

TABLE 1
FORMER TOEDTLI 1-10 PIT
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)
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
BH04 @ 7'	9/14/2021	7 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50
BH04 @ 8'	9/14/2021	8 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	126
BH04 @ 9'	9/14/2021	9 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	114
BH05 @ 7'	9/14/2021	7 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	67
BH05 @ 8'	9/14/2021	8 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	60
BH05 @ 9'	9/14/2021	9 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	197

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 extractable petroleum hydrocarbons - oil range organics

mg/kg = Milligrams per kilogram

TMB = Trimethylbenzene

ft. = Feet

TABLE 2
FORMER TOEDTLI 1-10 PIT
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
BH01 @ 1'	9/14/2021	1 ft. bgs	7.35	3.61	0.157	NA
BH01 @ 3'	9/14/2021	3 ft. bgs	8.11	2.34	1.52	NA
BH02 @ 1'	9/14/2021	1 ft. bgs	7.83	7.21	1.32	NA
BH02 @ 3'	9/14/2021	3 ft. bgs	8.55	3.72	4.98	NA
BH03 @ 1'	9/14/2021	1 ft. bgs	7.76	7.12	0.857	NA
BH03 @ 3'	9/14/2021	3 ft. bgs	7.73	10.4	2.19	NA
BH07 @ 1'	9/14/2021	1 ft. bgs	7.63	3.52	0.302	NA
BH07 @ 3'	9/14/2021	3 ft. bgs	7.79	4.37	0.565	NA
BH08 @ 1'	9/14/2021	1 ft. bgs	8.34	4.73	3.44	NA
BH08 @ 3'	9/14/2021	3 ft. bgs	8.16	7.02	3.73	NA
BH09 @ 1'	9/14/2021	1 ft. bgs	7.98	5.52	2.25	NA
BH09 @ 3'	9/14/2021	3 ft. bgs	8.14	5.78	3.63	NA
BH10 @ 1'	9/14/2021	1 ft. bgs	7.72	4.82	0.701	NA
BH10 @ 3'	9/14/2021	3 ft. bgs	7.65	5.24	0.766	NA
BH11 @ 1'	9/14/2021	1 ft. bgs	8.74	4.55	2.13	NA
BH11 @ 3'	9/14/2021	3 ft. bgs	8.85	4.90	2.34	NA
BH12 @ 1'	9/14/2021	1 ft. bgs	7.71	5.65	0.798	NA
BH12 @ 3'	9/14/2021	3 ft. bgs	8.34	5.14	2.05	NA
BH13 @ 1'	9/14/2021	1 ft. bgs	7.70	3.23	0.768	NA
BH13 @ 3'	9/14/2021	3 ft. bgs	7.62	3.69	0.573	NA
BH14 @ 1'	9/14/2021	1 ft. bgs	7.86	5.84	0.905	NA
BH14 @ 3'	9/14/2021	3 ft. bgs	8.17	2.30	0.738	NA
BH15 @ 1'	9/14/2021	1 ft. bgs	8.43	0.385	0.355	NA
BH15 @ 3'	9/14/2021	3 ft. bgs	8.39	1.59	0.560	NA
BH16 @ 1'	9/14/2021	1 ft. bgs	8.96	0.585	0.853	NA
BH16 @ 3'	9/14/2021	3 ft. bgs	7.88	2.58	0.815	NA
BKG01 @ 1'	9/14/2021	1 ft. bgs	8.67	0.343	0.107	NA
BKG01 @ 3'	9/14/2021	3 ft. bgs	8.48	0.557	0.191	NA

Notes:

1. Compounds referenced from the COGCC 2 CCR 404-1, Table 915-1, effective January 15, 2021.

COGCC = Colorado Oil and Gas Conservation Commission

EC = Electrical conductivity

SAR = Sodium adsorption ratio

mmhos/cm = millimhos per centimeter

mg/L = milligram per liter

ft. = Feet

in. = Inches

bgs = Below ground surface

BOLD = Analytical result is in exceedance of applicable standard.

BOLD = Analytical result is in exceedance of applicable standard, but below background concentration.

