

TABLE 1
FORMER FORD 23-13 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 @ 1'	1/8/2018	1	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	9.39	1.05
BCKG01 @ 1'	1/8/2018	1	NA	NA	NA	NA	NA	NA	8.28	0.688
SS02 @ 1.5'	1/22/2018	1.5	NA	NA	NA	NA	NA	NA	9.00	1.51

Notes:

1. Standards for soil are taken from 2 CCR 404-1, Table 910-1, effective January 30, 2015.

2. 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

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

January 15, 2018

Mark Longhurst
PDC Energy
1775 Sherman St. STE. 3000
Denver, CO 80203
RE: Ford 23-13

Enclosed are the results of analyses for samples received by Summit Scientific on 01/08/18 14:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Paul Shrewsbury For Ben Shrewsbury
Laboratory Manager



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

Project: Ford 23-13
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/15/18 07:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS01@1'	1801073-01	Soil	01/08/18 12:32	01/08/18 14:00
BCKG01@1'	1801073-02	Soil	01/08/18 12:50	01/08/18 14:00

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.

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

Page 1 of 1

Client:	PDC
Address:	
City/State/Zip:	
Phone:	Fax:
Sampler Name:	Tyler Blessisng

Project Manager:	Mark Longhurst
E-Mail:	Mark.Longhurst@pdce.com
Project Name:	Ford 23-13
Project Number:	

				Preservative				Matrix				Analyze For:								
Sample Description	Date Sampled	Time Sampled	Number of Containers	HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	GBTEXN (8260)	DRO (TPH)	EC	pH					Special Instructions
SS01 @ 1'	1/8/2017	12:32	1			X			X			X	X	X	X					HOLD BCKG01 @ 1'
BCKG01 @ 1'	1/8/2017	12:50	1			X			X											

Relinquished by: _____ Date/Time: 1/8/17 14:00		Received by: [Signature] 1-8-18 14:00		Turn Around Time (Check) 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 by: _____ Date/Time: _____		Sample Integrity: Temperature Upon Receipt: 2.9 Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Relinquished by: _____ Date/Time: _____		Received in Lab by: _____ Date/Time: _____			

1801073

Sample Receipt Checklist

S2 Work Order: _____

Client: PDCClient Project ID: Ford 23-13Shipped Via: P.V.
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Airbill #: _____

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

Cooler ID					
Temp (°C)	2.9				

Thermometer ID: T006

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature just above 0°C to ≤ 6°C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is waived 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 short holding time analytes or samples with HTs 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, etc.			✓	
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.

Muri P.
Custodian Printed Name

1-8-18
Signature or Initials of Custodian

17:00
Date/Time



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

Project: Ford 23-13
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/15/18 07:23

SS01@1'
1801073-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/08/18 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1801091	01/09/18	01/10/18	8015M	

Date Sampled: **01/08/18 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		97.8 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/08/18 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1801090	"	01/09/18	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **01/08/18 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		89.0 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	21-167		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/08/18 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.39	0.100	pH Units	1	1801084	01/09/18	01/09/18	EPA 9045	

Summit Scientific

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

Project: Ford 23-13
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/15/18 07:23

SS01@1'
1801073-01 (Soil)

Summit Scientific

Specific Conductance by EPA120.1

Date Sampled: **01/08/18 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.05	0.0100	mmhos/cm	1	1801083	01/09/18	01/09/18	EPA 120.1	

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

Project: Ford 23-13
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/15/18 07:23

BCKG01@1'
1801073-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/08/18 12:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.28	0.100	pH Units	1	1801130	01/12/18	01/12/18	EPA 9045	

Specific Conductance by EPA120.1

Date Sampled: **01/08/18 12:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.688	0.0100	mmhos/cm	1	1801125	01/12/18	01/12/18	EPA 120.1	

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

Project: Ford 23-13
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/15/18 07:23

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1801091 - EPA 3550A

Blank (1801091-BLK1)

Prepared & Analyzed: 01/09/18

C10-C28 (DRO)	ND	50	mg/kg							
Surrogate: o-Terphenyl	12.5		"	12.5		99.7	30-150			

LCS (1801091-BS1)

Prepared & Analyzed: 01/09/18

C10-C28 (DRO)	573	50	mg/kg	499		115	73-134			
Surrogate: o-Terphenyl	13.9		"	12.5		112	30-150			

