0.00500	"	0.0333	94.7	30-120				
Pyrene	0.0291	0.00500	"	0.0333	87.4	35-142				
1-Methylnaphthalene	0.0364	0.00500	"	0.0333	109	35-142				
2-Methylnaphthalene	0.0345	0.00500	"	0.0333	104	35-142				
Surrogate: 2-Methylnaphthalene-d10	0.0379		"	0.0333	114	40-150				
Surrogate: Fluoranthene-d10	0.0348		"	0.0333	104	40-150				

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

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	Notes

Batch BGC0426 - EPA 5030 Soil MS

Matrix Spike (BGC0426-MS1)			Source: 2303292-01		Prepared: 03/15/23 Analyzed: 03/17/23					
Acenaphthene	0.0976	0.00500	mg/kg	0.0333	0.0943	9.76	31-137			QM-02
Anthracene	0.134	0.00500	"	0.0333	0.110	72.6	30-120			
Benzo (a) anthracene	0.128	0.00500	"	0.0333	0.113	42.3	30-120			
Benzo (a) pyrene	0.0733	0.00500	"	0.0333	0.0595	41.4	30-120			
Benzo (b) fluoranthene	0.103	0.00500	"	0.0333	0.0912	36.5	30-120			
Benzo (k) fluoranthene	0.0504	0.00500	"	0.0333	0.0344	48.2	30-120			
Chrysene	0.135	0.00500	"	0.0333	0.121	41.1	30-120			
Dibenz (a,h) anthracene	0.0232	0.00500	"	0.0333	0.0132	30.1	30-120			
Fluoranthene	0.334	0.00500	"	0.0333	0.298	109	30-120			
Fluorene	0.156	0.00500	"	0.0333	0.150	17.6	30-120			QM-02
Indeno (1,2,3-cd) pyrene	0.0529	0.00500	"	0.0333	0.0392	41.2	30-120			
Pyrene	0.208	0.00500	"	0.0333	0.185	71.1	35-142			
1-Methylnaphthalene	0.0431	0.00500	"	0.0333	0.0149	84.5	15-130			
2-Methylnaphthalene	0.0626	0.00500	"	0.0333	0.0296	99.1	15-130			
Surrogate: 2-Methylnaphthalene-d10			0.0294	"	0.0333	88.2	40-150			
Surrogate: Fluoranthene-d10			0.0268	"	0.0333	80.5	40-150			

Matrix Spike Dup (BGC0426-MSD1)			Source: 2303292-01		Prepared: 03/15/23 Analyzed: 03/17/23					
Acenaphthene	0.134	0.00500	mg/kg	0.0333	0.0943	118	31-137	31.2	30	QM-02
Anthracene	0.195	0.00500	"	0.0333	0.110	253	30-120	36.6	30	QM-02
Benzo (a) anthracene	0.184	0.00500	"	0.0333	0.113	211	30-120	36.2	30	QM-02
Benzo (a) pyrene	0.104	0.00500	"	0.0333	0.0595	134	30-120	34.7	30	QM-02
Benzo (b) fluoranthene	0.146	0.00500	"	0.0333	0.0912	164	30-120	34.2	30	QM-02
Benzo (k) fluoranthene	0.0704	0.00500	"	0.0333	0.0344	108	30-120	33.1	30	QM-02
Chrysene	0.199	0.00500	"	0.0333	0.121	234	30-120	38.5	30	QM-02
Dibenz (a,h) anthracene	0.0320	0.00500	"	0.0333	0.0132	56.3	30-120	31.7	30	QM-02
Fluoranthene	0.426	0.00500	"	0.0333	0.298	386	30-120	24.3	30	QM-02
Fluorene	0.184	0.00500	"	0.0333	0.150	101	30-120	16.4	30	
Indeno (1,2,3-cd) pyrene	0.0744	0.00500	"	0.0333	0.0392	106	30-120	33.7	30	QM-02
Pyrene	0.290	0.00500	"	0.0333	0.185	318	35-142	33.0	30	QM-02
1-Methylnaphthalene	0.0568	0.00500	"	0.0333	0.0149	126	15-130	27.5	50	
2-Methylnaphthalene	0.0895	0.00500	"	0.0333	0.0296	180	15-130	35.4	50	QM-02
Surrogate: 2-Methylnaphthalene-d10			0.0357	"	0.0333	107	40-150			
Surrogate: Fluoranthene-d10			0.0284	"	0.0333	85.2	40-150			

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: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

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 BGC0381 - EPA 3050B

Blank (BGC0381-BLK1)

Prepared: 03/14/23 Analyzed: 03/16/23

Boron ND 0.0100 mg/L

LCS (BGC0381-BS1)

Prepared: 03/14/23 Analyzed: 03/16/23

Boron 5.41 0.0100 mg/L 5.00 108 80-120

Duplicate (BGC0381-DUP1)