NA = Constituent not analyzed

**TABLE 3
FORMER TOEDTLI 1-10 PIT
FIELD DATA SUMMARY TABLE**

Sample ID	Date Sampled	Depth	GPS Data ⁽¹⁾		PDOP Value	VOC Concentration ⁽²⁾ (ppm)
			Latitude	Longitude		
BH01 @ 1'	9/14/2021	1 ft. bgs	40.851683	-103.739802	NC	0.0
BH01 @ 3'	9/14/2021	3 ft. bgs	40.851683	-103.739802	NC	0.0
BH02 @ 1'	9/14/2021	1 ft. bgs	40.851534	-103.740146	NC	0.0
BH02 @ 3'	9/14/2021	3 ft. bgs	40.851534	-103.740146	NC	0.0
BH03 @ 1'	9/14/2021	1 ft. bgs	40.851474	-103.739915	NC	0.0
BH03 @ 3'	9/14/2021	3 ft. bgs	40.851474	-103.739915	NC	0.0
BH04 @ 7'	9/14/2021	7 ft. bgs	40.851248	-103.740023	NC	0.0
BH04 @ 8'	9/14/2021	8 ft. bgs	40.851248	-103.740023	NC	0.1
BH04 @ 9'	9/14/2021	9 ft. bgs	40.851248	-103.740023	NC	0.1
BH05 @ 7'	9/14/2021	7 ft. bgs	40.851242	-103.740060	NC	0.0
BH05 @ 8'	9/14/2021	8 ft. bgs	40.851242	-103.740060	NC	0.0
BH05 @ 9'	9/14/2021	9 ft. bgs	40.851242	-103.740060	NC	0.0
BH07 @ 1'	9/14/2021	1 ft. bgs	40.851040	-103.740132	NC	0.0
BH07 @ 3'	9/14/2021	3 ft. bgs	40.851040	-103.740132	NC	0.0
BH08 @ 1'	9/14/2021	1 ft. bgs	40.851183	-103.739860	NC	0.2
BH08 @ 3'	9/14/2021	3 ft. bgs	40.851183	-103.739860	NC	0.0
BH09 @ 1'	9/14/2021	1 ft. bgs	40.851403	-103.739613	NC	0.0
BH09 @ 3'	9/14/2021	3 ft. bgs	40.851403	-103.739613	NC	0.0
BH10 @ 1'	9/14/2021	1 ft. bgs	40.851166	-103.739527	NC	0.0
BH10 @ 3'	9/14/2021	3 ft. bgs	40.851166	-103.739527	NC	0.0
BH11 @ 1'	9/14/2021	1 ft. bgs	40.850971	-103.739676	NC	1.5
BH11 @ 3'	9/14/2021	3 ft. bgs	40.850971	-103.739676	NC	2.3
BH12 @ 1'	9/14/2021	1 ft. bgs	40.850959	-103.739923	NC	0.1
BH12 @ 3'	9/14/2021	3 ft. bgs	40.850959	-103.739923	NC	0.4
BH13 @ 1'	9/14/2021	1 ft. bgs	40.850971	-103.739407	NC	0.0
BH13 @ 3'	9/14/2021	3 ft. bgs	40.850971	-103.739407	NC	0.0
BH14 @ 1'	9/14/2021	1 ft. bgs	40.850754	-103.739279	NC	1.4
BH14 @ 3'	9/14/2021	3 ft. bgs	40.850754	-103.739279	NC	1.3
BH15 @ 1'	9/14/2021	1 ft. bgs	40.850619	-103.739199	NC	0.0
BH15 @ 3'	9/14/2021	3 ft. bgs	40.850619	-103.739199	NC	0.0
BH16 @ 1'	9/14/2021	1 ft. bgs	40.850458	-103.739280	NC	0.4
BH16 @ 3'	9/14/2021	3 ft. bgs	40.850458	-103.739280	NC	0.0
BKG01 @ 1'	9/14/2021	1 ft. bgs	40.850977	-103.740483	NC	0.0
BKG01 @ 3'	9/14/2021	3 ft. bgs	40.850977	-103.740483	NC	0.0

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

NC = Data not collected

Attachment A

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

September 23, 2021

Mark Longhurst
PDC Energy
1775 Sherman St. STE. 3000
Denver, CO 80203
RE: Toedtli 1-10
Work Order #2109214

Enclosed are the results of analyses for samples received by Summit Scientific on 09/14/21 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', written in a cursive style.

Paul Shrewsbury
President



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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01@1'	2109214-01	Soil	09/14/21 10:12	09/14/21 16:30
BH01@3'	2109214-02	Soil	09/14/21 10:13	09/14/21 16:30
BH02@1'	2109214-03	Soil	09/14/21 10:15	09/14/21 16:30
BH02@3'	2109214-04	Soil	09/14/21 10:16	09/14/21 16:30
BH03@1'	2109214-05	Soil	09/14/21 10:40	09/14/21 16:30
BH03@3'	2109214-06	Soil	09/14/21 10:43	09/14/21 16:30
BH04@7'	2109214-07	Soil	09/14/21 11:15	09/14/21 16:30
BH04@8'	2109214-08	Soil	09/14/21 11:16	09/14/21 16:30
BH04@9'	2109214-09	Soil	09/14/21 11:18	09/14/21 16:30
BH05@7'	2109214-10	Soil	09/14/21 11:35	09/14/21 16:30
BH05@8'	2109214-11	Soil	09/14/21 11:36	09/14/21 16:30
BH05@9'	2109214-12	Soil	09/14/21 11:37	09/14/21 16:30
BKG01@1'	2109214-13	Soil	09/14/21 11:33	09/14/21 16:30
BKG01@3'	2109214-14	Soil	09/14/21 11:37	09/14/21 16:30
BH07@1'	2109214-15	Soil	09/14/21 12:20	09/14/21 16:30
BH07@3'	2109214-16	Soil	09/14/21 12:25	09/14/21 16:30
BH08@1'	2109214-17	Soil	09/14/21 12:14	09/14/21 16:30
BH08@3'	2109214-18	Soil	09/14/21 12:15	09/14/21 16:30
BH09@1'	2109214-19	Soil	09/14/21 11:05	09/14/21 16:30
BH09@3'	2109214-20	Soil	09/14/21 11:10	09/14/21 16:30
BH10@1'	2109214-21	Soil	09/14/21 12:32	09/14/21 16:30
BH10@3'	2109214-22	Soil	09/14/21 12:33	09/14/21 16:30
BH11@1'	2109214-23	Soil	09/14/21 12:35	09/14/21 16:30
BH11@3'	2109214-24	Soil	09/14/21 12:39	09/14/21 16:30
BH12@1'	2109214-25	Soil	09/14/21 12:11	09/14/21 16:30
BH12@3'	2109214-26	Soil	09/14/21 12:13	09/14/21 16:30
BH13@1'	2109214-27	Soil	09/14/21 12:33	09/14/21 16:30

