

TABLE 1
FORMER WEBSTER FARMS 31-11 TANK BATTERY
SOIL ANALYTICAL RESULTS SUMMARY TABLE

Sample ID	Date Sampled	Depth (ft. bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TPH ⁽²⁾ (mg/kg)
COGCC Table 910-1 Soil Standard (mg/kg) ⁽¹⁾			0.17	85	100	175	23	500
SS06 @ 7'	3/27/2020	7	<0.0020	<0.0050	<0.0050	0.017	<0.010	2.1
SS07 @ 4'	3/27/2020	4	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50
SS08 @ 4'	3/27/2020	4	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50
SS09 @ 4'	3/27/2020	4	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50
SS10 @ 4'	3/30/2020	4	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50
SS11 @ 4'	3/30/2020	4	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50
SS12 @ 7'	3/30/2020	7	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50
SS13 @ 4'	3/30/2020	4	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50
SS14 @ 7'	3/30/2020	7	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50
SS15 @ 4'	3/30/2020	4	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50
SS16 @ 4'	3/30/2020	4	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50

Notes:

1. Standards for soil are taken from 2 CCR 404-1, Table 910-1, effective May 1, 2018.

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

ft. = Feet

bgs = Below ground surface

TABLE 2
FORMER WEBSTER FARMS 31-11 TANK BATTERY
GROUNDWATER ANALYTICAL RESULTS SUMMARY TABLE

Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Depth to Water (ft. bgs) ⁽²⁾
COGCC Table 910-1 Groundwater Standard (µg/L) ⁽¹⁾		5	560	700	1,400	
GW01	4/1/2020	<1.0	<1.0	<1.0	<2.0	~7

Notes:

1. Groundwater standards referenced from 2 CCR 404-1, Table 910-1, effective May 1, 2018.

2. Depth to groundwater measured from ground surface.

COGCC = Colorado Oil and Gas Conservation Commission

µg/L= Micrograms per liter

ft. = Feet

bgs = Below ground surface

(<) = Analytical result is less than the indicated laboratory reporting limit.

ATTACHMENT A

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

April 06, 2020

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Webster Farms 31-11

Work Order #2003337

Enclosed are the results of analyses for samples received by Summit Scientific on 03/27/20 15:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury

President



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

Project: Webster Farms 31-11

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
04/06/20 12:00

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS01@5'	2003337-01	Soil	03/27/20 10:46	03/27/20 15:50
SS06@7'	2003337-06	Soil	03/27/20 14:30	03/27/20 15:50
SS07@4'	2003337-07	Soil	03/27/20 14:33	03/27/20 15:50
SS08@4'	2003337-08	Soil	03/27/20 14:36	03/27/20 15:50
SS09@4'	2003337-09	Soil	03/27/20 14:39	03/27/20 15:50

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

2003337.1

1750 East Mountain Drive • Golden, Colorado 80401
 (303) 277-9310

Page 1 of 2

Client: PDC Tisman Project Manager: Mark Longhurst
 Address: 6855 W 119th Ave E-Mail: mark.longhurst@PDCI.com
 City/State/Zip: Broomfield/ CO/ 80020
 Phone: 303-487-1228 Project Name: Webster 31-11
 Sampler Name: Cody Gessell 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	\$260 BTEX	\$260B GBTEX	\$015 DRO	pH/EC	
1	SS01 @ 5'	3/27/20	1046	1			X			X			X	X	X		
2	SS02 @ 3'		1049														X
3	SS03 @ 3'		1052														
4	SS04 @ 3'		1055														
5	SS05 @ 3'		1058														
6																	
7																	
8																	
9																	
10																	

Relinquished by: Cody Gessell	Date/Time: 3/27/20 1550	Received by: Tisman's Lock Box Summit	Date/Time: 3/27/20 1550	Turn Around Time (Check)	Notes:
Relinquished by: Tisman's Lock Box Summit	Date/Time: 03/27/2020 1600	Received by: 	Date/Time: 03/27/2020 1600	Same Day _____ 72 hours _____ 24 hours _____ Standard <u>X</u> 48 hours _____	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Sample Integrity: Temperature Upon Receipt: <u>4.6</u> Samples Intact: <u>0</u> No	

