

TABLE 1
FORMER EHRlich 4, 22-7 TANK BATTERY
SOIL ANALYTICAL RESULTS SUMMARY TABLE

Sample ID	Date Sampled	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TPH ⁽²⁾ (mg/kg)	pH (units)	EC (mmhos/cm)
COGCC standards for soil (mg/kg) ⁽¹⁾			0.17	85	100	175	23	500	6-9	<4
SS01 @ 5'	10/29/2018	5	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	9.59	1.80
SS02 @ 3'	10/29/2018	3	NA	NA	NA	NA	NA	NA	8.40	3.19
SS03 @ 3'	10/29/2018	3	NA	NA	NA	NA	NA	NA	9.58	1.34
SS04 @ 3'	10/29/2018	3	NA	NA	NA	NA	NA	NA	10.0	0.911
SS05 @ 3'	10/29/2018	3	NA	NA	NA	NA	NA	NA	9.31	1.22
BG01 @ 3'	11/16/2018	3	NA	NA	NA	NA	NA	NA	7.64	5.36

Notes:

- Standards for soil are taken from 2 CCR 404-1, Table 910-1, effective May 1, 2018.
 - TPH - Total volatile and extractable petroleum hydrocarbons. Value calculated by adding GRO and DRO concentrations.
- COGCC = Colorado Oil and Gas Conservation Commission
(<) = Analytical result is less than the indicated laboratory reporting limit.
GRO = Total volatile petroleum hydrocarbons - gasoline range organics
DRO = Total extractable petroleum hydrocarbons - diesel range organics
mg/kg = Milligrams per kilogram
bgs = Below ground surface
EC = Electrical conductivity
mmhos/cm = millimhos per centimeter
NA = Constituent not analyzed.
BOLD = Analytical result is in exceedance of COGCC soil standards.

ATTACHMENT A

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

November 08, 2018

Mark Longhurst
PDC Energy
1775 Sherman St. STE. 3000
Denver, CO 80203
RE: Ehrlich 4,22-7

Enclosed are the results of analyses for samples received by Summit Scientific on 10/29/18 18:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Muri Premer". The signature is written in a cursive style with a large initial "M" and a long, sweeping underline.

Muri Premer For Ben Shrewsbury
Laboratory Manager



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

Project: Ehrlich 4,22-7

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/08/18 10:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS01@5'	1810368-01	Soil	10/29/18 15:11	10/29/18 18:30
SS02@3'	1810368-02	Soil	10/29/18 15:14	10/29/18 18:30
SS03@3'	1810368-03	Soil	10/29/18 15:17	10/29/18 18:30
SS04@3'	1810368-04	Soil	10/29/18 15:20	10/29/18 18:30
SS05@3'	1810368-05	Soil	10/29/18 15:23	10/29/18 18:30

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.

Summit Scientific

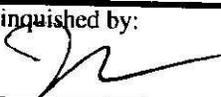
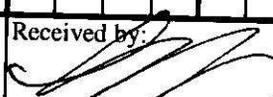
1810368

741 Corporate Circle Suite I ♦ Golden, Colorado 80401
303-277-9310 ♦ 303-374-5933 Fax

Client: PDC
Address: _____
City/State/Zip: _____
Phone: _____ Fax: _____
Sampler Name: Jake McCarver

Page 1 of 1

Project Manager: Mark Longhurst
E-Mail: Mark.Longhurst@pdce.com
Project Name: Ehrlich 4, 22-7
Project Number: _____

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix			Analyze For:					Special Instructions		
				HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	GBTEXN (8260)	TPH - DRO	EC/pH	HOLD			
SS01 @ 5'	10/29/2018	3:11	1		X			X				X	X	X				
SS02 @ 3'	10/29/2018	3:14	1		X			X							X			
SS03 @ 3'	10/29/2018	3:17	1		X			X							X			
SS04 @ 3'	10/29/2018	3:20	1		X			X							X			
SS05 @ 3'	10/29/2018	3:23	1		X			X							X			
Relinquished by: 	Date/Time: <u>10/29/18</u>	Received by: 	Date/Time: <u>10-29-18 1830</u>	Turn Around Time (Check)					Hold SS02-SS05									
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day	<input type="checkbox"/>	72 Hours	<input type="checkbox"/>	24 Hours	<input type="checkbox"/>	Standard	<input checked="" type="checkbox"/>	48 Hours	<input type="checkbox"/>					
Relinquished by:	Date/Time:	Received in Lab by:	Date/Time:	Sample Integrity:					Temperature Upon Receipt: <u>33</u>									
				Intact:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>												