Summit Scientific

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



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

Project: Toedtli 1-10

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH13@3'	2109214-28	Soil	09/14/21 12:38	09/14/21 16:30
BH14@1'	2109214-29	Soil	09/14/21 12:55	09/14/21 16:30
BH14@3'	2109214-30	Soil	09/14/21 12:59	09/14/21 16:30
BH15@1'	2109214-31	Soil	09/14/21 12:45	09/14/21 16:30
BH15@3'	2109214-32	Soil	09/14/21 12:50	09/14/21 16:30
BH16@1'	2109214-33	Soil	09/14/21 12:48	09/14/21 16:30
BH16@3'	2109214-34	Soil	09/14/21 12:49	09/14/21 16:30

Summit Scientific

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

2109214.1

Summit Scientific

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: Toedti 1-10
 Sampler Name: David Vigil Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested						Special Instructions
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEXN - 8260B	TPH - (C6 - C36)	1,2,4 & 1,3,5-TMB	Boron - HWS	pH, EC, SAR		
1	BH01 @ 1'	9/14/21	1012	1			X			X							X	pH, EC, SAR by saturated paste	
2	BH01 @ 3'		1013	1			X			X							X		
3	BH02 @ 1'		1015	1			X			X							X		
4	BH02 @ 3'		1016	1			X			X							X		
5	BH03 @ 1'		1040	1			X			X							X		
6	BH03 @ 3'		1043	1			X			X							X		
7	BH04 @ 7'		1115	2			X			X		X	X	X					
8	BH04 @ 8'		1116	2			X			X		X	X	X					
9	BH04 @ 9'		1118	2			X			X		X	X	X					
10																			

Relinquished by: <u>David Vigil</u>	Date/Time: <u>9/14/21 1630</u>	Received by: <u>Tasman's Lock Box</u>	Date/Time: <u>9-14-21 16:30</u>	Turn Around Time (Check) Same Day _____ 72 hours _____ 24 hours _____ Standard <u>X</u> 48 hours _____ Sample Integrity: Temperature Upon Receipt: <u>57</u> Samples Intact: Yes No	Notes:
Relinquished by: <u>Tasman's Lock Box</u>	Date/Time:	Received by:	Date/Time:		
Relinquished by:	Date/Time:	Received by:	Date/Time:		

Summit Scientific

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: <u>Toedti: 1-10</u>
Sampler Name: <u>David Vigil</u>	Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested						Special Instructions
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEXN - 8260B	TPH - (C6 - C36)	1,2,4 & 1,3,5-TMB	Boron - HWS	pH, EC, SAR	
1	BH09 @ 1'	9/14/21	1105	1			X			X							X	pH, EC, SAR by saturated paste
2	BH09 @ 3'		1110	1			X			X							X	
3	BH10 @ 1'		1232	1			X			X							X	
4	BH10 @ 3'		1233	1			X			X							X	
5	BH11 @ 1'		1235	1			X			X							X	
6	BH11 @ 3'		1239	1			X			X							X	
7	BH12 @ 1'		1211	1			X			X							X	
8	BH12 @ 3'		1213	1			X			X							X	
9	BH13 @ 1'		1233	1			X			X							X	
10	BH13 @ 3'		1234	1			X			X							X	

Relinquished by: <u>David Vigil</u>	Date/Time: <u>9/14/21 630</u>	Received by: <u>Tasman's Lock Box</u>	Date/Time: <u>9-14-21 10:30</u>	Turn Around Time (Check)	Notes:
Relinquished by: <u>Tasman's Lock Box</u>	Date/Time:	Received by:	Date/Time:	Same Day <input type="checkbox"/>	72 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 hours <input type="checkbox"/>
Relinquished by:	Date/Time:	Received by:	Date/Time:	Sample Integrity:	
				Temperature Upon Receipt: <u>57</u>	
				Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	

Sample Receipt Checklist

S2 Work Order 2109214

Client: PDC/TASMAN Client Project ID TOEDTLI 1-10

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

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

Temp (°C)	<u>5.7</u>
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Thermometer ID: 61857155-K

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

Additional Comments (if any):