Source: 2303311-01

Prepared: 03/14/23 Analyzed: 03/16/23

Boron 1.65 0.0100 mg/L 1.67 1.51 20

Matrix Spike (BGC0381-MS1)

Source: 2303311-01

Prepared: 03/14/23 Analyzed: 03/16/23

Boron 6.60 0.0100 mg/L 5.00 1.67 98.5 75-125

Matrix Spike Dup (BGC0381-MSD1)

Source: 2303311-01

Prepared: 03/14/23 Analyzed: 03/16/23

Boron 6.57 0.0100 mg/L 5.00 1.67 98.0 75-125 0.362 25

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BGC0374 - EPA 3050B

Blank (BGC0374-BLK1)

Prepared: 03/13/23 Analyzed: 03/15/23

Arsenic	ND	0.200	mg/kg wet
Barium	ND	0.400	"
Cadmium	ND	0.200	"
Copper	ND	0.400	"
Lead	ND	0.200	"
Nickel	ND	0.400	"
Selenium	ND	0.260	"
Silver	ND	0.0200	"
Zinc	ND	0.400	"

LCS (BGC0374-BS1)

Prepared: 03/13/23 Analyzed: 03/15/23

Arsenic	40.9	0.200	mg/kg wet	40.0	102	80-120
Barium	38.4	0.400	"	40.0	95.9	80-120
Cadmium	1.96	0.200	"	2.00	98.1	80-120
Copper	38.8	0.400	"	40.0	96.9	80-120
Lead	18.3	0.200	"	20.0	91.3	80-120
Nickel	39.1	0.400	"	40.0	97.8	80-120
Selenium	4.11	0.260	"	4.00	103	80-120
Silver	1.79	0.0200	"	2.00	89.4	80-120
Zinc	41.5	0.400	"	40.0	104	80-120

Duplicate (BGC0374-DUP1)

Source: 2303312-01

Prepared: 03/13/23 Analyzed: 03/15/23

Arsenic	2.61	0.241	mg/kg dry	2.55	2.28	20
Barium	76.9	0.483	"	78.7	2.27	20
Cadmium	0.214	0.241	"	0.211	1.07	20
Copper	7.54	0.483	"	7.53	0.168	20
Lead	7.99	0.241	"	8.09	1.30	20
Nickel	7.21	0.483	"	7.23	0.301	20
Selenium	0.715	0.260	"	0.665	7.20	20
Silver	0.0584	0.0241	"	0.0538	8.20	20
Zinc	27.9	0.483	"	28.0	0.237	20

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BGC0374 - EPA 3050B

Matrix Spike (BGC0374-MS1)

Source: 2303312-01

Prepared: 03/13/23 Analyzed: 03/15/23

Arsenic	51.8	0.241	mg/kg dry	48.3	2.55	102	75-125
Barium	135	0.483	"	48.3	78.7	116	75-125
Cadmium	2.73	0.241	"	2.41	0.211	104	75-125
Copper	56.3	0.483	"	48.3	7.53	101	75-125
Lead	31.3	0.241	"	24.1	8.09	96.1	75-125
Nickel	56.6	0.483	"	48.3	7.23	102	75-125
Selenium	5.29	0.260	"	4.83	0.665	95.8	75-125
Silver	2.29	0.0241	"	2.41	0.0538	92.7	75-125
Zinc	84.8	0.483	"	48.3	28.0	118	75-125

Matrix Spike Dup (BGC0374-MSD1)

Source: 2303312-01

Prepared: 03/13/23 Analyzed: 03/15/23

Arsenic	51.8	0.241	mg/kg dry	48.3	2.55	102	75-125	0.129	25
Barium	133	0.483	"	48.3	78.7	113	75-125	1.00	25
Cadmium	2.64	0.241	"	2.41	0.211	101	75-125	3.55	25
Copper	55.7	0.483	"	48.3	7.53	99.8	75-125	1.04	25
Lead	31.0	0.241	"	24.1	8.09	94.9	75-125	0.898	25
Nickel	56.5	0.483	"	48.3	7.23	102	75-125	0.297	25
Selenium	5.20	0.260	"	4.83	0.665	93.9	75-125	1.78	25
Silver	2.25	0.0241	"	2.41	0.0538	91.1	75-125	1.74	25
Zinc	84.8	0.483	"	48.3	28.0	118	75-125	0.0538	25

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BGC0393 - 3060A Mod

Blank (BGC0393-BLK1)

Prepared & Analyzed: 03/14/23

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BGC0393-BS1)

Prepared & Analyzed: 03/14/23

Chromium, Hexavalent 23.2 0.30 mg/kg wet 25.0 93.0 80-120

Duplicate (BGC0393-DUP1)

Source: 2303225-21

Prepared & Analyzed: 03/14/23

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BGC0393-MS1)

