TABLE 1
FORMER MILLER 5 TANK BATTERY
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**
SS01 @ 5'	8/6/2021	5 ft. bgs	<0.0020	<0.00050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	50
SS02 @ 10'	8/11/2021	10 ft. bgs	<0.0020	<0.00050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50
SS03 @ 10'	8/11/2021	10 ft. bgs	<0.0020	<0.00050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50
SS04 @ 5'	8/11/2021	5 ft. bgs	<0.0020	<0.00050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50
SS05 @ 8'	8/11/2021	8 ft. bgs	<0.0020	<0.00050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50
SS06 @ 10'	8/12/2021	10 ft. bgs	<0.0020	<0.00050	<0.0050	0.010	**0.0084**	<0.0050	<0.0038	<50
SS07 @ 10'	8/12/2021	10 ft. bgs	<0.0020	<0.00050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50
SS08 @ 10'	8/13/2021	10 ft. bgs	<0.0020	<0.00050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50
SS09 @ 10'	8/13/2021	10 ft. bgs	<0.0020	<0.00050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50
SS10 @ 10.5'	8/13/2021	10.5 ft. bgs	<0.0020	<0.00050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50

Notes:

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

COGCC = Colorado Oil and Gas Conservation Commission
(<) = Analytical result is less than the indicated laboratory reporting limit.
TVPH-GRO = Total volatile petroleum hydrocarbons - gasoline range organics
TEPH-DRO = Total extractable petroleum hydrocarbons - diesel range organics
TEPH-ORO = Total extactable petroleum hydrocarbons - oil range organics
mg/kg = Milligrams per kilogram
TMB = Trimethylbenzene
= Source material characterization sample
ft. = Feet
bgs = Below ground surface
BOLD = Analytical result is in exceedance of applicable standard.

TABLE 2
FORMER MILLER 5 TANK BATTERY
SOIL ANALYTICAL RESULTS SUMMARY TABLE
INORGANIC COMPOUNDS

Sample ID	Date Sampled	Depth	pH (units)	EC (mmhos/cm)	SAR (units)	Boron (mg/L)
Soil Suitabilty for Reclamation Standard [(1)]			**6-8.3**	**<4**	**<6**	**2**
SS01 @ 5'	8/6/2021	5 ft. bgs	8.23	0.604	1.72	0.187

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 = millgram per liter
= Source material characterization sample
ft. = Feet
bgs = Below ground surface

TABLE 3
FORMER MILLER 5 TANK BATTERY
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**
SS01 @ 5'	8/6/2021	5 ft. bgs	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500

Notes:

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

COGCC = Colorado Oil and Gas Conservation Commission
(<) = Analytical result is less than the indicated laboratory reporting limit.
PAHs = Polycyclic aromatic hydrocarbons
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
= Source material characterization sample
ft. = Feet
bgs = Below ground surface

TABLE 4
FORMER MILLER 5 TANK BATTERY
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**
SS01 @ 5'	8/6/2021	5 ft. bgs	**1.99**	43.3	<0.245	<0.30 [4]	25.3	**20.4**	24.5	**0.721**	0.0369	136

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. 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
= Source material characterization sample
ft. = Feet
bgs = Below ground surface
BOLD = Analytical result is in exceedance of applicable standard.

TABLE 5
FORMER MILLER 5 TANK BATTERY
FIELD DATA SUMMARY TABLE

Sample ID	Date Sampled	Depth	GPS Data [1] Latitude / Longitude		PDOP Value	VOC Concentration [2] (ppm)
AST01 @ 0-6"	8/6/2021	0-6 in. bgs	40.203406	-104.793798	1.5	0.5
AST02 @ 0-6"	8/6/2021	0-6 in. bgs	40.203404	-104.793749	1.5	0.3
ECD01 @ 0-6"	8/6/2021	0-6 in. bgs	40.203269	-104.793523	1.3	0.2
ECD02 @ 0-6"	8/6/2021	0-6 in. bgs	40.203277	-104.793441	1.2	0.0
DL01-01 @ 4'	8/6/2021	4 ft. bgs	40.204122	-104.793774	1.2	0.2
DL01-02 @ 4'	8/6/2021	4 ft. bgs	40.203277	-104.793441	1.2	0.0
SEP01-FL @ 4'	8/6/2021	4 ft. bgs	40.206593	-104.796073	1.3	0.2
MH01 @ 0-6"	8/6/2021	0-6 in. bgs	40.204904	-104.793867	1.2	0.3
SEP01-DL @ 4'	8/6/2021	4 ft. bgs	40.204883	-104.793802	1.3	3.2
SS01 @ 5'	8/6/2021	5 ft. bgs	40.203440	-104.793713	1.3	812.2
SS02 @ 10'	8/11/2021	10 ft. bgs	NC	NC	NC	2.5
SS03 @ 10'	8/11/2021	10 ft. bgs	NC	NC	NC	15.3
SS04 @ 5'	8/11/2021	5 ft. bgs	40.203470	-104.793702	1.0	0.0
SS05 @ 8'	8/11/2021	8 ft. bgs	NC	NC	NC	50.0
SS06 @ 10'	8/12/2021	10 ft. bgs	NC	NC	NC	37.1
SS07 @ 10'	8/12/2021	10 ft. bgs	NC	NC	NC	38.0
SS08 @ 10'	8/13/2021	10 ft. bgs	NC	NC	NC	3.2
SS09 @ 10'	8/13/2021	10 ft. bgs	NC	NC	NC	1.8
SS10 @ 10.5'	8/13/2021	10.5 ft. bgs	NC	NC	NC	2.1

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

= Source material characterization sample

ft. = Feet

in. = Inches

bgs = Below ground surface

NC = Data not collected

Attachment A

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

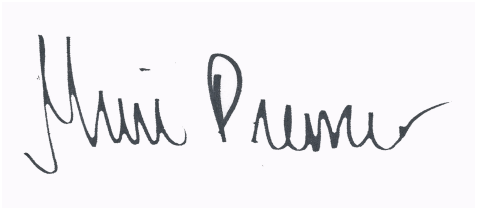
August 16, 2021

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

RE: Miller 5 Tank Battery
Work Order #2108093

Enclosed are the results of analyses for samples received by Summit Scientific on 08/06/21 13:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Muri Premer For Paul Shrewsbury
President

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS01 @ 5'	2108093-01	Soil	08/06/21 12:00	08/06/21 13:20

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.