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

Nurip.
Custodian Printed Name or Initials

[Signature]
Signature of Custodian

9-14-21
Date/Time



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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH01@1'
2109214-01 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	130	0.0568	mg/L dry	1	BEI0430	09/21/21	09/22/21	EPA 6020B	
Magnesium	4.19	0.0568	"	"	"	"	"	"	
Sodium	6.68	0.0568	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.157	0.00100	units	1	BEI0495	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.1		%	1	BEI0372	09/16/21	09/17/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	3.61	0.0100	mmhos/cm	1	BEI0432	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.35		pH Units	1	BEI0431	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH01@3'
2109214-02 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 10:13**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	9.08	0.0642	mg/L dry	1	BEI0430	09/21/21	09/22/21	EPA 6020B	
Magnesium	1.19	0.0642	"	"	"	"	"	"	
Sodium	18.4	0.0642	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 10:13**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	1.52	0.00100	units	1	BEI0495	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 10:13**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	77.9		%	1	BEI0372	09/16/21	09/17/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 10:13**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	2.34	0.0100	mmhos/cm	1	BEI0432	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 10:13**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	8.11		pH Units	1	BEI0431	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH02@1'
2109214-03 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 10:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	27.2	0.0562	mg/L dry	1	BEI0430	09/21/21	09/22/21	EPA 6020B	
Magnesium	3.31	0.0562	"	"	"	"	"	"	
Sodium	27.3	0.0562	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 10:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	1.32	0.00100	units	1	BEI0495	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 10:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	89.0		%	1	BEI0372	09/16/21	09/17/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 10:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	7.21	0.0100	mmhos/cm	1	BEI0432	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 10:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	7.83		pH Units	1	BEI0431	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH02@3'
2109214-04 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 10:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	6.33	0.0645	mg/L dry	1	BEI0430	09/21/21	09/22/21	EPA 6020B	
Magnesium	0.954	0.0645	"	"	"	"	"	"	
Sodium	50.9	0.0645	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 10:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.98	0.00100	units	1	BEI0495	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 10:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	77.5		%	1	BEI0372	09/16/21	09/17/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 10:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	3.72	0.0100	mmhos/cm	1	BEI0432	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 10:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.55		pH Units	1	BEI0431	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH03@1'
2109214-05 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 10:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	24.6	0.0557	mg/L dry	1	BEI0430	09/21/21	09/22/21	EPA 6020B	
Magnesium	3.76	0.0557	"	"	"	"	"	"	
Sodium	17.3	0.0557	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 10:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.857	0.00100	units	1	BEI0495	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 10:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	89.8		%	1	BEI0372	09/16/21	09/17/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 10:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	7.12	0.0100	mmhos/cm	1	BEI0432	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 10:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	7.76		pH Units	1	BEI0431	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH03@3'
2109214-06 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 10:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	18.4	0.0589	mg/L dry	1	BEI0430	09/21/21	09/22/21	EPA 6020B	
Magnesium	3.60	0.0589	"	"	"	"	"	"	
Sodium	39.3	0.0589	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 10:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.19	0.00100	units	1	BEI0495	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 10:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.9		%	1	BEI0372	09/16/21	09/17/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 10:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	10.4	0.0100	mmhos/cm	1	BEI0432	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 10:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.73		pH Units	1	BEI0431	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH04@7'
2109214-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/21 11:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BEI0333	09/15/21	09/16/21	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: **09/14/21 11:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		107 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		99.1 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %		21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/21 11:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BEI0334	09/15/21	09/16/21	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **09/14/21 11:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		123 %		30-150		"	"	"	"	

Summit Scientific

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

Project: Toedtli 1-10

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH04@8'
2109214-08 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/21 11:16**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BEI0333	09/15/21	09/16/21	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: **09/14/21 11:16**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		98.2 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/21 11:16**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	59	50	mg/kg	1	BEI0334	09/15/21	09/16/21	EPA 8015M	
C28-C36 (ORO)	67	50	"	"	"	"	"	"	

Date Sampled: **09/14/21 11:16**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		120 %	30-150		"	"	"	"	

Summit Scientific

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

Project: Toedtli 1-10

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH04@9'
2109214-09 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/21 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEI0333	09/15/21	09/16/21	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: **09/14/21 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		99.2 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.8 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/21 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	58	50	mg/kg	1	BEI0334	09/15/21	09/16/21	EPA 8015M	
C28-C36 (ORO)	56	50	"	"	"	"	"	"	

Date Sampled: **09/14/21 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		126 %	30-150		"	"	"	"	

Summit Scientific

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

Project: Toedtli 1-10

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH05@7'
2109214-10 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/21 11:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BEI0333	09/15/21	09/16/21	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: **09/14/21 11:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		118 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		105 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.7 %		21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/21 11:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	67	50		mg/kg	1	BEI0334	09/15/21	09/16/21	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **09/14/21 11:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		125 %		30-150		"	"	"	"	

Summit Scientific

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

Project: Toedtli 1-10

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH05@8'
2109214-11 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/21 11:36**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BEI0333	09/15/21	09/16/21	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: **09/14/21 11:36**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		104 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		94.4 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.0 %		21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/21 11:36**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	60	50		mg/kg	1	BEI0334	09/15/21	09/16/21	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **09/14/21 11:36**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		124 %		30-150		"	"	"	"	