Source: 2303225-21

Prepared & Analyzed: 03/14/23

Chromium, Hexavalent 34.3 0.30 mg/kg dry 28.8 ND 119 75-125

Matrix Spike Dup (BGC0393-MSD1)

Source: 2303225-21

Prepared & Analyzed: 03/14/23

Chromium, Hexavalent 34.5 0.30 mg/kg dry 28.8 ND 120 75-125 0.837 20

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

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 BGC0371 - General Preparation

Blank (BGC0371-BLK1)

Prepared: 03/13/23 Analyzed: 03/16/23

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

LCS (BGC0371-BS1)

Prepared: 03/13/23 Analyzed: 03/16/23

Calcium	5.06	0.0500	mg/L wet	5.00	101	70-130
Magnesium	4.88	0.0500	"	5.00	97.6	70-130
Sodium	5.19	0.0500	"	5.00	104	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: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

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 BGC0385 - General Preparation

Duplicate (BGC0385-DUP1)		Source: 2303311-01		Prepared: 03/14/23 Analyzed: 03/15/23	
% Solids	82.5		%	81.3	1.48 20

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

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 BGC0400 - General Preparation

Blank (BGC0400-BLK1)

Prepared: 03/14/23 Analyzed: 03/15/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGC0400-BS1)

Prepared: 03/14/23 Analyzed: 03/15/23

Specific Conductance (EC) 0.143 0.0100 mmhos/cm 0.150 95.6 95-105

Duplicate (BGC0400-DUP1)

Source: 2303310-01

Prepared: 03/14/23 Analyzed: 03/15/23

Specific Conductance (EC) 4.54 0.0100 mmhos/cm 4.65 2.44 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: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/21/23 15:26

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 BGC0401 - General Preparation

LCS (BGC0401-BS1)

Prepared: 03/14/23 Analyzed: 03/15/23

pH	9.11	pH Units	9.18	99.2	95-105
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Duplicate (BGC0401-DUP1)

Source: 2303310-01

Prepared: 03/14/23 Analyzed: 03/15/23

pH	7.92	pH Units	7.93	0.126	20
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Summit Scientific

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PDC Energy

1775 Sherman St. STE. 3000

Denver CO, 80203

Project: Dinner 6-5-14 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:

03/21/23 15:26

Notes and Definitions

QM-02	The RPD and/or percent recovery for this QC sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
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

March 22, 2023

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Dinner 6-5-14 Wellhead

Work Order #2303321

Enclosed are the results of analyses for samples received by Summit Scientific on 03/13/23 18:03. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Sheely".

Scott Sheely For Paul Shrewsbury
President



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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

ANALYTICAL REPORT FOR SAMPLES

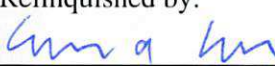
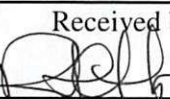

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WH01@6'	2303321-01	Soil	03/13/23 12:15	03/13/23 18:03
FLR01@4'	2303321-02	Soil	03/13/23 12:20	03/13/23 18:03

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.

Client: PDC / Tasman		Send Data To: Project Manager: Mark Longhurst		Send Invoice To: Company: PDC Energy	
Address: 6855 W 119th Ave		E-Mail: mark.longhurst@PDCE.com		Project Name/Location:	
City/State/Zip: Broomfield / CO / 80220				AFE#:	
Phone: 303-487-1228		Project Name: Dinner 6-5-14 wellhead		PO/Billing Codes:	
Sampler Name: Emilia Wozniak		Project Number:		Contact: Mark Longhurst	

					Preservative				Matrix				Analysis Requested								Special Instructions	
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other _____	Water	Soil	Air-Canister #	Other _____	BTEXN - 8260B	TPH - (C6 - C36)	1,2,4 & 1,3,5-TMB	Boron - HWS	pH, EC, SAR	PAH - 915	on hold			
1	WHOI @ 6'	3/13/23	1215	2			x			x			x	x	x	x	x	x	x			
2	WHOI FLRO @ 4'	↓	1220	2			↓			↓			x	x	x	x	x	x				
3	BKG01 @ 4'	↓	1222	1			↓			↓										x		
4	BKG01 @ 6'	↓	1227	1			↓			↓										x		
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						

Relinquished by: 	Date/Time: 3/13/23 1750	Received by: Tasman's Lockbox	Date/Time: 3/13/23 1750	TAT Business Days	Field DO	Notes:
Relinquished by: Tasman's Lockbox	Date/Time: 3/13/23 1803	Received by: 	Date/Time: 3/13/23 1803	Same Day	Field EC	
Relinquished by:	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
Temperature Upon Receipt: 9.1	Corrected Temperature: 	IR gun #:		Standard	X	Field Turb.
				HNO3 lot #:		