2108093

Summit Scientific

S_2

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

Page 1 of 1

Client: PDC/Tasman
Address: 6855 W 119th Ave.
City/State/Zip: Broomfield, CO 80020
Phone: 303-487-1228
Sampler Name: Max Dahlgren

Project Manager: Mark Longhurst
E-Mail: mark.longhurst@PDCE.com
Project Name: Miller 5 Tank Battery
Project Number:

					Preservative				Matrix				Analysis Requested								Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other ___	Water	Soil	Air-Canister #	Other ___	VOC - 915	TPH - 915	PAH - 915	SAR,EC,pH	Boron - HWS	Metals - 915			SAR,EC,pH by saturated paste
1	SSol @ 5'	8/6/21	1200	3			X			X			X	X	X	X	X	X			
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by: Max Date/Time: 8/6/21 1245
Received by: Will Mahi 8/6/21 Date/Time: 1320

Relinquished by: Date/Time:
Received by: Date/Time:

Relinquished by: Date/Time:
Received by: Date/Time:

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

Sample Integrity:
Temperature Upon Receipt: 5.1
Samples Intact: (Yes) No

Notes:

Sample Receipt Checklist

S2 Work Order 2108093

Client: PDC/TASMAN Client Project ID: Miller S Tank Battery

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

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

Temp (°C)	5.1

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.	✓			on ice
Were all samples received intact (1)?	✓			
Was adequate sample volume provided (1)?	✓			
If custody seals are present, are they intact (1)?			✓	
Are samples with holding times due within 48 hours sample due within 48 hours present?	✓			same day
Is a chain-of-custody (COC) form present and filled out completely (1)?	✓			
Does the COC agree with the number and type of sample bottles received (1)?	✓			
Do the sample IDs on the bottle labels match the COC (1)?	✓			
Is the COC properly relinquished by the client w/ date and time recorded (1)?	✓		✓	WG
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**			✓	
Are samples preserved that require preservation **(excluding cooling)** (1)? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect			✓	
If samples are acid preserved for metals, is the pH ≤ 2(1)? Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Additional Comments (if any):				
(1) **If NO, then contact the client before proceeding with analysis and note in case narrative.**				

WG — **Custodian Printed Name or Initials**

Will Adkins — **Signature of Custodian**

8/6/21 — **Date/Time**

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

SS01 @ 5'

2108093-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/06/21 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEH0109	08/06/21	08/07/21	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	**50**	0.50	"	"	"	"	"	"	

Date Sampled: **08/06/21 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*105 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*144 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/06/21 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEH0110	"	08/06/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/06/21 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*83.0 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

SS01 @ 5'

2108093-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **08/06/21 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEH0112	08/09/21	08/10/21	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **08/06/21 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		*48.7 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10		*60.3 %*	*40-150*		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **08/06/21 12:00**

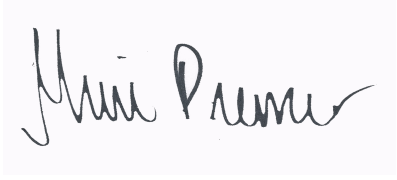
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	**0.187**	0.0100	mg/L	1	BEH0126	08/09/21	08/10/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **08/06/21 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

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.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

SS01 @ 5'

2108093-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	**1.99**	0.245	mg/kg dry	1	BEH0146	08/10/21	08/11/21	EPA 6020B	
Barium	**43.3**	0.489	"	"	"	"	"	"	
Cadmium	ND	0.245	"	"	"	"	"	"	
Copper	**25.3**	0.489	"	"	"	"	"	"	
Lead	**20.4**	0.245	"	"	"	"	"	"	
Nickel	**24.5**	0.489	"	"	"	"	"	"	
Selenium	**0.721**	0.318	"	"	"	"	"	"	
Silver	**0.0396**	0.0245	"	"	"	"	"	"	
Zinc	**136**	0.489	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **08/06/21 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEH0162	08/11/21	08/12/21	EPA 7196A	

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

Date Sampled: **08/06/21 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**51.6**	0.0611	mg/L dry	1	BEH0122	08/09/21	08/12/21	EPA 6020B	
Magnesium	**20.9**	0.0611	"	"	"	"	"	"	
Sodium	**57.8**	0.0611	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **08/06/21 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**1.72**	0.00100	units	1	BEH0230	08/13/21	08/13/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **08/06/21 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

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.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

SS01 @ 5'

2108093-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**81.8**		%	1	BEH0123	08/09/21	08/09/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **08/06/21 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**0.604**	0.0100	mmhos/cm	1	BEH0143	08/10/21	08/10/21	EPA 120.1	

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

Date Sampled: **08/06/21 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**8.23**		pH Units	1	BEH0142	08/10/21	08/10/21	EPA 9045D	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0109 - EPA 5030 Soil MS										
Blank (BEH0109-BLK1)				Prepared & Analyzed: 08/06/21						
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	*0.0414*		*"*	*0.0400*		*104*	*23-173*			
Surrogate: Toluene-d8	*0.0397*		*"*	*0.0400*		*99.2*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0369*		*"*	*0.0400*		*92.2*	*21-167*			
LCS (BEH0109-BS1)				Prepared & Analyzed: 08/06/21						
Benzene	0.0704	0.0020	mg/kg	0.100		70.4	70-130			
Toluene	0.0718	0.0050	"	0.100		71.8	70-130			
Ethylbenzene	0.0904	0.0050	"	0.100		90.4	70-130			
m,p-Xylene	0.177	0.010	"	0.200		88.7	70-130			
o-Xylene	0.0893	0.0050	"	0.100		89.3	70-130			
1,2,4-Trimethylbenzene	0.0914	0.0050	"	0.100		91.4	70-130			
1,3,5-Trimethylbenzene	0.0914	0.0050	"	0.100		91.4	70-130			
Naphthalene	0.115	0.0038	"	0.100		115	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0404*		*"*	*0.0400*		*101*	*23-173*			
Surrogate: Toluene-d8	*0.0400*		*"*	*0.0400*		*100*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0369*		*"*	*0.0400*		*92.3*	*21-167*			
Matrix Spike (BEH0109-MS1)	**Source: 2108092-01**			Prepared & Analyzed: 08/06/21						
Benzene	0.0707	0.0020	mg/kg	0.100	ND	70.7	70-130			
Toluene	0.0739	0.0050	"	0.100	ND	73.9	70-130			
Ethylbenzene	0.0902	0.0050	"	0.100	ND	90.2	70-130			
m,p-Xylene	0.176	0.010	"	0.200	ND	87.9	70-130			
o-Xylene	0.0891	0.0050	"	0.100	ND	89.1	70-130			
1,2,4-Trimethylbenzene	0.0904	0.0050	"	0.100	ND	90.4	70-130			
1,3,5-Trimethylbenzene	0.0902	0.0050	"	0.100	ND	90.2	70-130			
Naphthalene	0.119	0.0038	"	0.100	ND	119	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0419*		*"*	*0.0400*		*105*	*23-173*			
Surrogate: Toluene-d8	*0.0407*		*"*	*0.0400*		*102*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0375*		*"*	*0.0400*		*93.7*	*21-167*			

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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.