Matrix Spike (1801091-MS1)

Source: 1801070-01

Prepared & Analyzed: 01/09/18

C10-C28 (DRO)	520	50	mg/kg	499	12.4	102	50-148			
Surrogate: o-Terphenyl	16.0		"	12.5		128	30-150			

Matrix Spike Dup (1801091-MSD1)

Source: 1801070-01

Prepared & Analyzed: 01/09/18

C10-C28 (DRO)	559	50	mg/kg	499	12.4	110	50-148	7.16	20	
Surrogate: o-Terphenyl	15.6		"	12.5		125	30-150			

Summit Scientific

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

Project: Ford 23-13
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/15/18 07:23

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 1801090 - EPA 5030 Soil MS

Blank (1801090-BLK1)

Prepared & Analyzed: 01/09/18

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0343</i>		<i>"</i>	<i>0.0400</i>		<i>85.6</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0408</i>		<i>"</i>	<i>0.0400</i>		<i>102</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0402</i>		<i>"</i>	<i>0.0400</i>		<i>101</i>	<i>21-167</i>			

LCS (1801090-BS1)

Prepared & Analyzed: 01/09/18

Benzene	0.102	0.0020	mg/kg	0.100		102	58-130			
Toluene	0.104	0.0050	"	0.100		104	61-134			
Ethylbenzene	0.110	0.0050	"	0.0992		111	74-139			
m,p-Xylene	0.209	0.010	"	0.200		105	73-137			
o-Xylene	0.105	0.0050	"	0.0980		107	73-141			
Xylenes (total)	0.314	0.0050	"				30-150			
Gasoline Range Hydrocarbons	2.71	0.50	"				30-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0343</i>		<i>"</i>	<i>0.0400</i>		<i>85.6</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0424</i>		<i>"</i>	<i>0.0400</i>		<i>106</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 (1801090-MS1)

Source: 1801070-01

Prepared & Analyzed: 01/09/18

Benzene	0.102	0.0020	mg/kg	0.100	ND	102	30-131			
Toluene	0.105	0.0050	"	0.100	ND	105	30-134			
Ethylbenzene	0.114	0.0050	"	0.0992	ND	115	22-153			
m,p-Xylene	0.215	0.010	"	0.200	ND	108	10-159			
o-Xylene	0.109	0.0050	"	0.0980	ND	111	31-151			
Xylenes (total)	0.324	0.0050	"		ND		30-150			
Gasoline Range Hydrocarbons	2.86	0.50	"		ND		30-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0363</i>		<i>"</i>	<i>0.0400</i>		<i>90.8</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0411</i>		<i>"</i>	<i>0.0400</i>		<i>103</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0390</i>		<i>"</i>	<i>0.0400</i>		<i>97.6</i>	<i>21-167</i>			

Summit Scientific

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

Project: Ford 23-13
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/15/18 07:23

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 1801090 - EPA 5030 Soil MS

Matrix Spike Dup (1801090-MSD1)	Source: 1801070-01			Prepared & Analyzed: 01/09/18						
Benzene	0.110	0.0020	mg/kg	0.100	ND	110	30-131	6.98	34	
Toluene	0.114	0.0050	"	0.100	ND	114	30-134	8.44	30	
Ethylbenzene	0.126	0.0050	"	0.0992	ND	127	22-153	9.85	24	
m,p-Xylene	0.237	0.010	"	0.200	ND	118	10-159	9.39	68	
o-Xylene	0.121	0.0050	"	0.0980	ND	124	31-151	10.9	38	
Xylenes (total)	0.358	0.0050	"		ND		30-150	9.90	20	
Gasoline Range Hydrocarbons	3.12	0.50	"		ND		30-150	8.57	20	
Surrogate: 1,2-Dichloroethane-d4	0.0370		"	0.0400		92.6	23-173			
Surrogate: Toluene-d8	0.0411		"	0.0400		103	20-170			
Surrogate: 4-Bromofluorobenzene	0.0398		"	0.0400		99.4	21-167			

Summit Scientific

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

Project: Ford 23-13
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/15/18 07:23

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

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

Batch 1801084 - General Preparation

LCS (1801084-BS1)				Prepared & Analyzed: 01/09/18							
pH	9.22	0.100	pH Units	9.16	101	95-105					
Duplicate (1801084-DUP1)				Source: 1801070-01		Prepared & Analyzed: 01/09/18					
pH	9.18	0.100	pH Units		9.20			0.218		20	