S₂

Sample Receipt Checklist

S2 Work Order# 2303321Client: DCI/Asman Client Project ID: Dinner 6-5-14 wellheadShipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #:

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------	--------------------------	--------------------------

Matrix (Check all that apply) Air ☐ Soil/Solid ☐ Water ☐ Other ☐Temp (°C) 9.1 Thermometer # 1

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>on ice</u>
If custody seals are present, are they intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<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"/>	
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<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"/>	
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"/>	
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, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<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.
AS
Custodian Printed Name

3/13/23
Date/Time



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

Project: Dinner 6-5-14 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

WH01@6'
2303321-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/13/23 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BGC0432	03/15/23	03/18/23	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: **03/13/23 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0563	141 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0399	99.7 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0443	111 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/13/23 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BGC0435	03/15/23	03/16/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/13/23 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	15.9	128 %	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: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

WH01@6'
2303321-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/13/23 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGC0599	03/20/23	03/20/23	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: **03/13/23 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0241	72.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0276	82.8 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/13/23 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.166	0.0100	mg/L	1	BGC0520	03/17/23	03/19/23	EPA 6020B	

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

Date Sampled: **03/13/23 12:15**

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: Dinner 6-5-14 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

WH01@6'
2303321-01 (Soil)

Summit Scientific

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

Calcium	29.5	0.0575	mg/L dry	1	BGC0554	03/18/23	03/20/23	EPA 6020B
Magnesium	9.80	0.0575	"	"	"	"	"	"
Sodium	30.4	0.0575	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **03/13/23 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.24	0.00100	units	1	BGC0687	03/21/23	03/21/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/13/23 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.0		%	1	BGC0522	03/17/23	03/17/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/13/23 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.482	0.0100	mmhos/cm	1	BGC0597	03/20/23	03/20/23	EPA 120.1	

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

Date Sampled: **03/13/23 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.80		pH Units	1	BGC0596	03/20/23	03/20/23	EPA 9045D	

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

FLR01@4'
2303321-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/13/23 12:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BGC0432	03/15/23	03/18/23	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: **03/13/23 12:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0501	125 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0391	97.8 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0427	107 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/13/23 12:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BGC0435	03/15/23	03/16/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/13/23 12:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	14.0	112 %	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: Dinner 6-5-14 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

FLR01@4'
2303321-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/13/23 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGC0599	03/20/23	03/20/23	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: **03/13/23 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0239	71.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0251	75.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/13/23 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0954	0.0100	mg/L	1	BGC0520	03/17/23	03/19/23	EPA 6020B	

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

Date Sampled: **03/13/23 12:20**

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: Dinner 6-5-14 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

FLR01@4'
2303321-02 (Soil)

Summit Scientific

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

Calcium	34.5	0.0562	mg/L dry	1	BGC0554	03/18/23	03/20/23	EPA 6020B
Magnesium	8.83	0.0562	"	"	"	"	"	"
Sodium	55.7	0.0562	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **03/13/23 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.19	0.00100	units	1	BGC0687	03/21/23	03/21/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/13/23 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.0		%	1	BGC0522	03/17/23	03/17/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/13/23 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.691	0.0100	mmhos/cm	1	BGC0597	03/20/23	03/20/23	EPA 120.1	

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

Date Sampled: **03/13/23 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.78		pH Units	1	BGC0596	03/20/23	03/20/23	EPA 9045D	

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

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 BGC0432 - EPA 5030 Soil MS

Blank (BGC0432-BLK1)

Prepared: 03/15/23 Analyzed: 03/17/23

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	0.0352		"	0.0400		87.9	50-150			
Surrogate: Toluene-d8	0.0415		"	0.0400		104	50-150			
Surrogate: 4-Bromofluorobenzene	0.0493		"	0.0400		123	50-150			

LCS (BGC0432-BS1)

Prepared: 03/15/23 Analyzed: 03/17/23

Benzene	0.0896	0.0020	mg/kg	0.100		89.6	70-130			
Toluene	0.0757	0.0050	"	0.100		75.7	70-130			
Ethylbenzene	0.0923	0.0050	"	0.100		92.3	70-130			
m,p-Xylene	0.183	0.010	"	0.200		91.4	70-130			
o-Xylene	0.0881	0.0050	"	0.100		88.1	70-130			
1,2,4-Trimethylbenzene	0.0832	0.0050	"	0.100		83.2	70-130			
1,3,5-Trimethylbenzene	0.0865	0.0050	"	0.100		86.5	70-130			
Naphthalene	0.0706	0.0038	"	0.100		70.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0446		"	0.0400		111	50-150			
Surrogate: Toluene-d8	0.0382		"	0.0400		95.5	50-150			
Surrogate: 4-Bromofluorobenzene	0.0400		"	0.0400		99.9	50-150			

Matrix Spike (BGC0432-MS1)