Summit Scientific

2003337.2

3050 East Mountain Drive • Golden, Colorado 80401
303-277-9310

Page 2 of 2

Client: PDC - Fasman Project Manager: Mark Longhurst
 Address: 6855 W 119th Ave E-Mail: mark.longhurst@PDCI.com
 City/State/Zip: Broomfield/ CO/ 80020
 Phone: 303-487-1228 Project Name: Webster 31-11
 Sampler Name: Cody Gessell 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	\$260 BTEX	\$260B CBTEX	\$015 DRO	
1	SS06 @ 7'	3/27/20	1430	1			X			X			X	X		
2	SS07 @ 4'		1433													
3	SS08 @ 4'		1436													
4	SS09 @ 4'		1439													
5																
6																
7																
8																
9																
10																

Relinquished by: Cody Gessell	Date/Time: 3/27/20 1550	Received by: Fasman's Lock Box Summit	Date/Time: 3/27/20 1550	Turn Around Time (Check) Same Day <input checked="" type="checkbox"/> 72 hours ___ 24 hours ___ Standard ___ 48 hours ___	Notes:
Relinquished by: Fasman's Lock Box Summit	Date/Time: 03/27/2020 1600	Received by: 	Date/Time: 03/27/2020 1600	Sample Integrity: Temperature Upon Receipt: 4.6 Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	
Relinquished by:	Date/Time:	Received by: 	Date/Time:		

Sample Receipt Checklist

S2 Work Order 2003337

Client: PDC HANMAN Client Project ID: Webstar 31-11

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

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

Temp (°C)	4.6
-----------	-----

Thermometer ID: 61857155-K

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

Additional Comments (if any):

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

DEE
Custodian Printed Name or Initials

[Signature]
Signature of Custodian

03/24/2020
Date/Time



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

Project: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:00

SS01@5'
2003337-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/27/20 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	2003356	03/30/20	04/01/20	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Naphthalene	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	26	0.50	"	"	"	"	"	"	

Date Sampled: **03/27/20 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		117 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		240 %	21-167		"	"	"	"	S-02

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/27/20 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	250	50	mg/kg	1	2003357	03/30/20	03/31/20	EPA 8015M	

Date Sampled: **03/27/20 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		113 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/27/20 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.17		pH Units	1	2004048	04/03/20	04/03/20	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: Webster Farms 31-11

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 04/06/20 12:00

SS01@5'
2003337-01 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1

Date Sampled: **03/27/20 10:46**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	1.10	0.0100	mmhos/cm	1	2004049	04/03/20	04/03/20	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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:00

SS06@7'
2003337-06 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/27/20 14:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	2003351	03/27/20	03/28/20	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	0.017	0.010		"	"	"	"	"	"	
Naphthalene	ND	0.010		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	2.1	0.50		"	"	"	"	"	"	

Date Sampled: **03/27/20 14:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		120 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		106 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %		21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/27/20 14:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	2003352	03/27/20	03/27/20	EPA 8015M	

Date Sampled: **03/27/20 14:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		106 %		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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:00

SS07@4'
2003337-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/27/20 14:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	2003351	03/27/20	03/28/20	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: **03/27/20 14:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		127 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		105 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		110 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/27/20 14:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	2003352	03/27/20	03/27/20	EPA 8015M	

Date Sampled: **03/27/20 14:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		107 %	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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:00

SS08@4'
2003337-08 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/27/20 14:36**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	2003351	03/27/20	03/28/20	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: **03/27/20 14:36**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		108 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		105 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/27/20 14:36**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	2003352	03/27/20	03/27/20	EPA 8015M	

Date Sampled: **03/27/20 14:36**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		125 %	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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:00

SS09@4'
2003337-09 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/27/20 14:39**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	2003351	03/27/20	03/28/20	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: **03/27/20 14:39**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		128 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		105 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		115 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/27/20 14:39**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	2003352	03/27/20	03/27/20	EPA 8015M	