Sample Receipt Checklist

S2 Work Order 1810368

Client: PDC Client Project ID: Enclich 4, 22-7

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

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

Temp (°C)	3.3
-----------	-----

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

CP
Custodian Printed Name or Initials

[Signature]
Signature of Custodian

10-29-18 1830
Date/Time



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

Project: Ehrlich 4,22-7

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/08/18 10:06

SS01@5'
1810368-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/29/18 15:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1810439	10/30/18	11/01/18	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Naphthalene	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/29/18 15:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		73.8 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		95.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.1 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/29/18 15:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1810438	10/30/18	11/03/18	EPA 8015M	

Date Sampled: **10/29/18 15:11**

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

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/29/18 15:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.59		pH Units	1	1810455	10/31/18	10/31/18	EPA 9045D	

Summit Scientific

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

Project: Ehrlich 4,22-7

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 11/08/18 10:06

SS01@5'
1810368-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Specific Conductance by EPA Method 120.1

Date Sampled: **10/29/18 15:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.80	0.0100	mmhos/cm	1	1810463	10/31/18	10/31/18	EPA 120.1	

Summit Scientific

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

Project: Ehrlich 4,22-7

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 11/08/18 10:06

SS02@3'
1810368-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/29/18 15:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.40		pH Units	1	1811100	11/07/18	11/07/18	EPA 9045D	I-02

Specific Conductance by EPA Method 120.1

Date Sampled: **10/29/18 15:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	3.19	0.0100	mmhos/cm	1	1811101	11/07/18	11/07/18	EPA 120.1	

Summit Scientific

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PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Ehrlich 4,22-7 Project Number: [none] Project Manager: Mark Longhurst	Reported: 11/08/18 10:06
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SS03@3'
1810368-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/29/18 15:17**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	9.58			pH Units	1	1811100	11/07/18	11/07/18	EPA 9045D	I-02

Specific Conductance by EPA Method 120.1

Date Sampled: **10/29/18 15:17**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	1.34	0.0100		mmhos/cm	1	1811101	11/07/18	11/07/18	EPA 120.1	

Summit Scientific



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

Project: Ehrlich 4,22-7

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 11/08/18 10:06

SS04@3'
1810368-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/29/18 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	10.0		pH Units	1	1811100	11/07/18	11/07/18	EPA 9045D	I-02

Specific Conductance by EPA Method 120.1

Date Sampled: **10/29/18 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.911	0.0100	mmhos/cm	1	1811101	11/07/18	11/07/18	EPA 120.1	

Summit Scientific

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

Project: Ehrlich 4,22-7

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 11/08/18 10:06

SS05@3'
1810368-05 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/29/18 15:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.31		pH Units	1	1811100	11/07/18	11/07/18	EPA 9045D	I-02

Specific Conductance by EPA Method 120.1

Date Sampled: **10/29/18 15:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.22	0.0100	mmhos/cm	1	1811101	11/07/18	11/07/18	EPA 120.1	

Summit Scientific

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

Project: Ehrlich 4,22-7

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/08/18 10:06

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 1810439 - EPA 5030 Soil MS

Blank (1810439-BLK1)

Prepared: 10/30/18 Analyzed: 10/31/18

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Naphthalene	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0300		"	0.0396		75.8	23-173			
Surrogate: Toluene-d8	0.0401		"	0.0400		100	20-170			
Surrogate: 4-Bromofluorobenzene	0.0374		"	0.0400		93.4	21-167			

LCS (1810439-BS1)

Prepared: 10/30/18 Analyzed: 10/31/18

Benzene	0.0743	0.0020	mg/kg	0.100		74.3	70-130			
Toluene	0.0903	0.0050	"	0.100		90.3	70-130			
Ethylbenzene	0.0934	0.0050	"	0.100		93.4	70-130			
m,p-Xylene	0.194	0.010	"	0.200		97.1	70-130			
o-Xylene	0.100	0.0050	"	0.100		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0308		"	0.0396		77.7	23-173			
Surrogate: Toluene-d8	0.0391		"	0.0400		97.7	20-170			
Surrogate: 4-Bromofluorobenzene	0.0375		"	0.0400		93.8	21-167			

Matrix Spike (1810439-MS1)

