

TABLE 1
FORMER ACHZIGER 14-4 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)	Naphthalene (mg/kg)	TPH ⁽⁴⁾ (mg/kg)
Residential SSL ^(1,2)			1.2	490	5.8	58	2	500
Protection of Groundwater SSL ^(1,2,3)			0.0026	0.69	0.78	9.9	0.0038	500
AST01 @ 0-6"	2/22/2021	0-6 in. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<50
SEP01-FL @ 4'	2/22/2021	4 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<50
SEP01-DL @ 6'	2/22/2021	6 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<50
PWV01-B @ 3.5'	2/22/2021	3.5 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<50
PWV01-S @ 2'	2/22/2021	2 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<50
WDL01 @ 7'	2/22/2021	7 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	0.65

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

in. = Inches

bgs = Below ground surface

ft. = Feet

TABLE 2
FORMER ACHZIGER 14-4 TANK BATTERY
SOIL ANALYTICAL RESULTS SUMMARY TABLE
SOIL SUITABILITY

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
PWV01-S @ 2'	2/22/2021	2 ft. bgs	8.16	0.389	1.00	0.204

Notes:

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

COGCC = Colorado Oil and Gas Conservation Commission

EC = Electrical conductivity

SAR = Sodium adsorption ratio

mmhos/cm = Millimhos per centimeter

mg/L = Milligram per liter

ft. = Feet

bgs = Below ground surface

TABLE 3
FORMER ACHZIGER 14-4 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"	2/22/2021	0-6 in. bgs	40.426534	-104.563379	1.0	0.7
SEP01-FL @ 4'	2/22/2021	4 ft. bgs	40.426321	-104.563449	1.2	0.0
SEP01-DL @ 6'	2/22/2021	6 ft. bgs	40.426347	-104.563411	1.2	0.0
PWV01-B @ 3.5'	2/22/2021	3.5 ft. bgs	40.426530	-104.563337	1.0	2.1
PWV01-N @ 2'	2/22/2021	2 ft. bgs	40.426553	-104.563336	1.0	0.7
PWV01-W @ 2'	2/22/2021	2 ft. bgs	40.426522	-104.563361	1.0	0.4
PWV01-S @ 2'	2/22/2021	2 ft. bgs	40.426507	-104.563329	1.0	1.1
PWV01-E @ 2'	2/22/2021	2 ft. bgs	40.426531	-104.563308	1.0	0.3
WDL01 @ 7'	2/22/2021	7 ft. bgs	40.426514	-104.563335	1.0	16.2
MH01 @ 0-6"	2/22/2021	0-6 in. bgs	40.426370	-104.563431	1.0	0.3
ECD01 @ 0-6"	2/22/2021	0-6 in. bgs	40.426342	-104.563304	1.0	0.2
BKG01 @ 2.5'	2/22/2021	2.5 ft. bgs	NC	NC	NC	0.6

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

in. = Inches

bgs = Below ground surface

ft. = Feet

NC = Data not collected

Attachment A

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

February 23, 2021

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Achziger 14-4

Work Order #2102271

Enclosed are the results of analyses for samples received by Summit Scientific on 02/22/21 18:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', with a stylized, cursive script.

Paul Shrewsbury

President



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

Project: Achziger 14-4

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
02/23/21 06:37

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WDL01@7'	2102271-01	Soil	02/22/21 10:34	02/22/21 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.

2102271

Summit Scientific

S₂

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310

Page 1 of 1

Client: PDC / Tasman Project Manager: Mark Longhurst
 Address: 6855 W 119th Ave E-Mail: mark.longhurst@PDCE.com
 City/State/Zip: Broomfield/ CO/ 80020
 Phone: 303-487-1228 Project Name: Achziger 14-4
 Sampler Name: Kevin Fletcher Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested							Special Instructions		
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	GBTEXN - 8260B 915	TPH - (C6 - C36) 915	pH, EC, SAR	Boron - HWS	VOC - 915	PAH - 915		Metals - 915	
1	WDLO1@7'	2/22/21	1034	2			X			X				X	X						pH, EC, SAR by saturated paste
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by: <u>Kevin Fletcher</u>	Date/Time: <u>2/22/21 1530</u>	Received by: <u>Tasman's Lock Box</u>	Date/Time: <u>2/22/21 1530</u>	Turn Around Time (Check) Same Day <u>X</u> 72 hours 24 hours Standard 48 hours	Notes:
Relinquished by: <u>Tasman's Lock Box</u>	Date/Time: <u>02/22/2021 1730</u>	Received by: <u>[Signature]</u>	Date/Time: <u>02/22/2021 1730</u>	Sample Integrity: Temperature Upon Receipt: <u>4.3</u>	
Relinquished by:	Date/Time:	Received by: <u>[Signature]</u>	Date/Time:	Samples Intact: <u>Yes</u> No	