Date Sampled: **03/27/20 14:39**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		105 %	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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:00

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 2003351 - EPA 5030 Soil MS

Blank (2003351-BLK1)

Prepared: 03/27/20 Analyzed: 03/28/20

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	0.0464		"	0.0400		116	23-173				
Surrogate: Toluene-d8	0.0423		"	0.0400		106	20-170				
Surrogate: 4-Bromofluorobenzene	0.0452		"	0.0400		113	21-167				

LCS (2003351-BS1)

Prepared: 03/27/20 Analyzed: 03/28/20

Benzene	0.0718	0.0020	mg/kg	0.100		71.8	70-130				
Toluene	0.0760	0.0050	"	0.100		76.0	70-130				
Ethylbenzene	0.0871	0.0050	"	0.100		87.1	70-130				
m,p-Xylene	0.168	0.010	"	0.200		83.8	70-130				
o-Xylene	0.0837	0.0050	"	0.100		83.7	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.0336		"	0.0400		83.9	23-173				
Surrogate: Toluene-d8	0.0389		"	0.0400		97.4	20-170				
Surrogate: 4-Bromofluorobenzene	0.0406		"	0.0400		102	21-167				

Matrix Spike (2003351-MS1)

Source: 2003334-01

Prepared: 03/27/20 Analyzed: 03/28/20

Benzene	1.00	0.0020	mg/kg	0.100	2.97	NR	70-130				E, QM-07
Toluene	0.0778	0.0050	"	0.100	ND	77.8	70-130				
Ethylbenzene	0.705	0.0050	"	0.100	3.72	NR	70-130				E, QM-07
m,p-Xylene	2.36	0.010	"	0.200	16.8	NR	70-130				E, QM-07
o-Xylene	1.44	0.0050	"	0.100	6.30	NR	70-130				E, QM-07
Surrogate: 1,2-Dichloroethane-d4	0.0807		"	0.0400		202	23-173				S-02
Surrogate: Toluene-d8	0.0367		"	0.0400		91.7	20-170				
Surrogate: 4-Bromofluorobenzene	0.100		"	0.0400		251	21-167				S-02

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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:00

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 2003351 - EPA 5030 Soil MS

Matrix Spike Dup (2003351-MSD1)

Source: 2003334-01

Prepared: 03/27/20 Analyzed: 03/28/20

Benzene	0.912	0.0020	mg/kg	0.100	2.97	NR	70-130	9.70	30	E, QM-07
Toluene	0.0780	0.0050	"	0.100	ND	78.0	70-130	0.154	30	
Ethylbenzene	0.678	0.0050	"	0.100	3.72	NR	70-130	3.90	30	E, QM-07
m,p-Xylene	2.29	0.010	"	0.200	16.8	NR	70-130	3.35	30	E, QM-07
o-Xylene	1.39	0.0050	"	0.100	6.30	NR	70-130	4.03	30	E, QM-07
Surrogate: 1,2-Dichloroethane-d4	0.0526		"	0.0400		132	23-173			
Surrogate: Toluene-d8	0.0367		"	0.0400		91.8	20-170			
Surrogate: 4-Bromofluorobenzene	0.106		"	0.0400		265	21-167			S-02

Batch 2003356 - EPA 5030 Soil MS

Blank (2003356-BLK1)

Prepared: 03/30/20 Analyzed: 04/01/20

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	0.0473		"	0.0400		118	23-173			
Surrogate: Toluene-d8	0.0419		"	0.0400		105	20-170			
Surrogate: 4-Bromofluorobenzene	0.0446		"	0.0400		112	21-167			

LCS (2003356-BS1)