Source: 1810349-01

Prepared: 10/30/18 Analyzed: 10/31/18

Benzene	0.0773	0.0020	mg/kg	0.100	ND	77.3	70-130			
Toluene	0.0942	0.0050	"	0.100	ND	94.2	70-130			
Ethylbenzene	0.102	0.0050	"	0.100	ND	102	70-130			
m,p-Xylene	0.212	0.010	"	0.200	ND	106	70-130			
o-Xylene	0.108	0.0050	"	0.100	ND	108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0308		"	0.0396		77.7	23-173			
Surrogate: Toluene-d8	0.0382		"	0.0400		95.6	20-170			
Surrogate: 4-Bromofluorobenzene	0.0378		"	0.0400		94.5	21-167			

Summit Scientific

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

Project: Ehrlich 4,22-7

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 11/08/18 10:06

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

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

Batch 1810439 - EPA 5030 Soil MS

Matrix Spike Dup (1810439-MSD1)

Source: 1810349-01

Prepared: 10/30/18 Analyzed: 10/31/18

Benzene	0.0744	0.0020	mg/kg	0.100	ND	74.4	70-130	3.84	30	
Toluene	0.0905	0.0050	"	0.100	ND	90.5	70-130	4.00	30	
Ethylbenzene	0.0980	0.0050	"	0.100	ND	98.0	70-130	3.84	30	
m,p-Xylene	0.204	0.010	"	0.200	ND	102	70-130	4.03	30	
o-Xylene	0.103	0.0050	"	0.100	ND	103	70-130	4.62	30	
Surrogate: 1,2-Dichloroethane-d4	0.0314		"	0.0396		79.4	23-173			
Surrogate: Toluene-d8	0.0385		"	0.0400		96.2	20-170			
Surrogate: 4-Bromofluorobenzene	0.0378		"	0.0400		94.6	21-167			

Summit Scientific

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



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

Project: Ehrlich 4,22-7

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 11/08/18 10:06

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1810438 - EPA 3550A

Blank (1810438-BLK1)

Prepared: 10/30/18 Analyzed: 11/02/18

C10-C28 (DRO) ND 50 mg/kg

LCS (1810438-BS1)

Prepared: 10/30/18 Analyzed: 11/02/18

C10-C28 (DRO) 523 50 mg/kg 500 105 70-130

Matrix Spike (1810438-MS1)

Source: 1810349-01

Prepared: 10/30/18 Analyzed: 11/02/18

C10-C28 (DRO) 494 50 mg/kg 500 36.5 91.6 70-130

Matrix Spike Dup (1810438-MSD1)

Source: 1810349-01

Prepared: 10/30/18 Analyzed: 11/02/18

C10-C28 (DRO) 475 50 mg/kg 500 36.5 87.7 70-130 4.00 20

Summit Scientific

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

Project: Ehrlich 4,22-7

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 11/08/18 10:06

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

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

Batch 1810455 - General Preparation

LCS (1810455-BS1)		Prepared & Analyzed: 10/31/18								
pH	9.2		pH Units				95-105			
Duplicate (1810455-DUP1)		Source: 1810343-01		Prepared & Analyzed: 10/31/18						
pH	8.2		pH Units		8.2			0.490	20	

Batch 1811100 - General Preparation

LCS (1811100-BS1)		Prepared & Analyzed: 11/07/18								
pH	9.1		pH Units	9.18		99.5	95-105			
Duplicate (1811100-DUP1)		Source: 1810368-02		Prepared & Analyzed: 11/07/18						
pH	8.7		pH Units		8.4			3.62	20	

Summit Scientific

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

Project: Ehrlich 4,22-7

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 11/08/18 10:06

Specific Conductance by EPA Method 120.1 - Quality Control
Summit Scientific

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

Batch 1810463 - General Preparation

Blank (1810463-BLK1)

Prepared & Analyzed: 10/31/18

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (1810463-BS1)

Prepared & Analyzed: 10/31/18

Specific Conductance (EC) 0.750 0.0100 mmhos/cm 0.750 99.9 90-110

Duplicate (1810463-DUP1)

Source: 1810343-01

Prepared & Analyzed: 10/31/18

Specific Conductance (EC) 0.430 0.0100 mmhos/cm 0.478 10.7 20

Batch 1811101 - General Preparation

Blank (1811101-BLK1)

Prepared & Analyzed: 11/07/18

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (1811101-BS1)

Prepared & Analyzed: 11/07/18

Specific Conductance (EC) 0.751 0.0100 mmhos/cm 0.750 100 90-110

Duplicate (1811101-DUP1)

Source: 1810368-02

Prepared & Analyzed: 11/07/18

Specific Conductance (EC) 3.15 0.0100 mmhos/cm 3.19 1.21 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: Ehrlich 4,22-7

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/08/18 10:06

Notes and Definitions

I-02 This sample was analyzed outside of the recommended holding time.