Sample Receipt Checklist

S2 Work Order 2102271

Client: POC/TABMAN Client Project ID: ACHZIGER 14-4

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

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

Temp (°C)	4.3
-----------	-----

Thermometer ID: 61857155-K

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

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

BB
Custodian Printed Name or Initials

[Signature]
Signature of Custodian

02/22/2021
Date/Time



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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
02/23/21 06:37

WDL01@7'
2102271-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/22/21 10:34**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BEB0327	02/22/21	02/22/21	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	0.65	0.50		"	"	"	"	"	"	

Date Sampled: **02/22/21 10:34**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		116 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		89.9 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.8 %		21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/22/21 10:34**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BEB0328	02/22/21	02/22/21	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **02/22/21 10:34**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		92.4 %		30-150		"	"	"	"	

Summit Scientific

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



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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
02/23/21 06:37

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BEB0327 - EPA 5030 Soil MS

Blank (BEB0327-BLK1)

Prepared: 02/22/21 Analyzed: 02/23/21

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0410		"	0.0400		103	23-173			
Surrogate: Toluene-d8	0.0415		"	0.0400		104	20-170			
Surrogate: 4-Bromofluorobenzene	0.0370		"	0.0400		92.6	21-167			

LCS (BEB0327-BS1)

Prepared: 02/22/21 Analyzed: 02/23/21

Benzene	0.0928	0.0020	mg/kg	0.100		92.8	70-130			
Toluene	0.106	0.0050	"	0.100		106	70-130			
Ethylbenzene	0.106	0.0050	"	0.100		106	70-130			
m,p-Xylene	0.210	0.010	"	0.200		105	70-130			
o-Xylene	0.101	0.0050	"	0.100		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0397		"	0.0400		99.2	23-173			
Surrogate: Toluene-d8	0.0403		"	0.0400		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0360		"	0.0400		89.9	21-167			

Matrix Spike (BEB0327-MS1)

Source: 2102268-01

Prepared: 02/22/21 Analyzed: 02/23/21

Benzene	0.0921	0.0020	mg/kg	0.100	ND	92.1	70-130			
Toluene	0.103	0.0050	"	0.100	ND	103	70-130			
Ethylbenzene	0.105	0.0050	"	0.100	ND	105	70-130			
m,p-Xylene	0.208	0.010	"	0.200	ND	104	70-130			
o-Xylene	0.101	0.0050	"	0.100	ND	101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0398		"	0.0400		99.5	23-173			
Surrogate: Toluene-d8	0.0394		"	0.0400		98.5	20-170			
Surrogate: 4-Bromofluorobenzene	0.0370		"	0.0400		92.4	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.



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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
02/23/21 06:37

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch BEB0327 - EPA 5030 Soil MS

Matrix Spike Dup (BEB0327-MSD1)	Source: 2102268-01			Prepared: 02/22/21 Analyzed: 02/23/21						
Benzene	0.0919	0.0020	mg/kg	0.100	ND	91.9	70-130	0.261	30	
Toluene	0.105	0.0050	"	0.100	ND	105	70-130	2.00	30	
Ethylbenzene	0.106	0.0050	"	0.100	ND	106	70-130	1.25	30	
m,p-Xylene	0.210	0.010	"	0.200	ND	105	70-130	0.975	30	
o-Xylene	0.104	0.0050	"	0.100	ND	104	70-130	2.83	30	
Surrogate: 1,2-Dichloroethane-d4	0.0413		"	0.0400		103	23-173			
Surrogate: Toluene-d8	0.0399		"	0.0400		99.8	20-170			
Surrogate: 4-Bromofluorobenzene	0.0371		"	0.0400		92.8	21-167			

Summit Scientific

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



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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
02/23/21 06:37

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BEB0328 - EPA 3550A

Blank (BEB0328-BLK1)