Source: 2303294-03

Prepared: 03/15/23 Analyzed: 03/17/23

Benzene	0.0918	0.0020	mg/kg	0.100	ND	91.8	70-130			
Toluene	0.0812	0.0050	"	0.100	ND	81.2	70-130			
Ethylbenzene	0.0946	0.0050	"	0.100	ND	94.6	70-130			
m,p-Xylene	0.189	0.010	"	0.200	ND	94.4	70-130			
o-Xylene	0.0902	0.0050	"	0.100	ND	90.2	70-130			
1,2,4-Trimethylbenzene	0.0860	0.0050	"	0.100	ND	86.0	70-130			
1,3,5-Trimethylbenzene	0.0886	0.0050	"	0.100	ND	88.6	70-130			
Naphthalene	0.0757	0.0038	"	0.100	ND	75.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0459		"	0.0400		115	50-150			
Surrogate: Toluene-d8	0.0386		"	0.0400		96.4	50-150			
Surrogate: 4-Bromofluorobenzene	0.0413		"	0.0400		103	50-150			

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

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 BGC0432 - EPA 5030 Soil MS

Matrix Spike Dup (BGC0432-MSD1)	Source: 2303294-03			Prepared: 03/15/23 Analyzed: 03/17/23						
Benzene	0.0920	0.0020	mg/kg	0.100	ND	92.0	70-130	0.196	30	
Toluene	0.0790	0.0050	"	0.100	ND	79.0	70-130	2.77	30	
Ethylbenzene	0.0919	0.0050	"	0.100	ND	91.9	70-130	2.93	30	
m,p-Xylene	0.187	0.010	"	0.200	ND	93.5	70-130	0.942	30	
o-Xylene	0.0888	0.0050	"	0.100	ND	88.8	70-130	1.61	30	
1,2,4-Trimethylbenzene	0.0836	0.0050	"	0.100	ND	83.6	70-130	2.83	30	
1,3,5-Trimethylbenzene	0.0867	0.0050	"	0.100	ND	86.7	70-130	2.16	30	
Naphthalene	0.0722	0.0038	"	0.100	ND	72.2	70-130	4.66	30	
Surrogate: 1,2-Dichloroethane-d4	0.0472		"	0.0400		118	50-150			
Surrogate: Toluene-d8	0.0383		"	0.0400		95.8	50-150			
Surrogate: 4-Bromofluorobenzene	0.0411		"	0.0400		103	50-150			

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BGC0435 - EPA 3550A

Blank (BGC0435-BLK1)

Prepared: 03/15/23 Analyzed: 03/16/23

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	14.5		"	12.5	116		30-150			

LCS (BGC0435-BS1)

Prepared: 03/15/23 Analyzed: 03/16/23

C10-C28 (DRO)	516	50	mg/kg	500	103		70-130			
Surrogate: o-Terphenyl	14.6		"	12.5	116		30-150			

Matrix Spike (BGC0435-MS1)

Source: 2303294-03

Prepared: 03/15/23 Analyzed: 03/16/23

C10-C28 (DRO)	411	50	mg/kg	500	13.1	79.6	70-130			
Surrogate: o-Terphenyl	11.6		"	12.5	92.5		30-150			

Matrix Spike Dup (BGC0435-MSD1)

Source: 2303294-03

Prepared: 03/15/23 Analyzed: 03/16/23

C10-C28 (DRO)	478	50	mg/kg	500	13.1	93.0	70-130	15.1	20	
Surrogate: o-Terphenyl	13.6		"	12.5	109		30-150			

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

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 BGC0599 - EPA 5030 Soil MS

Blank (BGC0599-BLK1)

Prepared & Analyzed: 03/20/23

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	0.0395		"	0.0333		119		40-150			
Surrogate: Fluoranthene-d10	0.0394		"	0.0333		118		40-150			

LCS (BGC0599-BS1)

Prepared & Analyzed: 03/20/23

Acenaphthene	0.0364	0.00500	mg/kg	0.0333		109		31-137			
Anthracene	0.0354	0.00500	"	0.0333		106		30-120			
Benzo (a) anthracene	0.0371	0.00500	"	0.0333		111		30-120			
Benzo (a) pyrene	0.0321	0.00500	"	0.0333		96.3		30-120			
Benzo (b) fluoranthene	0.0358	0.00500	"	0.0333		107		30-120			
Benzo (k) fluoranthene	0.0359	0.00500	"	0.0333		108		30-120			
Chrysene	0.0318	0.00500	"	0.0333		95.4		30-120			
Dibenz (a,h) anthracene	0.0314	0.00500	"	0.0333		94.1		30-120			
Fluoranthene	0.0356	0.00500	"	0.0333		107		30-120			
Fluorene	0.0354	0.00500	"	0.0333		106		30-120			
Indeno (1,2,3-cd) pyrene	0.0347	0.00500	"	0.0333		104		30-120			
Pyrene	0.0391	0.00500	"	0.0333		117		35-142			
1-Methylnaphthalene	0.0311	0.00500	"	0.0333		93.4		35-142			
2-Methylnaphthalene	0.0366	0.00500	"	0.0333		110		35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0337		"	0.0333		101		40-150			
Surrogate: Fluoranthene-d10	0.0390		"	0.0333		117		40-150			