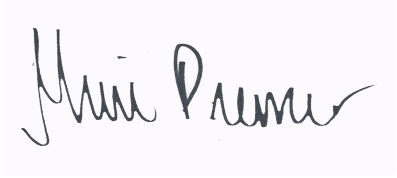
S2

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/16/21 12:27

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0109 - EPA 5030 Soil MS										
Matrix Spike Dup (BEH0109-MSD1)	**Source: 2108092-01**			Prepared & Analyzed: 08/06/21						
Benzene	0.0739	0.0020	mg/kg	0.100	ND	73.9	70-130	4.36	30	
Toluene	0.0700	0.0050	"	0.100	ND	70.0	70-130	5.38	30	
Ethylbenzene	0.0868	0.0050	"	0.100	ND	86.8	70-130	3.83	30	
m,p-Xylene	0.170	0.010	"	0.200	ND	84.9	70-130	3.47	30	
o-Xylene	0.0845	0.0050	"	0.100	ND	84.5	70-130	5.32	30	
1,2,4-Trimethylbenzene	0.0871	0.0050	"	0.100	ND	87.1	70-130	3.72	30	
1,3,5-Trimethylbenzene	0.0866	0.0050	"	0.100	ND	86.6	70-130	4.04	30	
Naphthalene	0.120	0.0038	"	0.100	ND	120	70-130	1.20	30	
Surrogate: 1,2-Dichloroethane-d4	*0.0418*		*"*	*0.0400*		*104*	*23-173*			
Surrogate: Toluene-d8	*0.0402*		*"*	*0.0400*		*100*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0375*		*"*	*0.0400*		*93.7*	*21-167*			



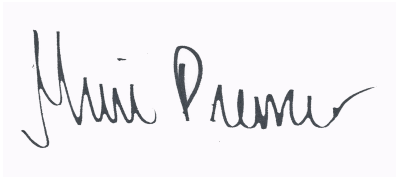
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0110 - EPA 3550A										
Blank (BEH0110-BLK1)				Prepared & Analyzed: 08/06/21						
C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
LCS (BEH0110-BS1)				Prepared & Analyzed: 08/06/21						
C10-C28 (DRO)	584	50	mg/kg	500		117	70-130			
Matrix Spike (BEH0110-MS1)	**Source: 2108092-01**			Prepared & Analyzed: 08/06/21						
C10-C28 (DRO)	591	50	mg/kg	500	16.5	115	70-130			
Matrix Spike Dup (BEH0110-MSD1)	**Source: 2108092-01**			Prepared & Analyzed: 08/06/21						
C10-C28 (DRO)	586	50	mg/kg	500	16.5	114	70-130	0.916	20	



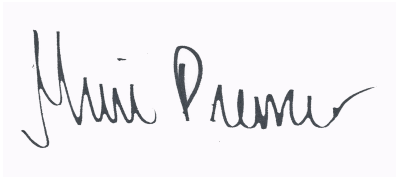
S2

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/16/21 12:27

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0112 - EPA 5030 Soil MS										
Blank (BEH0112-BLK1)				Prepared: 08/09/21 Analyzed: 08/10/21						
Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	*0.0165*		*"*	*0.0333*		*49.4*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0161*		*"*	*0.0333*		*48.3*	*40-150*			
LCS (BEH0112-BS1)				Prepared: 08/09/21 Analyzed: 08/10/21						
Acenaphthene	0.0247	0.00500	mg/kg	0.0333		74.0	31-137			
Anthracene	0.0247	0.00500	"	0.0333		74.1	30-120			
Benzo (a) anthracene	0.0252	0.00500	"	0.0333		75.5	30-120			
Benzo (a) pyrene	0.0241	0.00500	"	0.0333		72.2	30-120			
Benzo (b) fluoranthene	0.0245	0.00500	"	0.0333		73.4	30-120			
Benzo (k) fluoranthene	0.0252	0.00500	"	0.0333		75.5	30-120			
Chrysene	0.0252	0.00500	"	0.0333		75.5	30-120			
Dibenz (a,h) anthracene	0.0261	0.00500	"	0.0333		78.4	30-120			
Fluoranthene	0.0227	0.00500	"	0.0333		68.2	30-120			
Fluorene	0.0252	0.00500	"	0.0333		75.7	30-120			
Indeno (1,2,3-cd) pyrene	0.0258	0.00500	"	0.0333		77.4	30-120			
Pyrene	0.0248	0.00500	"	0.0333		74.3	35-142			
1-Methylnaphthalene	0.0202	0.00500	"	0.0333		60.7	35-142			
2-Methylnaphthalene	0.0232	0.00500	"	0.0333		69.7	35-142			
Surrogate: 2-Methylnaphthalene-d10	*0.0181*		*"*	*0.0333*		*54.2*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0169*		*"*	*0.0333*		*50.6*	*40-150*			



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0112 - EPA 5030 Soil MS										
Matrix Spike (BEH0112-MS1)	**Source: 2108076-02**			Prepared: 08/09/21 Analyzed: 08/10/21						
Acenaphthene	0.0311	0.00500	mg/kg	0.0333	ND	93.2	31-137			
Anthracene	0.0232	0.00500	"	0.0333	ND	69.5	30-120			
Benzo (a) anthracene	0.0257	0.00500	"	0.0333	ND	77.2	30-120			
Benzo (a) pyrene	0.0211	0.00500	"	0.0333	ND	63.2	30-120			
Benzo (b) fluoranthene	0.0225	0.00500	"	0.0333	ND	67.5	30-120			
Benzo (k) fluoranthene	0.0245	0.00500	"	0.0333	ND	73.6	30-120			
Chrysene	0.0262	0.00500	"	0.0333	ND	78.7	30-120			
Dibenz (a,h) anthracene	0.0178	0.00500	"	0.0333	ND	53.3	30-120			
Fluoranthene	0.0204	0.00500	"	0.0333	ND	61.3	30-120			
Fluorene	0.0220	0.00500	"	0.0333	ND	66.1	30-120			
Indeno (1,2,3-cd) pyrene	0.0166	0.00500	"	0.0333	ND	49.7	30-120			
Pyrene	0.0257	0.00500	"	0.0333	ND	77.1	35-142			
1-Methylnaphthalene	0.0179	0.00500	"	0.0333	ND	53.7	15-130			
2-Methylnaphthalene	0.0239	0.00500	"	0.0333	ND	71.7	15-130			
Surrogate: 2-Methylnaphthalene-d10	*0.0183*		*"*	*0.0333*		*55.0*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0145*		*"*	*0.0333*		*43.5*	*40-150*			
Matrix Spike Dup (BEH0112-MSD1)	**Source: 2108076-02**			Prepared: 08/09/21 Analyzed: 08/10/21						
Acenaphthene	0.0239	0.00500	mg/kg	0.0333	ND	71.8	31-137	25.9	30	
Anthracene	0.0191	0.00500	"	0.0333	ND	57.2	30-120	19.6	30	
Benzo (a) anthracene	0.0215	0.00500	"	0.0333	ND	64.5	30-120	17.9	30	
Benzo (a) pyrene	0.0186	0.00500	"	0.0333	ND	55.9	30-120	12.2	30	
Benzo (b) fluoranthene	0.0194	0.00500	"	0.0333	ND	58.3	30-120	14.6	30	
Benzo (k) fluoranthene	0.0210	0.00500	"	0.0333	ND	62.9	30-120	15.6	30	
Chrysene	0.0215	0.00500	"	0.0333	ND	64.4	30-120	20.1	30	
Dibenz (a,h) anthracene	0.0147	0.00500	"	0.0333	ND	44.2	30-120	18.6	30	
Fluoranthene	0.0174	0.00500	"	0.0333	ND	52.2	30-120	16.1	30	
Fluorene	0.0208	0.00500	"	0.0333	ND	62.5	30-120	5.53	30	
Indeno (1,2,3-cd) pyrene	0.0138	0.00500	"	0.0333	ND	41.4	30-120	18.3	30	
Pyrene	0.0201	0.00500	"	0.0333	ND	60.2	35-142	24.5	30	
1-Methylnaphthalene	0.0135	0.00500	"	0.0333	ND	40.6	15-130	27.7	50	
2-Methylnaphthalene	0.0196	0.00500	"	0.0333	ND	58.8	15-130	19.8	50	
Surrogate: 2-Methylnaphthalene-d10	*0.0149*		*"*	*0.0333*		*44.6*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0156*		*"*	*0.0333*		*46.7*	*40-150*			