Summit Scientific

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

Project: Toedtli 1-10

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH05@9'
2109214-12 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/21 11:37**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BEI0333	09/15/21	09/16/21	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: **09/14/21 11:37**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		100 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		92.1 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.6 %		21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/21 11:37**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	97	50		mg/kg	1	BEI0334	09/15/21	09/16/21	EPA 8015M	
C28-C36 (ORO)	100	50		"	"	"	"	"	"	

Date Sampled: **09/14/21 11:37**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		120 %		30-150		"	"	"	"	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BKG01@1'
2109214-13 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 11:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	48.4	0.0562	mg/L dry	1	BEI0430	09/21/21	09/22/21	EPA 6020B	
Magnesium	2.27	0.0562	"	"	"	"	"	"	
Sodium	2.81	0.0562	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 11:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.107	0.00100	units	1	BEI0495	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 11:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	88.9		%	1	BEI0372	09/16/21	09/17/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 11:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	0.343	0.0100	mmhos/cm	1	BEI0432	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 11:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	8.67		pH Units	1	BEI0431	09/21/21	09/21/21	EPA 9045D	

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: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BKG01@3'
2109214-14 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 11:37**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	22.8	0.0568	mg/L dry	1	BEI0430	09/21/21	09/22/21	EPA 6020B	
Magnesium	1.81	0.0568	"	"	"	"	"	"	
Sodium	3.53	0.0568	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 11:37**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.191	0.00100	units	1	BEI0495	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 11:37**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	88.0		%	1	BEI0372	09/16/21	09/17/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 11:37**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	0.557	0.0100	mmhos/cm	1	BEI0432	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 11:37**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	8.48		pH Units	1	BEI0431	09/21/21	09/21/21	EPA 9045D	

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: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH07@1'
2109214-15 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	53.0	0.0561	mg/L dry	1	BEI0430	09/21/21	09/22/21	EPA 6020B	
Magnesium	4.20	0.0561	"	"	"	"	"	"	
Sodium	8.49	0.0561	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.302	0.00100	units	1	BEI0495	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	89.1		%	1	BEI0372	09/16/21	09/17/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	3.52	0.0100	mmhos/cm	1	BEI0432	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	7.63		pH Units	1	BEI0431	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH07@3'
2109214-16 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	26.8	0.0571	mg/L dry	1	BEI0430	09/21/21	09/22/21	EPA 6020B	
Magnesium	3.45	0.0571	"	"	"	"	"	"	
Sodium	11.7	0.0571	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.565	0.00100	units	1	BEI0495	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	87.6		%	1	BEI0372	09/16/21	09/17/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	4.37	0.0100	mmhos/cm	1	BEI0432	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	7.79		pH Units	1	BEI0431	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH08@1'
2109214-17 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	6.29	0.0625	mg/L dry	1	BEI0430	09/21/21	09/22/21	EPA 6020B	
Magnesium	0.863	0.0625	"	"	"	"	"	"	
Sodium	34.7	0.0625	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.44	0.00100	units	1	BEI0495	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	80.0		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	4.73	0.0100	mmhos/cm	1	BEI0432	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.34		pH Units	1	BEI0431	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH08@3'
2109214-18 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	11.2	0.0629	mg/L dry	1	BEI0430	09/21/21	09/22/21	EPA 6020B	
Magnesium	2.50	0.0629	"	"	"	"	"	"	
Sodium	53.0	0.0629	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	3.73	0.00100	units	1	BEI0495	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	79.5		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	7.02	0.0100	mmhos/cm	1	BEI0432	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	8.16		pH Units	1	BEI0431	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH09@1'
2109214-19 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 11:05**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	17.9	0.0569	mg/L dry	1	BEI0430	09/21/21	09/22/21	EPA 6020B	
Magnesium	1.77	0.0569	"	"	"	"	"	"	
Sodium	37.2	0.0569	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 11:05**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	2.25	0.00100	units	1	BEI0495	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 11:05**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	87.9		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 11:05**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	5.52	0.0100	mmhos/cm	1	BEI0432	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 11:05**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	7.98		pH Units	1	BEI0431	09/21/21	09/21/21	EPA 9045D	

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: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH09@3'
2109214-20 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	8.05	0.0572	mg/L dry	1	BEI0430	09/21/21	09/22/21	EPA 6020B	
Magnesium	0.954	0.0572	"	"	"	"	"	"	
Sodium	40.9	0.0572	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.63	0.00100	units	1	BEI0495	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.5		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	5.78	0.0100	mmhos/cm	1	BEI0432	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.14		pH Units	1	BEI0431	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH10@1'
2109214-21 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:32**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	27.8	0.0574	mg/L dry	1	BEI0441	09/21/21	09/23/21	EPA 6020B	
Magnesium	3.34	0.0574	"	"	"	"	"	"	
Sodium	14.7	0.0574	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:32**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.701	0.00100	units	1	BEI0496	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:32**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	87.1		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:32**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	4.82	0.0100	mmhos/cm	1	BEI0443	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:32**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	7.72		pH Units	1	BEI0442	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH10@3'
2109214-22 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	22.1	0.0601	mg/L dry	1	BEI0441	09/21/21	09/23/21	EPA 6020B	
Magnesium	2.39	0.0601	"	"	"	"	"	"	
Sodium	14.2	0.0601	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.766	0.00100	units	1	BEI0496	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	83.3		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	5.24	0.0100	mmhos/cm	1	BEI0443	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	7.65		pH Units	1	BEI0442	09/21/21	09/21/21	EPA 9045D	