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

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 BGC0599 - EPA 5030 Soil MS

Matrix Spike (BGC0599-MS1)

Source: 2303457-01

Prepared & Analyzed: 03/20/23

Acenaphthene	0.0212	0.00500	mg/kg	0.0333	ND	63.7	31-137		
Anthracene	0.0212	0.00500	"	0.0333	ND	63.5	30-120		
Benzo (a) anthracene	0.0233	0.00500	"	0.0333	ND	69.8	30-120		
Benzo (a) pyrene	0.0215	0.00500	"	0.0333	ND	64.5	30-120		
Benzo (b) fluoranthene	0.0223	0.00500	"	0.0333	ND	66.8	30-120		
Benzo (k) fluoranthene	0.0225	0.00500	"	0.0333	ND	67.6	30-120		
Chrysene	0.0196	0.00500	"	0.0333	ND	58.7	30-120		
Dibenz (a,h) anthracene	0.0185	0.00500	"	0.0333	ND	55.6	30-120		
Fluoranthene	0.0220	0.00500	"	0.0333	0.00209	59.8	30-120		
Fluorene	0.0212	0.00500	"	0.0333	ND	63.7	30-120		
Indeno (1,2,3-cd) pyrene	0.0210	0.00500	"	0.0333	ND	63.1	30-120		
Pyrene	0.0245	0.00500	"	0.0333	0.00195	67.6	35-142		
1-Methylnaphthalene	0.0196	0.00500	"	0.0333	ND	58.7	15-130		
2-Methylnaphthalene	0.0224	0.00500	"	0.0333	ND	67.2	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0205		"	0.0333		61.5	40-150		
Surrogate: Fluoranthene-d10	0.0241		"	0.0333		72.3	40-150		

Matrix Spike Dup (BGC0599-MSD1)

Source: 2303457-01

Prepared & Analyzed: 03/20/23

Acenaphthene	0.0223	0.00500	mg/kg	0.0333	ND	66.9	31-137	4.90	30
Anthracene	0.0220	0.00500	"	0.0333	ND	66.0	30-120	3.82	30
Benzo (a) anthracene	0.0223	0.00500	"	0.0333	ND	67.0	30-120	4.09	30
Benzo (a) pyrene	0.0204	0.00500	"	0.0333	ND	61.1	30-120	5.28	30
Benzo (b) fluoranthene	0.0223	0.00500	"	0.0333	ND	66.8	30-120	0.0150	30
Benzo (k) fluoranthene	0.0222	0.00500	"	0.0333	ND	66.7	30-120	1.24	30
Chrysene	0.0190	0.00500	"	0.0333	ND	57.1	30-120	2.77	30
Dibenz (a,h) anthracene	0.0195	0.00500	"	0.0333	ND	58.5	30-120	5.11	30
Fluoranthene	0.0227	0.00500	"	0.0333	0.00209	61.8	30-120	2.90	30
Fluorene	0.0222	0.00500	"	0.0333	ND	66.6	30-120	4.46	30
Indeno (1,2,3-cd) pyrene	0.0215	0.00500	"	0.0333	ND	64.5	30-120	2.19	30
Pyrene	0.0239	0.00500	"	0.0333	0.00195	65.7	35-142	2.58	30
1-Methylnaphthalene	0.0245	0.00500	"	0.0333	ND	73.4	15-130	22.3	50
2-Methylnaphthalene	0.0223	0.00500	"	0.0333	ND	67.0	15-130	0.344	50
Surrogate: 2-Methylnaphthalene-d10	0.0229		"	0.0333		68.8	40-150		
Surrogate: Fluoranthene-d10	0.0250		"	0.0333		75.0	40-150		

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: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

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 BGC0520 - EPA 3050B

Blank (BGC0520-BLK1)

Prepared: 03/17/23 Analyzed: 03/19/23

Boron ND 0.0100 mg/L

LCS (BGC0520-BS1)

Prepared: 03/17/23 Analyzed: 03/19/23

Boron 5.10 0.0100 mg/L 5.00 102 80-120

Duplicate (BGC0520-DUP1)

Source: 2303319-01

Prepared: 03/17/23 Analyzed: 03/19/23

Boron 0.199 0.0100 mg/L 0.203 1.78 20

Matrix Spike (BGC0520-MS1)

Source: 2303319-01

Prepared: 03/17/23 Analyzed: 03/19/23

Boron 5.22 0.0100 mg/L 5.00 0.203 100 75-125

Matrix Spike Dup (BGC0520-MSD1)