Summit Scientific

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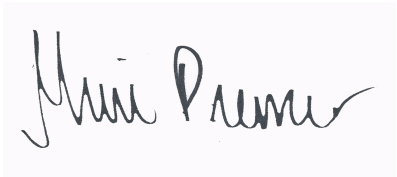
S2

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/16/21 12:27

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

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0126 - EPA 3050B										
Blank (BEH0126-BLK1)				Prepared: 08/09/21 Analyzed: 08/10/21						
Boron	ND	0.0100	mg/L							
LCS (BEH0126-BS1)				Prepared: 08/09/21 Analyzed: 08/10/21						
Boron	5.04	0.0100	mg/L	5.00		101	80-120			
Duplicate (BEH0126-DUP1)		**Source: 2108056-01**		Prepared: 08/09/21 Analyzed: 08/10/21						
Boron	0.0530	0.0100	mg/L		0.0717			30.1	20	QR-03
Matrix Spike (BEH0126-MS1)		**Source: 2108056-01**		Prepared: 08/09/21 Analyzed: 08/10/21						
Boron	5.00	0.0100	mg/L	5.00	0.0717	98.5	75-125			
Matrix Spike Dup (BEH0126-MSD1)		**Source: 2108056-01**		Prepared: 08/09/21 Analyzed: 08/10/21						
Boron	5.09	0.0100	mg/L	5.00	0.0717	100	75-125	1.86	25	



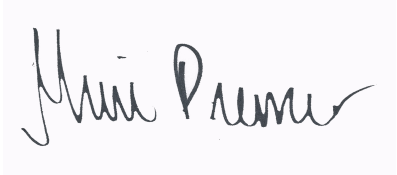
S2

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/16/21 12:27

Total Metals by EPA 6020B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0146 - EPA 3050B										
Blank (BEH0146-BLK1)				Prepared: 08/10/21 Analyzed: 08/11/21						
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 (BEH0146-BS1)				Prepared: 08/10/21 Analyzed: 08/11/21						
Arsenic	47.1	0.200	mg/kg wet	40.0		118	80-120			
Barium	40.2	0.400	"	40.0		101	80-120			
Cadmium	2.13	0.200	"	2.00		107	80-120			
Copper	41.7	0.400	"	40.0		104	80-120			
Lead	19.7	0.200	"	20.0		98.6	80-120			
Nickel	39.9	0.400	"	40.0		99.7	80-120			
Selenium	3.68	0.260	"	4.00		92.1	80-120			
Silver	1.94	0.0200	"	2.00		96.9	80-120			
Zinc	47.2	0.400	"	40.0		118	80-120			
Duplicate (BEH0146-DUP1)	**Source: 2108093-01**			Prepared: 08/10/21 Analyzed: 08/11/21						
Arsenic	2.01	0.245	mg/kg dry		1.99			1.03	20	
Barium	45.8	0.489	"		43.3			5.78	20	
Cadmium	0.177	0.245	"		0.186			4.87	20	
Copper	23.6	0.489	"		25.3			6.77	20	
Lead	21.2	0.245	"		20.4			3.79	20	
Nickel	22.6	0.489	"		24.5			8.36	20	
Selenium	0.642	0.318	"		0.721			11.6	20	
Silver	0.0443	0.0245	"		0.0396			11.3	20	
Zinc	133	0.489	"		136			1.89	20	



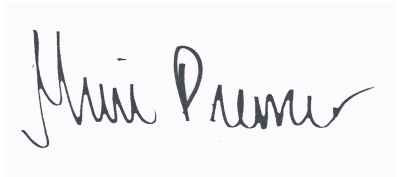
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

Total Metals by EPA 6020B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0146 - EPA 3050B										
Matrix Spike (BEH0146-MS1)	**Source: 2108093-01**			Prepared: 08/10/21 Analyzed: 08/12/21						
Arsenic	55.5	0.245	mg/kg dry	48.9	1.99	109	75-125			
Barium	96.5	0.489	"	48.9	43.3	109	75-125			
Cadmium	2.76	0.245	"	2.45	0.186	105	75-125			
Copper	77.1	0.489	"	48.9	25.3	106	75-125			
Lead	43.0	0.245	"	24.5	20.4	92.3	75-125			
Nickel	63.1	0.489	"	48.9	24.5	78.8	75-125			
Selenium	4.75	0.318	"	4.89	0.721	82.3	75-125			
Silver	2.46	0.0245	"	2.45	0.0396	98.9	75-125			
Zinc	184	0.489	"	48.9	136	98.9	75-125			
Matrix Spike Dup (BEH0146-MSD1)	**Source: 2108093-01**			Prepared: 08/10/21 Analyzed: 08/12/21						
Arsenic	53.3	0.245	mg/kg dry	48.9	1.99	105	75-125	3.98	25	
Barium	104	0.489	"	48.9	43.3	125	75-125	7.87	25	
Cadmium	2.74	0.245	"	2.45	0.186	104	75-125	0.918	25	
Copper	67.4	0.489	"	48.9	25.3	86.1	75-125	13.4	25	
Lead	41.1	0.245	"	24.5	20.4	84.6	75-125	4.52	25	
Nickel	75.1	0.489	"	48.9	24.5	103	75-125	17.5	25	
Selenium	4.43	0.318	"	4.89	0.721	75.9	75-125	6.86	25	
Silver	2.36	0.0245	"	2.45	0.0396	94.7	75-125	4.23	25	
Zinc	180	0.489	"	48.9	136	90.1	75-125	2.38	25	



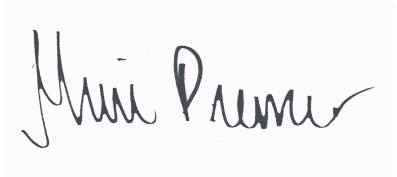
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

Hexavalent Chromium by EPA Method 7196 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0162 - 3060A_Mod										
Blank (BEH0162-BLK1)				Prepared: 08/11/21 Analyzed: 08/12/21						
Chromium, Hexavalent	ND	0.30	mg/kg wet							
LCS (BEH0162-BS1)				Prepared: 08/11/21 Analyzed: 08/12/21						
Chromium, Hexavalent	24.2	0.30	mg/kg wet	25.0		97.0	80-120			
Duplicate (BEH0162-DUP1)		**Source: 2108093-01**		Prepared: 08/11/21 Analyzed: 08/12/21						
Chromium, Hexavalent	ND	0.30	mg/kg dry		ND				20	
Matrix Spike (BEH0162-MS1)		**Source: 2108093-01**		Prepared: 08/11/21 Analyzed: 08/12/21						
Chromium, Hexavalent	26.0	0.30	mg/kg dry	30.6	ND	85.0	75-125			
Matrix Spike Dup (BEH0162-MSD1)		**Source: 2108093-01**		Prepared: 08/11/21 Analyzed: 08/12/21						
Chromium, Hexavalent	26.1	0.30	mg/kg dry	30.6	ND	85.4	75-125	0.469	20	