Prepared: 03/30/20 Analyzed: 04/01/20

Benzene	0.0766	0.0020	mg/kg	0.100		76.6	70-130			
Toluene	0.0837	0.0050	"	0.100		83.7	70-130			
Ethylbenzene	0.0873	0.0050	"	0.100		87.3	70-130			
m,p-Xylene	0.171	0.010	"	0.200		85.3	70-130			
o-Xylene	0.0866	0.0050	"	0.100		86.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0391		"	0.0400		97.7	23-173			
Surrogate: Toluene-d8	0.0408		"	0.0400		102	20-170			
Surrogate: 4-Bromofluorobenzene	0.0412		"	0.0400		103	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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:00

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 2003356 - EPA 5030 Soil MS

Matrix Spike (2003356-MS1)	Source: 2003321-05			Prepared: 03/30/20		Analyzed: 04/01/20				
Benzene	0.0729	0.0020	mg/kg	0.100	ND	72.9	70-130			
Toluene	0.0787	0.0050	"	0.100	ND	78.7	70-130			
Ethylbenzene	0.0894	0.0050	"	0.100	ND	89.4	70-130			
m,p-Xylene	0.174	0.010	"	0.200	ND	86.9	70-130			
o-Xylene	0.0876	0.0050	"	0.100	ND	87.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0377		"	0.0400		94.3	23-173			
Surrogate: Toluene-d8	0.0398		"	0.0400		99.6	20-170			
Surrogate: 4-Bromofluorobenzene	0.0410		"	0.0400		103	21-167			

Matrix Spike Dup (2003356-MSD1)	Source: 2003321-05			Prepared: 03/30/20		Analyzed: 04/01/20				
Benzene	0.0726	0.0020	mg/kg	0.100	ND	72.6	70-130	0.371	30	
Toluene	0.0787	0.0050	"	0.100	ND	78.7	70-130	0.0763	30	
Ethylbenzene	0.0888	0.0050	"	0.100	ND	88.8	70-130	0.606	30	
m,p-Xylene	0.172	0.010	"	0.200	ND	86.2	70-130	0.832	30	
o-Xylene	0.0867	0.0050	"	0.100	ND	86.7	70-130	0.964	30	
Surrogate: 1,2-Dichloroethane-d4	0.0367		"	0.0400		91.7	23-173			
Surrogate: Toluene-d8	0.0395		"	0.0400		98.8	20-170			
Surrogate: 4-Bromofluorobenzene	0.0408		"	0.0400		102	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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:00

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 2003352 - EPA 3550A

Blank (2003352-BLK1)

Prepared & Analyzed: 03/27/20

C10-C28 (DRO) ND 50 mg/kg

LCS (2003352-BS1)

Prepared & Analyzed: 03/27/20

C10-C28 (DRO) 521 50 mg/kg 500 104 70-130

Matrix Spike (2003352-MS1)

Source: 2003334-01

Prepared & Analyzed: 03/27/20

C10-C28 (DRO) 1190 50 mg/kg 500 630 112 70-130

Matrix Spike Dup (2003352-MSD1)

Source: 2003334-01

Prepared & Analyzed: 03/27/20

C10-C28 (DRO) 1150 50 mg/kg 500 630 104 70-130 3.57 20

Batch 2003357 - EPA 3550A

Blank (2003357-BLK1)

Prepared & Analyzed: 03/30/20

C10-C28 (DRO) ND 50 mg/kg

LCS (2003357-BS1)

Prepared: 03/30/20 Analyzed: 03/31/20

C10-C28 (DRO) 504 50 mg/kg 500 101 70-130

Matrix Spike (2003357-MS1)

Source: 2003321-05

Prepared: 03/30/20 Analyzed: 03/31/20

C10-C28 (DRO) 491 50 mg/kg 500 19.9 94.1 70-130

Matrix Spike Dup (2003357-MSD1)

Source: 2003321-05

Prepared: 03/30/20 Analyzed: 03/31/20

C10-C28 (DRO) 494 50 mg/kg 500 19.9 94.8 70-130 0.659 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: Webster Farms 31-11

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 04/06/20 12:00

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

Summit Scientific

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

Batch 2004048 - General Preparation

LCS (2004048-BS1)

Prepared & Analyzed: 04/03/20

pH 9.22 pH Units 9.18 100 95-105

Duplicate (2004048-DUP1)