Source: 2303319-01

Prepared: 03/17/23 Analyzed: 03/19/23

Boron 5.25 0.0100 mg/L 5.00 0.203 101 75-125 0.659 25

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

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 BGC0554 - General Preparation

Blank (BGC0554-BLK1)

Prepared: 03/18/23 Analyzed: 03/20/23

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

LCS (BGC0554-BS1)

Prepared: 03/18/23 Analyzed: 03/20/23

Calcium	5.60	0.0500	mg/L wet	5.00	112	70-130
Magnesium	5.39	0.0500	"	5.00	108	70-130
Sodium	5.14	0.0500	"	5.00	103	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: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

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

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

Batch BGC0522 - General Preparation

Duplicate (BGC0522-DUP1)		Source: 2303157-12			Prepared & Analyzed: 03/17/23						
% Solids	84.4		%		84.0			0.479		20	

Summit Scientific



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

Project: Dinner 6-5-14 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

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 BGC0597 - General Preparation

Blank (BGC0597-BLK1)

Prepared & Analyzed: 03/20/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGC0597-BS1)

Prepared & Analyzed: 03/20/23

Specific Conductance (EC) 0.153 0.0100 mmhos/cm 0.150 102 95-105

Duplicate (BGC0597-DUP1)

Source: 2303319-01

Prepared & Analyzed: 03/20/23

Specific Conductance (EC) 0.405 0.0100 mmhos/cm 0.406 0.222 20

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

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 BGC0596 - General Preparation

LCS (BGC0596-BS1)

Prepared & Analyzed: 03/20/23

pH	9.20	pH Units	9.18	100	95-105
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Duplicate (BGC0596-DUP1)

Source: 2303319-01

Prepared & Analyzed: 03/20/23

pH	7.85	pH Units	8.11	3.26	20
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Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 10:36

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

March 22, 2023

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Dinner 6-5-14 Wellhead

Work Order #2303369

Enclosed are the results of analyses for samples received by Summit Scientific on 03/14/23 17:47. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Sheely".

Scott Sheely For Paul Shrewsbury
President



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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
03/22/23 11:14

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01-01@4'	2303369-01	Soil	03/14/23 13:00	03/14/23 17:47

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.

Client: PDC / Tasman		Send Data To:		Send Invoice To:	
Address: 6855 W 119th Ave		Project Manager: Mark Longhurst		Company: PDC Energy	
City/State/Zip: Broomfield / CO / 80220		E-Mail: mark.longhurst@PDCE.com		Project Name/Location:	
Phone: 303-487-1228		Project Name: Dinner 6-5-14 wellhead		AFE#:	
Sampler Name: Emilia Wozniak		Project Number:		PO/Billing Codes:	
				Contact: Mark Longhurst	

					Preservative				Matrix				Analysis Requested							Special Instructions		
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other _____	Water	Soil	Air-Canister #	Other _____	BTEXN - 8260B	TPH - (C6 - C36)	1,2,4 & 1,3,5-TMB	Boron - HWS	pH, EC, SAR					
1	FL01-01 @ 4'	3/14/23	1300	2			X			X			X	X	X							
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						

Relinquished by: <u>Uma W</u>	Date/Time: <u>3/14/23 1724</u>	Received by: <u>Tasman Lockbox</u>	Date/Time: <u>3/14/23 1724</u>	TAT Business Days	Field DO	Notes:
Relinquished by: <u>Tasman Lockbox</u>	Date/Time: <u>3/14/23 1747</u>	Received by: <u>[Signature]</u>	Date/Time: <u>3/14/23 1747</u>	Same Day	Field EC	
				1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Standard	X Field Turb.	
Temperature Upon Receipt: <u>9.4</u>	Corrected Temperature: <u>-0</u>	IR gun #: <u>1</u>	HNO3 lot #: <u></u>			

S₂

Sample Receipt Checklist

S2 Work Order# 2303369Client: Portasman Client Project ID: Dinner G-5-14 wellheadShipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Matrix (Check all that apply) Air ☐ Soil/Solid ☐ Water ☐ Other ☐Temp (°C) 94Thermometer # 1

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>on ice</u>
If custody seals are present, are they intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<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"/>	
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<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"/>	
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"/>	
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, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<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.