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

November 26, 2018

Mark Longhurst

PDC Energy

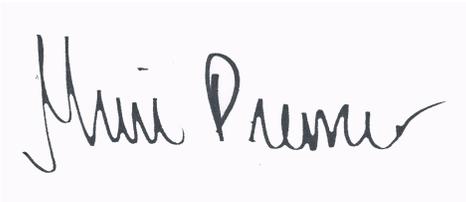
1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Ehrlich 4,22-7

Enclosed are the results of analyses for samples received by Summit Scientific on 11/16/18 15:44. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink on a light blue background. The signature reads "Muri Premer" in a cursive script.

Muri Premer For Ben Shrewsbury

Laboratory Manager



PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Ehrlich 4,22-7 Project Number: [none] Project Manager: Mark Longhurst	Reported: 11/26/18 13:26
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ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BG01@3'	1811216-01	Soil	11/16/18 10:26	11/16/18 15:44

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.

1811216

Summit Scientific

741 Corporate Circle Suite I ♦ Golden, Colorado 80401
303-277-9310 ♦ 303-374-5933 Fax

Client: PDC
Address: _____
City/State/Zip: _____
Phone: _____ Fax: _____
Sampler Name: Jake McCarver

Project Manager: Mark Longhurst
E-Mail: Mark.Longhurst@pdce.com
Project Name: Ehrlich 4, 22-7
Project Number: _____

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix			Analyze For:					Special Instructions			
				HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	GBTEXN (8260)	TPH - DRO	EC/pH					
BG01 @ 3'	11/16/2018	10:26	1		X			X					X						
Relinquished by: 		Date/Time: <u>11/16/18 3:44 pm</u>		Received by: 		Date/Time: <u>11-16-18 15:44</u>		Turn Around Time (Check)					Hold SS02-SS05						
Relinquished by:		Date/Time:		Received by:		Date/Time:		Same Day	<input type="checkbox"/>	72 Hours	<input type="checkbox"/>								
Relinquished by:		Date/Time:		Received in Lab by:		Date/Time:		24 Hours	<input type="checkbox"/>	Standard	<input checked="" type="checkbox"/>								
Relinquished by:		Date/Time:		Received in Lab by:		Date/Time:		Sample Integrity:											
Relinquished by:		Date/Time:		Received in Lab by:		Date/Time:		Temperature Upon Receipt: <u>-1</u>											
Relinquished by:		Date/Time:		Received in Lab by:		Date/Time:		Intact: Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>								

Sample Receipt Checklist

S2 Work Order: 1811214

Client: PDC Client Project ID: EHRICHT 4, 22-7

Shipped Via: _____ Airbill #: _____
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

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

Temp (°C)	.1
-----------	----

Thermometer ID: 61857155-K

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

Musi
 Custodian Printed Name or Initials

JA 11-16-18
 Signature or Initials of Custodian

17:00
 Date/Time



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

Project: Ehrlich 4,22-7

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 11/26/18 13:26

BG01@3'
1811216-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/16/18 10:26**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	7.64		pH Units	1	1811291	11/16/18	11/21/18	EPA 9045D	

Specific Conductance by EPA Method 120.1

Date Sampled: **11/16/18 10:26**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	5.36	0.0100	mmhos/cm	1	1811279	11/21/18	11/21/18	EPA 120.1	

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: Ehrlich 4,22-7

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 11/26/18 13:26

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

Summit Scientific

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

Batch 1811291 - General Preparation

LCS (1811291-BS1)

Prepared: 11/15/18 Analyzed: 11/21/18

pH	9.1	pH Units	9.18	99.6	95-105
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Duplicate (1811291-DUP1)

Source: 1811184-01

Prepared: 11/15/18 Analyzed: 11/21/18

pH	7.2	pH Units	7.3	0.138	20
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Summit Scientific

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

Project: Ehrlich 4,22-7

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 11/26/18 13:26

Specific Conductance by EPA Method 120.1 - Quality Control
Summit Scientific

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

Batch 1811279 - General Preparation

Blank (1811279-BLK1)

Prepared & Analyzed: 11/21/18

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (1811279-BS1)

Prepared & Analyzed: 11/21/18

Specific Conductance (EC) 0.761 0.0100 mmhos/cm 0.750 101 90-110

Duplicate (1811279-DUP1)

Source: 1811184-01

Prepared & Analyzed: 11/21/18

Specific Conductance (EC) 5.41 0.0100 mmhos/cm 6.27 14.7 20

Summit Scientific

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

Project: Ehrlich 4,22-7

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/26/18 13:26

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