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: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH11@1'
2109214-23 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:35**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	24.6	0.0607	mg/L dry	1	BEI0441	09/21/21	09/23/21	EPA 6020B	
Magnesium	2.92	0.0607	"	"	"	"	"	"	
Sodium	42.0	0.0607	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:35**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	2.13	0.00100	units	1	BEI0496	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:35**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	82.4		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:35**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	4.55	0.0100	mmhos/cm	1	BEI0443	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:35**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	8.74		pH Units	1	BEI0442	09/21/21	09/21/21	EPA 9045D	

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: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH11@3'
2109214-24 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:39**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	17.7	0.0619	mg/L dry	1	BEI0441	09/21/21	09/23/21	EPA 6020B	
Magnesium	1.89	0.0619	"	"	"	"	"	"	
Sodium	38.7	0.0619	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:39**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	2.34	0.00100	units	1	BEI0496	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:39**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	80.8		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:39**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	4.90	0.0100	mmhos/cm	1	BEI0443	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:39**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	8.85		pH Units	1	BEI0442	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH12@1'
2109214-25 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	19.5	0.0577	mg/L dry	1	BEI0441	09/21/21	09/23/21	EPA 6020B	
Magnesium	2.11	0.0577	"	"	"	"	"	"	
Sodium	13.9	0.0577	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.798	0.00100	units	1	BEI0496	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.7		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	5.65	0.0100	mmhos/cm	1	BEI0443	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.71		pH Units	1	BEI0442	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH12@3'
2109214-26 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:13**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	21.0	0.0615	mg/L dry	1	BEI0441	09/21/21	09/23/21	EPA 6020B	
Magnesium	2.13	0.0615	"	"	"	"	"	"	
Sodium	36.8	0.0615	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:13**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	2.05	0.00100	units	1	BEI0496	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:13**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	81.3		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:13**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	5.14	0.0100	mmhos/cm	1	BEI0443	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:13**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	8.34		pH Units	1	BEI0442	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH13@1'
2109214-27 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	10.5	0.0593	mg/L dry	1	BEI0441	09/21/21	09/23/21	EPA 6020B	
Magnesium	1.28	0.0593	"	"	"	"	"	"	
Sodium	9.90	0.0593	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.768	0.00100	units	1	BEI0496	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	84.3		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	3.23	0.0100	mmhos/cm	1	BEI0443	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	7.70		pH Units	1	BEI0442	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH13@3'
2109214-28 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:38**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	18.1	0.0601	mg/L dry	1	BEI0441	09/21/21	09/23/21	EPA 6020B	
Magnesium	1.88	0.0601	"	"	"	"	"	"	
Sodium	9.58	0.0601	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:38**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.573	0.00100	units	1	BEI0496	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:38**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	83.2		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:38**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	3.69	0.0100	mmhos/cm	1	BEI0443	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:38**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	7.62		pH Units	1	BEI0442	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH14@1'
2109214-29 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:55**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	26.1	0.0571	mg/L dry	1	BEI0441	09/21/21	09/23/21	EPA 6020B	
Magnesium	2.56	0.0571	"	"	"	"	"	"	
Sodium	18.1	0.0571	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:55**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.905	0.00100	units	1	BEI0496	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:55**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	87.6		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:55**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	5.84	0.0100	mmhos/cm	1	BEI0443	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:55**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	7.86		pH Units	1	BEI0442	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH14@3'
2109214-30 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:59**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	18.9	0.0559	mg/L dry	1	BEI0441	09/21/21	09/23/21	EPA 6020B	
Magnesium	1.93	0.0559	"	"	"	"	"	"	
Sodium	12.6	0.0559	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:59**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.738	0.00100	units	1	BEI0496	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:59**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	89.5		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:59**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	2.30	0.0100	mmhos/cm	1	BEI0443	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:59**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	8.17		pH Units	1	BEI0442	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH15@1'
2109214-31 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	14.4	0.0555	mg/L dry	1	BEI0441	09/21/21	09/23/21	EPA 6020B	
Magnesium	1.58	0.0555	"	"	"	"	"	"	
Sodium	5.32	0.0555	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.355	0.00100	units	1	BEI0496	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	90.1		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	0.385	0.0100	mmhos/cm	1	BEI0443	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	8.43		pH Units	1	BEI0442	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH15@3'
2109214-32 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	27.5	0.0567	mg/L dry	1	BEI0441	09/21/21	09/23/21	EPA 6020B	
Magnesium	2.39	0.0567	"	"	"	"	"	"	
Sodium	11.4	0.0567	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.560	0.00100	units	1	BEI0496	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	88.1		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	1.59	0.0100	mmhos/cm	1	BEI0443	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	8.39		pH Units	1	BEI0442	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH16@1'
2109214-33 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	9.71	0.0562	mg/L dry	1	BEI0441	09/21/21	09/23/21	EPA 6020B	
Magnesium	1.22	0.0562	"	"	"	"	"	"	
Sodium	10.6	0.0562	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.853	0.00100	units	1	BEI0496	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	89.0		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	0.585	0.0100	mmhos/cm	1	BEI0443	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	8.96		pH Units	1	BEI0442	09/21/21	09/21/21	EPA 9045D	