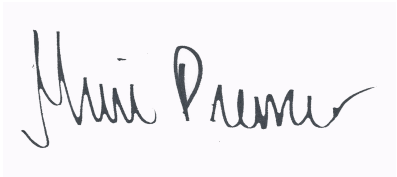
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

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

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0122 - General Preparation										
Blank (BEH0122-BLK1)				Prepared: 08/09/21 Analyzed: 08/12/21						
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							
LCS (BEH0122-BS1)				Prepared: 08/09/21 Analyzed: 08/12/21						
Calcium	5.30	0.0500	mg/L wet	5.00		106	70-130			
Magnesium	4.95	0.0500	"	5.00		98.9	70-130			
Sodium	4.95	0.0500	"	5.00		98.9	70-130			



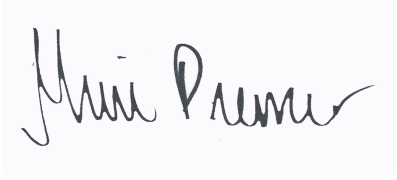
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

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

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0123 - General Preparation										
Duplicate (BEH0123-DUP1)		**Source: 2106181-16**		Prepared & Analyzed: 08/09/21						
% Solids	85.5		%		85.7			0.216	20	



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

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

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0143 - General Preparation										
Blank (BEH0143-BLK1)				Prepared & Analyzed: 08/10/21						
Specific Conductance (EC)	ND	0.0100	mmhos/cm							
LCS (BEH0143-BS1)				Prepared & Analyzed: 08/10/21						
Specific Conductance (EC)	0.152	0.0100	mmhos/cm	0.150		102	90-110			
Duplicate (BEH0143-DUP1)		**Source: 2107436-13**		Prepared & Analyzed: 08/10/21						
Specific Conductance (EC)	0.423	0.0100	mmhos/cm		0.422			0.379	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.

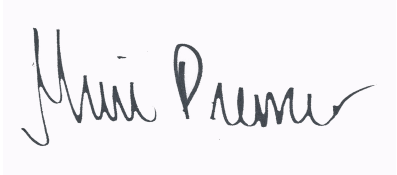
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

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

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0142 - General Preparation										
LCS (BEH0142-BS1)				Prepared & Analyzed: 08/10/21						
pH	9.26		pH Units	9.21		101	95-105			
Duplicate (BEH0142-DUP1)		**Source: 2107436-13**		Prepared & Analyzed: 08/10/21						
pH	8.46		pH Units		8.45			0.118	20	



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 12:27

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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

August 12, 2021

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Miller 5 Tank Battery

Work Order # 2108159

Enclosed are the results of analyses for samples received by Summit Scientific on 08/11/21 18:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Paul Shrewsbury

President

S2

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/12/21 06:24

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS02@10'	2108159-01	Soil	08/11/21 11:47	08/11/21 18:00
SS03@10'	2108159-02	Soil	08/11/21 13:55	08/11/21 18:00
SS04@5'	2108159-03	Soil	08/11/21 14:22	08/11/21 18:00
SS05@8'	2108159-04	Soil	08/11/21 14:23	08/11/21 18:00

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.

2108159

Summit Scientific

S_2

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

Client: PDC / Tasman
Address: 6855 W 119th Ave
City/State/Zip: Broomfield/ CO/ 80020
Phone: 303-487-1228
Sampler Name: J. Marcus

Project Manager: Mark Longhurst
E-Mail: mark.longhurst@PDCE.com
Project Name: Miller 5 Tank Battery
Project Number: NA

					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				pH, EC, SAR by saturated paste
1	SS02@10'	8/11/21	1147	3			X			X			X	X	X						
2	SS03@10'		1355	3			X			X			X	X	X						
3	SS04@5'		1422	3			X			X			X	X	X						
4	SS05@8'		1423	3			X			X			X	X	X						
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by: Date/Time: 8/11/21 1615
Received by: Tasman's Lock Box Date/Time: 8/11/21 1615

Relinquished by: Tasman's Lock Box Date/Time: 8/11/21 1810
Received by: Will Gabin Date/Time: 8/11/21 1810

Relinquished by: Date/Time:
Received by: Date/Time:

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

Sample Integrity:
Temperature Upon Receipt: 6
Samples Intact: (Yes) No

Notes:

Sample Receipt Checklist

S2 Work Order 2108159 .

Client: PDC/Tasman Client Project ID: Miller 5 Tank Battery

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

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

Temp (°C)	6

Thermometer ID: 61857155-K

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

(1) **If NO, then contact the client before proceeding with analysis and note in case narrative.**

WK
Custodian Printed Name or Initials

Will Galin
Signature of Custodian

8/11/21
Date/Time

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/12/21 06:24

SS02@10'

2108159-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/11/21 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEH0180	08/11/21	08/12/21	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: **08/11/21 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*83.6 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*76.4 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.8 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/11/21 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEH0179	08/11/21	08/11/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/11/21 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*105 %*	*30-150*		"	"	"	"	

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/12/21 06:24

SS03@10'

2108159-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/11/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEH0180	08/11/21	08/12/21	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: **08/11/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*87.3 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*77.5 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.8 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/11/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEH0179	08/11/21	08/11/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/11/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*103 %*	*30-150*		"	"	"	"	

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/12/21 06:24

SS04@5'

2108159-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/11/21 14:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEH0180	08/11/21	08/12/21	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: **08/11/21 14:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*85.9 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*78.4 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.2 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/11/21 14:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEH0179	08/11/21	08/11/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/11/21 14:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*99.2 %*	*30-150*		"	"	"	"	

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/12/21 06:24

SS05@8'

2108159-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/11/21 14:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEH0180	08/11/21	08/12/21	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: **08/11/21 14:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*86.0 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*79.4 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.9 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/11/21 14:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEH0179	08/11/21	08/11/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/11/21 14:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*99.1 %*	*30-150*		"	"	"	"	