Source: 2004032-02

Prepared & Analyzed: 04/03/20

pH 8.18 pH Units 8.20 0.244 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: Webster Farms 31-11

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 04/06/20 12:00

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 2004049 - General Preparation

Blank (2004049-BLK1)

Prepared & Analyzed: 04/03/20

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (2004049-BS1)

Prepared & Analyzed: 04/03/20

Specific Conductance (EC) 0.752 0.0100 mmhos/cm 0.750 100 90-110

Duplicate (2004049-DUP1)

Source: 2004032-02

Prepared & Analyzed: 04/03/20

Specific Conductance (EC) 0.661 0.0100 mmhos/cm 0.643 2.69 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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:00

Notes and Definitions

- S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
- 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.
- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.
- 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

April 06, 2020

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Webster Farms 31-11

Work Order #2003343

Enclosed are the results of analyses for samples received by Summit Scientific on 03/30/20 14:10. 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: Webster Farms 31-11

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
04/06/20 12:04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS10@4'	2003343-01	Soil	03/30/20 09:22	03/30/20 14:10
SS11@4'	2003343-02	Soil	03/30/20 09:25	03/30/20 14:10
SS12@7'	2003343-03	Soil	03/30/20 09:28	03/30/20 14:10
SS13@4'	2003343-04	Soil	03/30/20 09:31	03/30/20 14:10
SS14@7'	2003343-05	Soil	03/30/20 09:34	03/30/20 14:10
SS15@4'	2003343-06	Soil	03/30/20 10:20	03/30/20 14:10
SS16@4'	2003343-07	Soil	03/30/20 10:23	03/30/20 14:10

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

2003343

1651 Labl Mountain Drive ♦ Golden, Colorado 80402
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: Webster 31-11
 Sampler Name: Cody Gessell 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	\$260 BTEX	\$260B CBTEX	\$015 DRO	pH/EC	
1	SS11@ 4'	3/30/20	0922	1			X			X			X	X			
2	SS12@ 4'		0925														
3	SS13@ 7'		0928														
4	SS14@ 4'		0931														
5	SS15@ 7'		0934														
6	SS16@ 4'		1620														
7	SS17@ 4'		1023														
8																	
9																	
10																	

Relinquished by: <i>Cody Gessell</i>	Date/Time: 3/30/20 1410	Received by: Tasman's Lock Box Summit	Date/Time: 3/30/20 1410	Turn Around Time (Check) Same Day <input checked="" type="checkbox"/> 72 hours ___ 24 hours ___ Standard ___ 48 hours ___ Sample Integrity: Temperature Upon Receipt: 5.2 Samples Intact: <input checked="" type="checkbox"/> Yes No	Notes:
Relinquished by: Tasman's Lock Box Summit	Date/Time: 03/30/2020 1600	Received by: <i>[Signature]</i>	Date/Time: 03/30/2020 1600		
Relinquished by:	Date/Time:	Received by:	Date/Time:		

Sample Receipt Checklist

S2 Work Order 2003343

Client: PDC / TASMAN Client Project ID: WEBSTER 31 - 11

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

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

Temp (°C)	5.2
-----------	-----

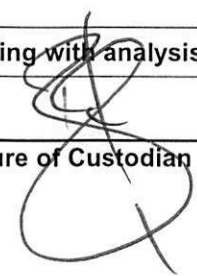
Thermometer ID: 61857155-K

	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.

RZ

 Custodian Printed Name or Initials



 Signature of Custodian

3/30/20

 Date/Time



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

Project: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:04

SS10@4'
2003343-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/30/20 09:22**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	2003366	03/30/20	03/30/20	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: **03/30/20 09:22**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		123 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		106 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		110 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/30/20 09:22**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	2003367	03/30/20	03/30/20	EPA 8015M	

Date Sampled: **03/30/20 09:22**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		115 %	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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:04

SS11@4'
2003343-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/30/20 09:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	2003366	03/30/20	03/30/20	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: **03/30/20 09:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		104 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		105 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/30/20 09:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	2003367	03/30/20	03/30/20	EPA 8015M	