Summit Scientific

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

Project: Toedtli 1-10
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

BH16@3'
2109214-34 (Soil)

Summit Scientific

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

Date Sampled: **09/14/21 12:49**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	9.19	0.0596	mg/L dry	1	BEI0441	09/21/21	09/23/21	EPA 6020B	
Magnesium	1.10	0.0596	"	"	"	"	"	"	
Sodium	9.82	0.0596	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/21 12:49**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.815	0.00100	units	1	BEI0496	09/23/21	09/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/21 12:49**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	83.9		%	1	BEI0433	09/21/21	09/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/21 12:49**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	2.58	0.0100	mmhos/cm	1	BEI0443	09/21/21	09/21/21	EPA 120.1	

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

Date Sampled: **09/14/21 12:49**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	7.88		pH Units	1	BEI0442	09/21/21	09/21/21	EPA 9045D	

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: Toedtli 1-10

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BEI0333 - EPA 5030 Soil MS

Blank (BEI0333-BLK1)

Prepared: 09/15/21 Analyzed: 09/16/21

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	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0405</i>		<i>"</i>	<i>0.0400</i>		<i>101</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0391</i>		<i>"</i>	<i>0.0400</i>		<i>97.8</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0398</i>		<i>"</i>	<i>0.0400</i>		<i>99.4</i>	<i>21-167</i>			

LCS (BEI0333-BS1)

Prepared: 09/15/21 Analyzed: 09/16/21

Benzene	0.118	0.0020	mg/kg	0.100		118	70-130			
Toluene	0.104	0.0050	"	0.100		104	70-130			
Ethylbenzene	0.0900	0.0050	"	0.100		90.0	70-130			
m,p-Xylene	0.171	0.010	"	0.200		85.7	70-130			
o-Xylene	0.0898	0.0050	"	0.100		89.8	70-130			
1,2,4-Trimethylbenzene	0.0861	0.0050	"	0.100		86.1	70-130			
1,3,5-Trimethylbenzene	0.0835	0.0050	"	0.100		83.5	70-130			
Naphthalene	0.0892	0.0038	"	0.100		89.2	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0463</i>		<i>"</i>	<i>0.0400</i>		<i>116</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0437</i>		<i>"</i>	<i>0.0400</i>		<i>109</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0398</i>		<i>"</i>	<i>0.0400</i>		<i>99.4</i>	<i>21-167</i>			

Matrix Spike (BEI0333-MS1)

Source: 2109182-01

Prepared: 09/15/21 Analyzed: 09/16/21

Benzene	0.0811	0.0020	mg/kg	0.100	ND	81.1	70-130			
Toluene	0.0579	0.0050	"	0.100	ND	57.9	70-130			QM-07
Ethylbenzene	0.0368	0.0050	"	0.100	ND	36.8	70-130			QM-07
m,p-Xylene	0.152	0.010	"	0.200	ND	75.9	70-130			
o-Xylene	0.0834	0.0050	"	0.100	ND	83.4	70-130			
1,2,4-Trimethylbenzene	0.0949	0.0050	"	0.100	ND	94.9	70-130			
1,3,5-Trimethylbenzene	0.146	0.0050	"	0.100	0.0374	108	70-130			
Naphthalene	0.0680	0.0038	"	0.100	ND	68.0	70-130			QM-07
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0408</i>		<i>"</i>	<i>0.0400</i>		<i>102</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0393</i>		<i>"</i>	<i>0.0400</i>		<i>98.2</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0450</i>		<i>"</i>	<i>0.0400</i>		<i>112</i>	<i>21-167</i>			

Summit Scientific

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

Project: Toedtli 1-10

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 09/23/21 12:11

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BEI0333 - EPA 5030 Soil MS

Matrix Spike Dup (BEI0333-MSD1)	Source: 2109182-01			Prepared: 09/15/21 Analyzed: 09/16/21							
Benzene	0.0663	0.0020	mg/kg	0.100	ND	66.3	70-130	20.0	30		QM-07
Toluene	0.0461	0.0050	"	0.100	ND	46.1	70-130	22.7	30		QM-07
Ethylbenzene	0.0257	0.0050	"	0.100	ND	25.7	70-130	35.5	30		QM-07
m,p-Xylene	0.114	0.010	"	0.200	ND	56.9	70-130	28.6	30		QM-07
o-Xylene	0.0799	0.0050	"	0.100	ND	79.9	70-130	4.26	30		
1,2,4-Trimethylbenzene	0.0659	0.0050	"	0.100	ND	65.9	70-130	36.0	30		QM-07
1,3,5-Trimethylbenzene	0.164	0.0050	"	0.100	0.0374	127	70-130	11.9	30		
Naphthalene	0.0480	0.0038	"	0.100	ND	48.0	70-130	34.5	30		QM-07
Surrogate: 1,2-Dichloroethane-d4	0.0395		"	0.0400		98.7	23-173				
Surrogate: Toluene-d8	0.0429		"	0.0400		107	20-170				
Surrogate: 4-Bromofluorobenzene	0.0487		"	0.0400		122	21-167				