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/12/21 06:24

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0180 - EPA 5030 Soil MS										
Blank (BEH0180-BLK1)				Prepared & Analyzed: 08/11/21						
Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	*0.0339*		*"*	*0.0400*		*84.7*	*23-173*			
Surrogate: Toluene-d8	*0.0503*		*"*	*0.0400*		*126*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0404*		*"*	*0.0400*		*101*	*21-167*			
LCS (BEH0180-BS1)				Prepared & Analyzed: 08/11/21						
Benzene	0.0877	0.0020	mg/kg	0.100		87.7	70-130			
Toluene	0.104	0.0050	"	0.100		104	70-130			
Ethylbenzene	0.0988	0.0050	"	0.100		98.8	70-130			
m,p-Xylene	0.212	0.010	"	0.200		106	70-130			
o-Xylene	0.0942	0.0050	"	0.100		94.2	70-130			
1,2,4-Trimethylbenzene	0.116	0.0050	"	0.100		116	70-130			
1,3,5-Trimethylbenzene	0.0892	0.0050	"	0.100		89.2	70-130			
Naphthalene	0.0928	0.0038	"	0.100		92.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0347*		*"*	*0.0400*		*86.8*	*23-173*			
Surrogate: Toluene-d8	*0.0488*		*"*	*0.0400*		*122*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0403*		*"*	*0.0400*		*101*	*21-167*			
Matrix Spike (BEH0180-MS1)		**Source: 2108157-01**		Prepared & Analyzed: 08/11/21						
Benzene	0.0910	0.0020	mg/kg	0.100	ND	91.0	70-130			
Toluene	0.107	0.0050	"	0.100	ND	107	70-130			
Ethylbenzene	0.0962	0.0050	"	0.100	ND	96.2	70-130			
m,p-Xylene	0.205	0.010	"	0.200	ND	102	70-130			
o-Xylene	0.0945	0.0050	"	0.100	ND	94.5	70-130			
1,2,4-Trimethylbenzene	0.115	0.0050	"	0.100	ND	115	70-130			
1,3,5-Trimethylbenzene	0.0870	0.0050	"	0.100	ND	87.0	70-130			
Naphthalene	0.102	0.0038	"	0.100	ND	102	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0333*		*"*	*0.0400*		*83.3*	*23-173*			
Surrogate: Toluene-d8	*0.0508*		*"*	*0.0400*		*127*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0398*		*"*	*0.0400*		*99.6*	*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	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/12/21 06:24

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0180 - EPA 5030 Soil MS										
Matrix Spike Dup (BEH0180-MSD1)	**Source: 2108157-01**			Prepared & Analyzed: 08/11/21						
Benzene	0.0950	0.0020	mg/kg	0.100	ND	95.0	70-130	4.26	30	
Toluene	0.117	0.0050	"	0.100	ND	117	70-130	8.44	30	
Ethylbenzene	0.0960	0.0050	"	0.100	ND	96.0	70-130	0.219	30	
m,p-Xylene	0.206	0.010	"	0.200	ND	103	70-130	0.744	30	
o-Xylene	0.0956	0.0050	"	0.100	ND	95.6	70-130	1.17	30	
1,2,4-Trimethylbenzene	0.115	0.0050	"	0.100	ND	115	70-130	0.365	30	
1,3,5-Trimethylbenzene	0.0854	0.0050	"	0.100	ND	85.4	70-130	1.81	30	
Naphthalene	0.112	0.0038	"	0.100	ND	112	70-130	8.90	30	
Surrogate: 1,2-Dichloroethane-d4	*0.0344*		*"*	*0.0400*		*85.9*	*23-173*			
Surrogate: Toluene-d8	*0.0540*		*"*	*0.0400*		*135*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0418*		*"*	*0.0400*		*104*	*21-167*			

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/12/21 06:24

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0179 - EPA 3550A										
Blank (BEH0179-BLK1)				Prepared & Analyzed: 08/11/21						
C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
LCS (BEH0179-BS1)				Prepared & Analyzed: 08/11/21						
C10-C28 (DRO)	472	50	mg/kg	500		94.3	70-130			
Matrix Spike (BEH0179-MS1)	**Source: 2108157-01**			Prepared & Analyzed: 08/11/21						
C10-C28 (DRO)	462	50	mg/kg	500	13.3	89.7	70-130			
Matrix Spike Dup (BEH0179-MSD1)	**Source: 2108157-01**			Prepared: 08/11/21 Analyzed: 08/12/21						
C10-C28 (DRO)	465	50	mg/kg	500	13.3	90.3	70-130	0.664	20	

S2

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/12/21 06:24

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

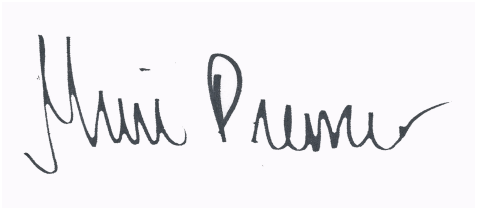
August 16, 2021

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

RE: Miller 5 Tank Battery
Work Order #2108173

Enclosed are the results of analyses for samples received by Summit Scientific on 08/12/21 18:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Muri Premer For Paul Shrewsbury
President

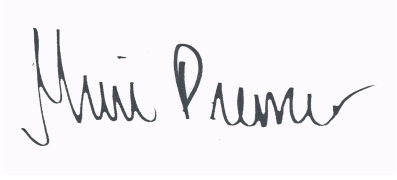
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 13:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS06@10'	2108173-01	Soil	08/12/21 13:56	08/12/21 18:00
SS07@10'	2108173-02	Soil	08/12/21 14:39	08/12/21 18:00

Summit Scientific



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

Summit Scientific

2108173-

S_2

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

Client:	PDC / Tasman	Project Manager:	Mark Longhurst
Address:	6855 W 119th Ave	E-Mail:	mark.longhurst@PDCE.com
City/State/Zip:	Broomfield/ CO/ 80020		
Phone:	303-487-1228	Project Name:	Miller S Tank Battery
Sampler Name:	J. Marcus	Project Number:	n/a

					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				pH, EC, SAR by saturated paste
1	SS06@10'	8/12/21	1356	3			X			X			X	X	X						
2	SS07@10'	↓	1439	3			X			X			X	X	X						
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by:	Date/Time: 8/12/21 1630	Received by: Tasman's Lock Box	Date/Time: 8/12/21 1630
Relinquished by: Tasman's Lock Box	Date/Time: 8/12/21 1800	Received by: Will Hart	Date/Time: 8/12/21 1800
Relinquished by:	Date/Time:	Received by:	Date/Time:

Turn Around Time (Check)

Same Day X — 72 hours ___
24 hours ___ — Standard ___
48 hours ___

Sample Integrity:

Temperature Upon Receipt: 10

Samples Intact: (Yes) No

Notes:

Sample Receipt Checklist

S2 Work Order 2108173

Client: PDC/Tasman Client Project ID: Miller S Tank Battery

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

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

Temp (°C)	10

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.	✓			on ice
Were all samples received intact [1]?	✓			
Was adequate sample volume provided [1]?	✓			
If custody seals are present, are they intact [1]?			✓	
Are samples with holding times due within 48 hours sample due within 48 hours present?	✓			same day
Is a chain-of-custody (COC) form present and filled out completely [1]?	✓			
Does the COC agree with the number and type of sample bottles received [1]?	✓			
Do the sample IDs on the bottle labels match the COC [1]?	✓			
Is the COC properly relinquished by the client w/ date and time recorded [1]?	✓			
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**			✓	
Are samples preserved that require preservation **(excluding cooling)** [1]? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect			✓	
If samples are acid preserved for metals, is the pH ≤ 2[1]? Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Additional Comments (if any):				

[1] **If NO, then contact the client before proceeding with analysis and note in case narrative.**