Batch 1801130 - General Preparation

LCS (1801130-BS1)				Prepared & Analyzed: 01/12/18							
pH	9.22	0.100	pH Units	9.16	101	95-105					
Duplicate (1801130-DUP1)				Source: 1801024-02		Prepared & Analyzed: 01/12/18					
pH	8.46	0.100	pH Units		8.49			0.354		20	

Summit Scientific

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

Project: Ford 23-13
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/15/18 07:23

Specific Conductance by EPA120.1 - Quality Control
Summit Scientific

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

Batch 1801083 - General Preparation

Blank (1801083-BLK1) Prepared & Analyzed: 01/09/18

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (1801083-BS1) Prepared & Analyzed: 01/09/18

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

Duplicate (1801083-DUP1) Source: 1801070-01 Prepared & Analyzed: 01/09/18

Specific Conductance (EC) 0.406 0.0100 mmhos/cm 0.409 0.908 20

Batch 1801125 - General Preparation

Blank (1801125-BLK1) Prepared & Analyzed: 01/12/18

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (1801125-BS1) Prepared & Analyzed: 01/12/18

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

Duplicate (1801125-DUP1) Source: 1801024-02 Prepared & Analyzed: 01/12/18

Specific Conductance (EC) 2.23 0.0100 mmhos/cm 2.22 0.450 20

Summit Scientific

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

Project: Ford 23-13

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/15/18 07:23

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

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

January 24, 2018

Mark Longhurst
PDC Energy
1775 Sherman St. STE. 3000
Denver, CO 80203
RE: Ford 23-13

Enclosed are the results of analyses for samples received by Summit Scientific on 01/22/18 13:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Paul Shrewsbury For Ben Shrewsbury
Laboratory Manager



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

Project: Ford 23-13
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/24/18 13:37

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS02@1.5'	1801226-01	Soil	01/22/18 09:55	01/22/18 13:00

Summit Scientific

A handwritten signature in black ink, appearing to be 'MSM'.

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.

Page 1 of 1

Project Manager:	Mark Longhurst
E-Mail:	Mark.Longhurst@pdce.com
Project Name:	Ford 23-13
Project Number:	

[illegible]

Sample Receipt Checklist

S2 Work Order: _____

Client: PDC Client Project ID: Ford 23-13

Shipped Via: P.U.
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

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

Cooler ID					
Temp (°C)	3.7				

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			
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⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
If custody seals are present, are they intact ⁽¹⁾ ?			X	
Are short holding time analytes or samples with HTs 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⁾ ?				
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect			X	
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ?				
Record the pH in Comments.			X	
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.

Muril P.
Custodian Printed Name

1-22-18
Signature or Initials of Custodian

17:08
Date/Time



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

Project: Ford 23-13
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/24/18 13:37

SS02@1.5'
1801226-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/22/18 09:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.00	0.100	pH Units	1	1801241	01/22/18	01/22/18	EPA 9045	

Specific Conductance by EPA120.1

Date Sampled: **01/22/18 09:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.51	0.0100	mmhos/cm	1	1801242	01/23/18	01/23/18	EPA 120.1	

Summit Scientific

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

Project: Ford 23-13
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/24/18 13:37

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

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

Batch 1801241 - General Preparation

LCS (1801241-BS1)

Prepared & Analyzed: 01/22/18

pH	9.32	0.100	pH Units	9.16	102	95-105
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Duplicate (1801241-DUP1)

Source: 1801168-01

Prepared & Analyzed: 01/22/18

pH	7.32	0.100	pH Units	7.35	0.409	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: Ford 23-13
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/24/18 13:37

Specific Conductance by EPA120.1 - Quality Control
Summit Scientific

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

Batch 1801242 - General Preparation

Blank (1801242-BLK1)

Prepared & Analyzed: 01/23/18

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (1801242-BS1)

Prepared & Analyzed: 01/23/18

Specific Conductance (EC) 0.754 0.0100 mmhos/cm 0.750 100 90-110

Duplicate (1801242-DUP1)

Source: 1801168-01

Prepared & Analyzed: 01/23/18

Specific Conductance (EC) 0.188 0.0100 mmhos/cm 0.187 0.133 20

Summit Scientific

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

Project: Ford 23-13

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
01/24/18 13:37

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