Summit Scientific

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

Project: Toedtli 1-10
 Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 09/23/21 12:11

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BEI0334 - EPA 3550A

Blank (BEI0334-BLK1)

Prepared & Analyzed: 09/15/21

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

LCS (BEI0334-BS1)

Prepared & Analyzed: 09/15/21

C10-C28 (DRO)	595	50	mg/kg	500	119	70-130					
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Matrix Spike (BEI0334-MS1)

Source: 2109182-02

Prepared & Analyzed: 09/15/21

C10-C28 (DRO)	696	50	mg/kg	500	117	116	70-130				
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Matrix Spike Dup (BEI0334-MSD1)

Source: 2109182-02

Prepared & Analyzed: 09/15/21

C10-C28 (DRO)	694	50	mg/kg	500	117	115	70-130	0.330	20		
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PDC Energy
 1775 Sherman St. STE. 3000
 Denver CO, 80203

Project: Toedtli 1-10

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 09/23/21 12:11

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

Summit Scientific

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

Batch BEI0430 - General Preparation

Blank (BEI0430-BLK1)

Prepared: 09/21/21 Analyzed: 09/22/21

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

LCS (BEI0430-BS1)

Prepared: 09/21/21 Analyzed: 09/22/21

Calcium	5.89	0.0500	mg/L wet	5.00	118	70-130
Magnesium	5.60	0.0500	"	5.00	112	70-130
Sodium	5.48	0.0500	"	5.00	110	70-130

Batch BEI0441 - General Preparation

Blank (BEI0441-BLK1)

Prepared: 09/21/21 Analyzed: 09/23/21

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

LCS (BEI0441-BS1)

Prepared: 09/21/21 Analyzed: 09/23/21

Calcium	5.31	0.0500	mg/L wet	5.00	106	70-130
Magnesium	5.15	0.0500	"	5.00	103	70-130
Sodium	4.97	0.0500	"	5.00	99.4	70-130

Summit Scientific

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

Project: Toedtli 1-10

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 09/23/21 12:11

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

Summit Scientific

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

Batch BEI0372 - General Preparation

Duplicate (BEI0372-DUP1)		Source: 2109196-01		Prepared: 09/16/21 Analyzed: 09/17/21	
% Solids	94.9		%	95.4	0.535 20

Batch BEI0433 - General Preparation

Duplicate (BEI0433-DUP1)		Source: 2109214-17		Prepared & Analyzed: 09/21/21	
% Solids	79.6		%	80.0	0.572 20

Summit Scientific

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

Project: Toedtli 1-10

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

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

Summit Scientific

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

Batch BEI0432 - General Preparation

Blank (BEI0432-BLK1)

Prepared & Analyzed: 09/21/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BEI0432-BS1)

Prepared & Analyzed: 09/21/21

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

Duplicate (BEI0432-DUP1)

Source: 2109038-02

Prepared & Analyzed: 09/21/21

Specific Conductance (EC) 1.05 0.0100 mmhos/cm 1.05 0.00 20

Batch BEI0443 - General Preparation

Blank (BEI0443-BLK1)

Prepared & Analyzed: 09/21/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BEI0443-BS1)

Prepared & Analyzed: 09/21/21

Specific Conductance (EC) 0.158 0.0100 mmhos/cm 0.150 105 90-110

Duplicate (BEI0443-DUP1)

Source: 2109214-21

Prepared & Analyzed: 09/21/21

Specific Conductance (EC) 4.82 0.0100 mmhos/cm 4.82 0.0622 20

Summit Scientific

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

Project: Toedtli 1-10

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 09/23/21 12:11

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

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

Batch BEI0431 - General Preparation

LCS (BEI0431-BS1)										
					Prepared & Analyzed: 09/21/21					
pH	9.32		pH Units	9.21	101	95-105				
Duplicate (BEI0431-DUP1)										
					Source: 2109038-02					
					Prepared & Analyzed: 09/21/21					
pH	8.47		pH Units	8.47			0.00	20		

Batch BEI0442 - General Preparation

LCS (BEI0442-BS1)										
					Prepared & Analyzed: 09/21/21					
pH	9.31		pH Units	9.21	101	95-105				
Duplicate (BEI0442-DUP1)										
					Source: 2109214-21					
					Prepared & Analyzed: 09/21/21					
pH	7.73		pH Units	7.72			0.129	20		

Summit Scientific

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

Project: Toedtli 1-10

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
09/23/21 12:11

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
- 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