WG — **Custodian Printed Name or Initials**

Will Galin — **Signature of Custodian**

8/12/21 — **Date/Time**

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 13:40

SS06@10'

2108173-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/12/21 13:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEH0199	08/12/21	08/12/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	**0.010**	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**0.0084**	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **08/12/21 13:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*116 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*104 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.2 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/12/21 13:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEH0198	08/12/21	08/12/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/12/21 13:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*81.7 %*	*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.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 13:40

SS07@10'

2108173-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/12/21 14:39**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEH0199	08/12/21	08/12/21	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: **08/12/21 14:39**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*116 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.9 %*	*21-167*		"	"	"	"	

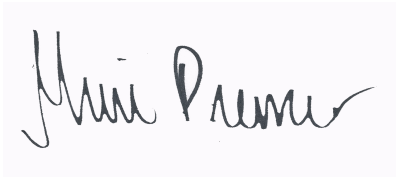
Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/12/21 14:39**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEH0198	08/12/21	08/12/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/12/21 14:39**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*81.4 %*	*30-150*		"	"	"	"	



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 13:40

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0199 - EPA 5030 Soil MS										
Blank (BEH0199-BLK1)				Prepared & Analyzed: 08/12/21						
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	*0.0447*		*"*	*0.0400*		*112*	*23-173*			
Surrogate: Toluene-d8	*0.0413*		*"*	*0.0400*		*103*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0387*		*"*	*0.0400*		*96.8*	*21-167*			
LCS (BEH0199-BS1)				Prepared & Analyzed: 08/12/21						
Benzene	0.0772	0.0020	mg/kg	0.100		77.2	70-130			
Toluene	0.0794	0.0050	"	0.100		79.4	70-130			
Ethylbenzene	0.0877	0.0050	"	0.100		87.7	70-130			
m,p-Xylene	0.174	0.010	"	0.200		86.9	70-130			
o-Xylene	0.0877	0.0050	"	0.100		87.7	70-130			
1,2,4-Trimethylbenzene	0.0893	0.0050	"	0.100		89.3	70-130			
1,3,5-Trimethylbenzene	0.0873	0.0050	"	0.100		87.3	70-130			
Naphthalene	0.107	0.0038	"	0.100		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0466*		*"*	*0.0400*		*116*	*23-173*			
Surrogate: Toluene-d8	*0.0417*		*"*	*0.0400*		*104*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0383*		*"*	*0.0400*		*95.8*	*21-167*			
Matrix Spike (BEH0199-MS1)		**Source: 2108174-01**		Prepared & Analyzed: 08/12/21						
Benzene	0.0727	0.0020	mg/kg	0.100	ND	72.7	70-130			
Toluene	0.0750	0.0050	"	0.100	ND	75.0	70-130			
Ethylbenzene	0.0855	0.0050	"	0.100	ND	85.5	70-130			
m,p-Xylene	0.166	0.010	"	0.200	ND	83.1	70-130			
o-Xylene	0.0832	0.0050	"	0.100	ND	83.2	70-130			
1,2,4-Trimethylbenzene	0.0819	0.0050	"	0.100	ND	81.9	70-130			
1,3,5-Trimethylbenzene	0.0804	0.0050	"	0.100	ND	80.4	70-130			
Naphthalene	0.0997	0.0038	"	0.100	ND	99.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0454*		*"*	*0.0400*		*113*	*23-173*			
Surrogate: Toluene-d8	*0.0411*		*"*	*0.0400*		*103*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0377*		*"*	*0.0400*		*94.4*	*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.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 13:40

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0199 - EPA 5030 Soil MS										
Matrix Spike Dup (BEH0199-MSD1)	**Source: 2108174-01**			Prepared & Analyzed: 08/12/21						
Benzene	0.0718	0.0020	mg/kg	0.100	ND	71.8	70-130	1.29	30	
Toluene	0.0733	0.0050	"	0.100	ND	73.3	70-130	2.35	30	
Ethylbenzene	0.0817	0.0050	"	0.100	ND	81.7	70-130	4.59	30	
m,p-Xylene	0.161	0.010	"	0.200	ND	80.3	70-130	3.38	30	
o-Xylene	0.0808	0.0050	"	0.100	ND	80.8	70-130	3.00	30	
1,2,4-Trimethylbenzene	0.0792	0.0050	"	0.100	ND	79.2	70-130	3.35	30	
1,3,5-Trimethylbenzene	0.0774	0.0050	"	0.100	ND	77.4	70-130	3.80	30	
Naphthalene	0.106	0.0038	"	0.100	ND	106	70-130	6.52	30	
Surrogate: 1,2-Dichloroethane-d4	*0.0461*		*"*	*0.0400*		*115*	*23-173*			
Surrogate: Toluene-d8	*0.0416*		*"*	*0.0400*		*104*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0387*		*"*	*0.0400*		*96.8*	*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.

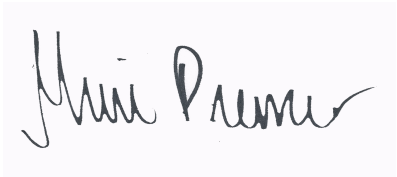
S2

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/16/21 13:40

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0198 - EPA 3550A										
Blank (BEH0198-BLK1)				Prepared & Analyzed: 08/12/21						
C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
LCS (BEH0198-BS1)				Prepared & Analyzed: 08/12/21						
C10-C28 (DRO)	538	50	mg/kg	500		108	70-130			
Matrix Spike (BEH0198-MS1)	**Source: 2108174-01**			Prepared & Analyzed: 08/12/21						
C10-C28 (DRO)	473	50	mg/kg	500	16.3	91.3	70-130			
Matrix Spike Dup (BEH0198-MSD1)	**Source: 2108174-01**			Prepared & Analyzed: 08/12/21						
C10-C28 (DRO)	487	50	mg/kg	500	16.3	94.2	70-130	3.03	20	



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/16/21 13:40

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

August 15, 2021

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

RE: Miller 5 Tank Battery
Work Order #2108199

Enclosed are the results of analyses for samples received by Summit Scientific on 08/13/21 17:53. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Paul Shrewsbury
President

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/15/21 20:25

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS08@10'	2108199-01	Soil	08/13/21 09:56	08/13/21 17:53
SS09@10'	2108199-02	Soil	08/13/21 11:05	08/13/21 17:53
SS10@10.5'	2108199-03	Soil	08/13/21 11:05	08/13/21 17:53

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.