Prepared: 02/22/21 Analyzed: 02/23/21

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

LCS (BEB0328-BS1)

Prepared: 02/22/21 Analyzed: 02/23/21

C10-C28 (DRO)	420	50	mg/kg	500	84.0	70-130
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Matrix Spike (BEB0328-MS1)

Source: 2102268-01

Prepared: 02/22/21 Analyzed: 02/23/21

C10-C28 (DRO)	418	50	mg/kg	500	14.5	80.6	70-130
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Matrix Spike Dup (BEB0328-MSD1)

Source: 2102268-01

Prepared: 02/22/21 Analyzed: 02/23/21

C10-C28 (DRO)	416	50	mg/kg	500	14.5	80.3	70-130	0.317	20
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Summit Scientific

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



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

Project: Achziger 14-4

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
02/23/21 06:37

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

March 18, 2021

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Achziger 14-4

Work Order #2102287

Enclosed are the results of analyses for samples received by Summit Scientific on 02/22/21 17:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', with a stylized, cursive script.

Paul Shrewsbury

President



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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AST01@0-6"	2102287-01	Soil	02/22/21 09:30	02/22/21 17:30
PWV01-B@3.5'	2102287-02	Soil	02/22/21 09:54	02/22/21 17:30
PWV01-S@2'	2102287-03	Soil	02/22/21 10:01	02/22/21 17:30
SEP01-FL@4'	2102287-04	Soil	02/22/21 11:15	02/22/21 17:30
SEP01-DL@6'	2102287-05	Soil	02/22/21 11:16	02/22/21 17:30

Summit Scientific

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

S_2

303-277-9310

Page

Project Number:

pH, EC, SAR by saturated
paste

2102287

Sample Receipt Checklist

S2 Work Order _____

Client: EDC/TABMAN Client Project ID: ACHZIGER K-4Shipped Via: ☐ H.D./P.U./FedEx/UPS/USPS/Other _____ Airbill #: _____
☐ ☒ ☐ ☐ ☐
Matrix (check all that apply): ☐ Air ☒ Soil/Solid ☐ Water ☐ Other: _____
(Describe)

Temp (°C)

4.3

Thermometer ID: 61857155-K

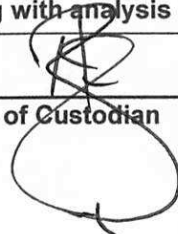
	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input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

Custodian Printed Name or Initials

Signature of Custodian

Date/Time

TGB



02/22/2021



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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

AST01@0-6"
2102287-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/22/21 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEB0375	02/24/21	02/25/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/22/21 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		113 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		91.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.7 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/22/21 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEB0376	02/24/21	02/25/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/22/21 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		95.0 %	30-150		"	"	"	"	

Summit Scientific

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



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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

PWV01-B@3.5'
2102287-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/22/21 09:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEB0375	02/24/21	02/25/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/22/21 09:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		108 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		92.9 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.4 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/22/21 09:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BEB0376	02/24/21	02/25/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/22/21 09:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		95.0 %	30-150		"	"	"	"	

Summit Scientific

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



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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

PWV01-S@2'
2102287-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/22/21 10:01**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEB0375	02/24/21	02/25/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/22/21 10:01**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		130 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.8 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/22/21 10:01**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEB0376	02/24/21	02/25/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/22/21 10:01**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		93.7 %	30-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/22/21 10:01**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.204	0.0100	mg/L	1	BEB0383	02/25/21	02/26/21	EPA 6020B	

Summit Scientific

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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

PWV01-S@2'
2102287-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

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

Date Sampled: **02/22/21 10:01**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	49.6	0.0549	mg/L dry	1	BEB0363	02/24/21	02/25/21	EPA 6020B	
Magnesium	4.39	0.0549	"	"	"	"	02/26/21	"	
Sodium	27.4	0.0549	"	"	"	"	02/25/21	"	

Calculated Analysis

Date Sampled: **02/22/21 10:01**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.00	0.100	units	1	BEB0407	02/26/21	02/26/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/22/21 10:01**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.0		%	1	BEB0356	02/24/21	02/24/21	Calculation	

Specific Conductance by EPA Method 120.1

Date Sampled: **02/22/21 10:01**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.536	0.0100	mmhos/cm	1	BEB0357	02/24/21	02/24/21	EPA 120.1	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/22/21 10:01**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.389	0.0100	mmhos/cm	1	BEB0391	02/25/21	02/25/21	EPA 120.1	