Date Sampled: **03/30/20 09:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		125 %	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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:04

SS12@7'
2003343-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/30/20 09:28**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	2003366	03/30/20	03/30/20	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: **03/30/20 09:28**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		123 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		103 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		110 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/30/20 09:28**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	2003367	03/30/20	03/30/20	EPA 8015M	

Date Sampled: **03/30/20 09:28**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		118 %	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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:04

SS13@4'
2003343-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/30/20 09:31**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	2003366	03/30/20	03/30/20	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: **03/30/20 09:31**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		124 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		106 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		110 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/30/20 09:31**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	2003367	03/30/20	03/30/20	EPA 8015M	

Date Sampled: **03/30/20 09:31**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		120 %	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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:04

SS14@7'
2003343-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/30/20 09:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	2003366	03/30/20	03/30/20	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: **03/30/20 09:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		110 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		106 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/30/20 09:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	2003367	03/30/20	03/30/20	EPA 8015M	

Date Sampled: **03/30/20 09:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		119 %	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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:04

SS15@4'
2003343-06 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/30/20 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	2003366	03/30/20	03/30/20	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: **03/30/20 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		120 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		115 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/30/20 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2003367	03/30/20	03/30/20	EPA 8015M	

Date Sampled: **03/30/20 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		121 %	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: Webster Farms 31-11

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 04/06/20 12:04

SS16@4'
2003343-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/30/20 10:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	2003366	03/30/20	03/30/20	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: **03/30/20 10:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		128 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		107 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		111 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/30/20 10:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2003367	03/30/20	03/30/20	EPA 8015M	

Date Sampled: **03/30/20 10:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		119 %	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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:04

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 2003366 - EPA 5030 Soil MS

Blank (2003366-BLK1)

Prepared & Analyzed: 03/30/20

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	0.0425		"	0.0400		106	23-173				
Surrogate: Toluene-d8	0.0422		"	0.0400		105	20-170				
Surrogate: 4-Bromofluorobenzene	0.0422		"	0.0400		105	21-167				

LCS (2003366-BS1)

Prepared & Analyzed: 03/30/20

Benzene	0.0745	0.0020	mg/kg	0.100		74.5	70-130				
Toluene	0.0798	0.0050	"	0.100		79.8	70-130				
Ethylbenzene	0.0889	0.0050	"	0.100		88.9	70-130				
m,p-Xylene	0.171	0.010	"	0.200		85.7	70-130				
o-Xylene	0.0842	0.0050	"	0.100		84.2	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.0350		"	0.0400		87.4	23-173				
Surrogate: Toluene-d8	0.0398		"	0.0400		99.4	20-170				
Surrogate: 4-Bromofluorobenzene	0.0407		"	0.0400		102	21-167				

Matrix Spike (2003366-MS1)

Source: 2003343-01

Prepared & Analyzed: 03/30/20

Benzene	0.0737	0.0020	mg/kg	0.100	ND	73.7	70-130				
Toluene	0.0794	0.0050	"	0.100	ND	79.4	70-130				
Ethylbenzene	0.0876	0.0050	"	0.100	ND	87.6	70-130				
m,p-Xylene	0.170	0.010	"	0.200	ND	84.9	70-130				
o-Xylene	0.0855	0.0050	"	0.100	ND	85.5	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.0384		"	0.0400		96.0	23-173				
Surrogate: Toluene-d8	0.0395		"	0.0400		98.8	20-170				
Surrogate: 4-Bromofluorobenzene	0.0404		"	0.0400		101	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: Webster Farms 31-11

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 04/06/20 12:04

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 2003366 - EPA 5030 Soil MS

Matrix Spike Dup (2003366-MSD1)