2108199

Summit Scientific

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

Client: PDC / Tasman
Address: 6855 W 119th Ave
City/State/Zip: Broomfield/ CO/ 80020
Phone: 303-487-1228
Sampler Name: J. Marcus

Project Manager: Mark Longhurst
E-Mail: mark.longhurst@PDCE.com
Project Name: Miller 5 Tank Battery
Project Number: N/a

					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				pH, EC, SAR by saturated paste
1	SS08@10'	8/13/21	0956	3			X			X			X	X	X						
2	SS09@10'	↓	1105	3			X			X			X	X	X						
3	SS10@10.5'	↓	1257	3			X			X			X	X	X						
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by:	Date/Time:	Received by:	Date/Time:
	8/13/21 1530	Tasman's Lock Box	8/13/21 1530
Relinquished by: Tasman's Lock Box	8/13/21 1755	Received by:	8/13/21 1755
Relinquished by:	Date/Time:	Received by:	Date/Time:

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

Sample Integrity:
Temperature Upon Receipt: 10
Samples Intact: (Yes) No

Notes:

Sample Receipt Checklist

S2 Work Order 2108199

Client: PDC/Tasman Client Project ID: Miller 5 Tank battery

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

☒ ☐ ☐ ☐ ☐

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

Temp (°C)	10

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.	✓			
Were all samples received intact (1)?	✓			
Was adequate sample volume provided (1)?	✓			
If custody seals are present, are they intact (1)?			✓	
Are samples with holding times due within 48 hours sample due within 48 hours present?	✓			same day
Is a chain-of-custody (COC) form present and filled out completely (1)?	✓			
Does the COC agree with the number and type of sample bottles received (1)?	✓			
Do the sample IDs on the bottle labels match the COC (1)?	✓			
Is the COC properly relinquished by the client w/ date and time recorded (1)?	✓			
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**			✓	
Are samples preserved that require preservation **(excluding cooling)** (1)? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect			✓	
If samples are acid preserved for metals, is the pH ≤ 2(1)? Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Additional Comments (if any):				

(1) **If NO, then contact the client before proceeding with analysis and note in case narrative.**

WG	Will Galin	8/13/21
Custodian Printed Name or Initials	**Signature of Custodian**	**Date/Time**

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/15/21 20:25

SS08@10'

2108199-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/13/21 09:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEH0231	08/13/21	08/14/21	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: **08/13/21 09:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*53.8 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*54.6 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/13/21 09:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEH0232	08/13/21	08/13/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/13/21 09:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*78.3 %*	*30-150*		"	"	"	"	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/15/21 20:25

SS09@10'

2108199-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/13/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEH0231	08/13/21	08/14/21	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: **08/13/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*108 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*111 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/13/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEH0232	08/13/21	08/13/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/13/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*80.1 %*	*30-150*		"	"	"	"	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/15/21 20:25

SS10@10.5'

2108199-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/13/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEH0231	08/13/21	08/14/21	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: **08/13/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*115 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*110 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.6 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/13/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEH0232	08/13/21	08/13/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/13/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*80.1 %*	*30-150*		"	"	"	"	

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/15/21 20:25

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0231 - EPA 5030 Soil MS										
Blank (BEH0231-BLK1)				Prepared & Analyzed: 08/13/21						
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	*0.0432*		*"*	*0.0400*		*108*	*23-173*			
Surrogate: Toluene-d8	*0.0434*		*"*	*0.0400*		*108*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0385*		*"*	*0.0400*		*96.2*	*21-167*			
LCS (BEH0231-BS1)				Prepared & Analyzed: 08/13/21						
Benzene	0.121	0.0020	mg/kg	0.100		121	70-130			
Toluene	0.113	0.0050	"	0.100		113	70-130			
Ethylbenzene	0.0981	0.0050	"	0.100		98.1	70-130			
m,p-Xylene	0.194	0.010	"	0.200		96.8	70-130			
o-Xylene	0.0941	0.0050	"	0.100		94.1	70-130			
1,2,4-Trimethylbenzene	0.0980	0.0050	"	0.100		98.0	70-130			
1,3,5-Trimethylbenzene	0.0977	0.0050	"	0.100		97.7	70-130			
Naphthalene	0.114	0.0038	"	0.100		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0461*		*"*	*0.0400*		*115*	*23-173*			
Surrogate: Toluene-d8	*0.0442*		*"*	*0.0400*		*110*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0392*		*"*	*0.0400*		*98.1*	*21-167*			
Matrix Spike (BEH0231-MS1)		**Source: 2108199-01**		Prepared & Analyzed: 08/13/21						
Benzene	0.117	0.0020	mg/kg	0.100	ND	117	70-130			
Toluene	0.109	0.0050	"	0.100	ND	109	70-130			
Ethylbenzene	0.0952	0.0050	"	0.100	ND	95.2	70-130			
m,p-Xylene	0.187	0.010	"	0.200	ND	93.4	70-130			
o-Xylene	0.0900	0.0050	"	0.100	ND	90.0	70-130			
1,2,4-Trimethylbenzene	0.0913	0.0050	"	0.100	ND	91.3	70-130			
1,3,5-Trimethylbenzene	0.0914	0.0050	"	0.100	ND	91.4	70-130			
Naphthalene	0.108	0.0038	"	0.100	ND	108	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0460*		*"*	*0.0400*		*115*	*23-173*			
Surrogate: Toluene-d8	*0.0443*		*"*	*0.0400*		*111*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0394*		*"*	*0.0400*		*98.5*	*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	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/15/21 20:25

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0231 - EPA 5030 Soil MS										
Matrix Spike Dup (BEH0231-MSD1)	**Source: 2108199-01**			Prepared & Analyzed: 08/13/21						
Benzene	0.117	0.0020	mg/kg	0.100	ND	117	70-130	0.359	30	
Toluene	0.109	0.0050	"	0.100	ND	109	70-130	0.220	30	
Ethylbenzene	0.0964	0.0050	"	0.100	ND	96.4	70-130	1.22	30	
m,p-Xylene	0.190	0.010	"	0.200	ND	95.0	70-130	1.67	30	
o-Xylene	0.0910	0.0050	"	0.100	ND	91.0	70-130	1.13	30	
1,2,4-Trimethylbenzene	0.0938	0.0050	"	0.100	ND	93.8	70-130	2.76	30	
1,3,5-Trimethylbenzene	0.0934	0.0050	"	0.100	ND	93.4	70-130	2.11	30	
Naphthalene	0.111	0.0038	"	0.100	ND	111	70-130	2.47	30	
Surrogate: 1,2-Dichloroethane-d4	*0.0464*		*"*	*0.0400*		*116*	*23-173*			
Surrogate: Toluene-d8	*0.0442*		*"*	*0.0400*		*111*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0394*		*"*	*0.0400*		*98.6*	*21-167*			

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Miller 5 Tank Battery Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 08/15/21 20:25

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEH0232 - EPA 3550A										
Blank (BEH0232-BLK1)				Prepared & Analyzed: 08/13/21						
C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
LCS (BEH0232-BS1)				Prepared: 08/13/21 Analyzed: 08/14/21						
C10-C28 (DRO)	575	50	mg/kg	500		115	70-130			
Matrix Spike (BEH0232-MS1)	**Source: 2108199-01**			Prepared: 08/13/21 Analyzed: 08/14/21						
C10-C28 (DRO)	520	50	mg/kg	500	14.3	101	70-130			
Matrix Spike Dup (BEH0232-MSD1)	**Source: 2108199-01**			Prepared: 08/13/21 Analyzed: 08/14/21						
C10-C28 (DRO)	495	50	mg/kg	500	14.3	96.2	70-130	4.93	20	

S2

PDC Energy	Project: Miller 5 Tank Battery	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	08/15/21 20:25

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