AS

Custodian Printed Name

3/14/23

Date/Time



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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 11:14

FL01-01@4'
2303369-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BGC0471	03/16/23	03/19/23	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: **03/14/23 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0541	135 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0395	98.8 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0436	109 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BGC0474	03/16/23	03/17/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/14/23 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	14.1	113 %	30-150		"	"	"	"	

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 11:14

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 BGC0471 - EPA 5030 Soil MS

Blank (BGC0471-BLK1)

Prepared: 03/16/23 Analyzed: 03/18/23

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	0.0534		"	0.0400		133	50-150			
Surrogate: Toluene-d8	0.0387		"	0.0400		96.8	50-150			
Surrogate: 4-Bromofluorobenzene	0.0436		"	0.0400		109	50-150			

LCS (BGC0471-BS1)

Prepared: 03/16/23 Analyzed: 03/18/23

Benzene	0.0814	0.0020	mg/kg	0.0750		109	70-130			
Toluene	0.0731	0.0050	"	0.0750		97.4	70-130			
Ethylbenzene	0.0891	0.0050	"	0.0750		119	70-130			
m,p-Xylene	0.179	0.010	"	0.150		119	70-130			
o-Xylene	0.0861	0.0050	"	0.0750		115	70-130			
1,2,4-Trimethylbenzene	0.0822	0.0050	"	0.0750		110	70-130			
1,3,5-Trimethylbenzene	0.0844	0.0050	"	0.0750		113	70-130			
Naphthalene	0.0706	0.0038	"	0.0750		94.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0435		"	0.0400		109	50-150			
Surrogate: Toluene-d8	0.0376		"	0.0400		94.1	50-150			
Surrogate: 4-Bromofluorobenzene	0.0416		"	0.0400		104	50-150			

Matrix Spike (BGC0471-MS1)

Source: 2303326-21

Prepared: 03/16/23 Analyzed: 03/18/23

Benzene	0.0806	0.0020	mg/kg	0.0750	ND	107	70-130			
Toluene	0.0727	0.0050	"	0.0750	ND	96.9	70-130			
Ethylbenzene	0.0843	0.0050	"	0.0750	ND	112	70-130			
m,p-Xylene	0.174	0.010	"	0.150	ND	116	70-130			
o-Xylene	0.0832	0.0050	"	0.0750	ND	111	70-130			
1,2,4-Trimethylbenzene	0.0818	0.0050	"	0.0750	ND	109	70-130			
1,3,5-Trimethylbenzene	0.0839	0.0050	"	0.0750	ND	112	70-130			
Naphthalene	0.0815	0.0038	"	0.0750	ND	109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0468		"	0.0400		117	50-150			
Surrogate: Toluene-d8	0.0394		"	0.0400		98.5	50-150			
Surrogate: 4-Bromofluorobenzene	0.0417		"	0.0400		104	50-150			

Summit Scientific

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

Project: Dinner 6-5-14 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 11:14

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 BGC0471 - EPA 5030 Soil MS

Matrix Spike Dup (BGC0471-MSD1)	Source: 2303326-21			Prepared: 03/16/23 Analyzed: 03/18/23						
Benzene	0.0764	0.0020	mg/kg	0.0750	ND	102	70-130	5.43	30	
Toluene	0.0674	0.0050	"	0.0750	ND	89.9	70-130	7.54	30	
Ethylbenzene	0.0842	0.0050	"	0.0750	ND	112	70-130	0.107	30	
m,p-Xylene	0.170	0.010	"	0.150	ND	114	70-130	2.21	30	
o-Xylene	0.0826	0.0050	"	0.0750	ND	110	70-130	0.687	30	
1,2,4-Trimethylbenzene	0.0778	0.0050	"	0.0750	ND	104	70-130	5.00	30	
1,3,5-Trimethylbenzene	0.0803	0.0050	"	0.0750	ND	107	70-130	4.46	30	
Naphthalene	0.0775	0.0038	"	0.0750	ND	103	70-130	5.02	30	
Surrogate: 1,2-Dichloroethane-d4	0.0454		"	0.0400		113	50-150			
Surrogate: Toluene-d8	0.0382		"	0.0400		95.6	50-150			
Surrogate: 4-Bromofluorobenzene	0.0411		"	0.0400		103	50-150			

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: Dinner 6-5-14 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 11:14

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BGC0474 - EPA 3550A

Blank (BGC0474-BLK1)

Prepared & Analyzed: 03/16/23

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	15.7		"	12.5		126	30-150			

LCS (BGC0474-BS1)

Prepared & Analyzed: 03/16/23

C10-C28 (DRO)	436	50	mg/kg	500		87.2	70-130			
Surrogate: o-Terphenyl	13.2		"	12.5		106	30-150			

Matrix Spike (BGC0474-MS1)

Source: 2303326-21

Prepared & Analyzed: 03/16/23

C10-C28 (DRO)	421	50	mg/kg	500	11.8	81.8	70-130			
Surrogate: o-Terphenyl	12.8		"	12.5		102	30-150			

Matrix Spike Dup (BGC0474-MSD1)

Source: 2303326-21

Prepared & Analyzed: 03/16/23

C10-C28 (DRO)	434	50	mg/kg	500	11.8	84.5	70-130	3.10	20	
Surrogate: o-Terphenyl	12.1		"	12.5		96.9	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: Dinner 6-5-14 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/22/23 11:14

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