Summit Scientific

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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

PWV01-S@2'
2102287-03 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

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

Date Sampled: **02/22/21 10:01**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.16			pH Units	1	BEB0392	02/25/21	02/25/21	EPA 9045D	

Summit Scientific

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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

SEP01-FL@4'
2102287-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/22/21 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEB0375	02/24/21	02/25/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/22/21 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		117 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		92.0 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.4 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/22/21 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BEB0376	02/24/21	02/25/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/22/21 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		95.5 %	30-150		"	"	"	"	

Summit Scientific

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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

SEP01-DL@6'
2102287-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/22/21 11:16**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEB0375	02/24/21	02/25/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/22/21 11:16**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		112 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		88.3 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.5 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/22/21 11:16**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BEB0376	02/24/21	02/25/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/22/21 11:16**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		93.1 %	30-150		"	"	"	"	

Summit Scientific

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

Project: Achziger 14-4

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BEB0375 - EPA 5030 Soil MS

Blank (BEB0375-BLK1)

Prepared & Analyzed: 02/24/21

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0322		"	0.0400		80.4	23-173			
Surrogate: Toluene-d8	0.0443		"	0.0400		111	20-170			
Surrogate: 4-Bromofluorobenzene	0.0408		"	0.0400		102	21-167			

LCS (BEB0375-BS1)

Prepared & Analyzed: 02/24/21

Benzene	0.0770	0.0020	mg/kg	0.100		77.0	70-130			
Toluene	0.0813	0.0050	"	0.100		81.3	70-130			
Ethylbenzene	0.0948	0.0050	"	0.100		94.8	70-130			
m,p-Xylene	0.181	0.010	"	0.200		90.4	70-130			
o-Xylene	0.0905	0.0050	"	0.100		90.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0282		"	0.0400		70.4	23-173			
Surrogate: Toluene-d8	0.0376		"	0.0400		93.9	20-170			
Surrogate: 4-Bromofluorobenzene	0.0375		"	0.0400		93.8	21-167			

Matrix Spike (BEB0375-MS1)

Source: 2102214-01

Prepared: 02/24/21 Analyzed: 02/25/21

Benzene	0.0850	0.0020	mg/kg	0.100	ND	85.0	70-130			
Toluene	0.0753	0.0050	"	0.100	ND	75.3	70-130			
Ethylbenzene	0.0929	0.0050	"	0.100	ND	92.9	70-130			
m,p-Xylene	0.176	0.010	"	0.200	ND	87.9	70-130			
o-Xylene	0.0866	0.0050	"	0.100	ND	86.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0369		"	0.0400		92.2	23-173			
Surrogate: Toluene-d8	0.0338		"	0.0400		84.5	20-170			
Surrogate: 4-Bromofluorobenzene	0.0380		"	0.0400		94.9	21-167			

Summit Scientific

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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

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 BEB0375 - EPA 5030 Soil MS

Matrix Spike Dup (BEB0375-MSD1)	Source: 2102214-01			Prepared: 02/24/21 Analyzed: 02/25/21						
Benzene	0.0870	0.0020	mg/kg	0.100	ND	87.0	70-130	2.27	30	
Toluene	0.0753	0.0050	"	0.100	ND	75.3	70-130	0.00	30	
Ethylbenzene	0.0948	0.0050	"	0.100	ND	94.8	70-130	2.01	30	
m,p-Xylene	0.179	0.010	"	0.200	ND	89.6	70-130	1.93	30	
o-Xylene	0.0889	0.0050	"	0.100	ND	88.9	70-130	2.56	30	
Surrogate: 1,2-Dichloroethane-d4	0.0370		"	0.0400		92.6	23-173			
Surrogate: Toluene-d8	0.0347		"	0.0400		86.8	20-170			
Surrogate: 4-Bromofluorobenzene	0.0370		"	0.0400		92.6	21-167			

Summit Scientific

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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BEB0376 - EPA 3550A

Blank (BEB0376-BLK1)

Prepared: 02/24/21 Analyzed: 02/25/21

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

LCS (BEB0376-BS1)

Prepared: 02/24/21 Analyzed: 02/25/21

C10-C28 (DRO)	436	50	mg/kg	500	87.2	70-130				
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Matrix Spike (BEB0376-MS1)

Source: 2102214-01

Prepared: 02/24/21 Analyzed: 02/25/21

C10-C28 (DRO)	512	50	mg/kg	500	14.6	99.5	70-130			
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Matrix Spike Dup (BEB0376-MSD1)

Source: 2102214-01

Prepared: 02/24/21 Analyzed: 02/25/21

C10-C28 (DRO)	478	50	mg/kg	500	14.6	92.7	70-130	6.85	20	
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Summit Scientific

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

Project: Achziger 14-4

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

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

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

Batch BEB0383 - EPA 3050B

Blank (BEB0383-BLK1)

Prepared & Analyzed: 02/25/21

Boron ND 0.0100 mg/L

LCS (BEB0383-BS1)

Prepared & Analyzed: 02/25/21

Boron 4.88 0.0100 mg/L 5.00 97.6 80-120

Duplicate (BEB0383-DUP1)

Source: 2102176-03

Prepared: 02/25/21 Analyzed: 02/26/21

Boron 1.51 0.0100 mg/L 1.66 9.20 20

Matrix Spike (BEB0383-MS1)

Source: 2102176-03

Prepared: 02/25/21 Analyzed: 02/26/21

Boron 6.26 0.0100 mg/L 5.00 1.66 92.2 75-125

Matrix Spike Dup (BEB0383-MSD1)

Source: 2102176-03

Prepared: 02/25/21 Analyzed: 02/26/21

Boron 6.26 0.0100 mg/L 5.00 1.66 92.1 75-125 0.0211 25

Summit Scientific

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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

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

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

Batch BEB0363 - General Preparation

Blank (BEB0363-BLK1)

Prepared: 02/24/21 Analyzed: 02/25/21

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

LCS (BEB0363-BS1)

Prepared: 02/24/21 Analyzed: 02/25/21

Calcium	5.16	0.0500	mg/L wet	5.00	103	70-130
Magnesium	5.30	0.0500	"	5.00	106	70-130
Sodium	5.15	0.0500	"	5.00	103	70-130

Summit Scientific

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

Project: Achziger 14-4

Project Number: [none]

Project Manager: Mark Longhurst

Reported:

03/18/21 14:36

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

Summit Scientific

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

Batch BEB0356 - General Preparation

Duplicate (BEB0356-DUP1)

Source: 2101305-01

Prepared & Analyzed: 02/24/21

% Solids	83.6	%	83.4	0.234	20
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Summit Scientific

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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

Specific Conductance by EPA Method 120.1 - Quality Control
Summit Scientific

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

Batch BEB0357 - General Preparation

Blank (BEB0357-BLK1)

Prepared & Analyzed: 02/24/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BEB0357-BS1)

Prepared & Analyzed: 02/24/21

Specific Conductance (EC) 0.741 0.0100 mmhos/cm 0.750 98.7 90-110

Duplicate (BEB0357-DUP1)

Source: 2102287-03

Prepared & Analyzed: 02/24/21

Specific Conductance (EC) 0.538 0.0100 mmhos/cm 0.536 0.279 20

Summit Scientific

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

Project: Achziger 14-4
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
03/18/21 14:36

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

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

Batch BEB0391 - General Preparation

Blank (BEB0391-BLK1)

Prepared & Analyzed: 02/25/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BEB0391-BS1)

Prepared & Analyzed: 02/25/21

Specific Conductance (EC) 0.152 0.0100 mmhos/cm 0.150 101 90-110

Duplicate (BEB0391-DUP1)

Source: 2102266-01

Prepared & Analyzed: 02/25/21

Specific Conductance (EC) 2.48 0.0100 mmhos/cm 2.43 1.96 20

Summit Scientific

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



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

Project: Achziger 14-4

Project Number: [none]

Project Manager: Mark Longhurst

Reported:

03/18/21 14:36

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

Summit Scientific

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

Batch BEB0392 - General Preparation

LCS (BEB0392-BS1)

Prepared & Analyzed: 02/25/21

pH	9.20	pH Units	9.21	99.9	95-105
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Duplicate (BEB0392-DUP1)

Source: 2102266-01

Prepared & Analyzed: 02/25/21

pH	8.17	pH Units	8.16	0.122	20
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Summit Scientific

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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