Source: 2003343-01

Prepared: 03/30/20 Analyzed: 03/31/20

Benzene	0.0732	0.0020	mg/kg	0.100	ND	73.2	70-130	0.694	30	
Toluene	0.0731	0.0050	"	0.100	ND	73.1	70-130	8.34	30	
Ethylbenzene	0.0849	0.0050	"	0.100	ND	84.9	70-130	3.17	30	
m,p-Xylene	0.165	0.010	"	0.200	ND	82.6	70-130	2.74	30	
o-Xylene	0.0826	0.0050	"	0.100	ND	82.6	70-130	3.43	30	
Surrogate: 1,2-Dichloroethane-d4	0.0346		"	0.0400		86.6	23-173			
Surrogate: Toluene-d8	0.0397		"	0.0400		99.3	20-170			
Surrogate: 4-Bromofluorobenzene	0.0398		"	0.0400		99.6	21-167			

Summit Scientific

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



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

Project: Webster Farms 31-11

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 04/06/20 12:04

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 2003367 - EPA 3550A

Blank (2003367-BLK1)

Prepared & Analyzed: 03/30/20

C10-C28 (DRO) ND 50 mg/kg

LCS (2003367-BS1)

Prepared & Analyzed: 03/30/20

C10-C28 (DRO) 507 50 mg/kg 500 101 70-130

Matrix Spike (2003367-MS1)

Source: 2003343-01

Prepared & Analyzed: 03/30/20

C10-C28 (DRO) 541 50 mg/kg 500 32.4 102 70-130

Matrix Spike Dup (2003367-MSD1)

Source: 2003343-01

Prepared & Analyzed: 03/30/20

C10-C28 (DRO) 535 50 mg/kg 500 32.4 101 70-130 1.14 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: Webster Farms 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/06/20 12:04

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

April 02, 2020

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

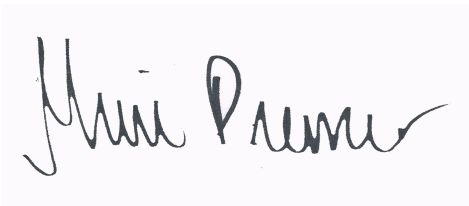
Denver, CO 80203

RE: Webster 31-11

Work Order #2004002

Enclosed are the results of analyses for samples received by Summit Scientific on 04/01/20 13:30. 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 Paul Shrewsbury
President



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

Project: Webster 31-11

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
04/02/20 13:35

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW01	2004002-01	Water	04/01/20 09:40	04/01/20 13:30

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.

Sample Receipt Checklist

S2 Work Order 2004002

Client: PDC / TASMAN Client Project ID: WEBSTER 31 - 11

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

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

Temp (°C)	2.9
-----------	-----

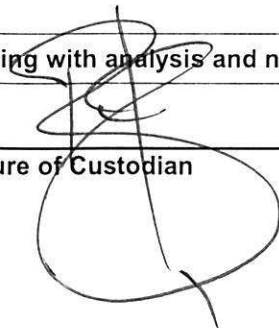
Thermometer ID: 61857155-K

	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	✓			HCL
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.

RZ
Custodian Printed Name or Initials


Signature of Custodian

4/1/20
Date/Time



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

Project: Webster 31-11

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 04/02/20 13:35

GW01
2004002-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/01/20 09:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	1.0	ug/l	1	2004010	04/01/20	04/01/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **04/01/20 09:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		72.0 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.2 %	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: Webster 31-11

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/02/20 13:35

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 2004010 - EPA 5030 Water MS

Blank (2004010-BLK1)

Prepared & Analyzed: 04/01/20

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	9.52		"	13.3		71.4	23-173			
Surrogate: Toluene-d8	13.1		"	13.3		98.4	20-170			
Surrogate: 4-Bromofluorobenzene	12.8		"	13.3		95.9	21-167			

LCS (2004010-BS1)

Prepared & Analyzed: 04/01/20

Benzene	25.8	1.0	ug/l	33.3		77.4	51-132			
Toluene	26.1	1.0	"	33.3		78.3	51-138			
Ethylbenzene	31.7	1.0	"	33.3		95.0	58-146			
m,p-Xylene	62.3	2.0	"	66.7		93.5	57-144			
o-Xylene	28.7	1.0	"	33.3		86.0	53-146			
Surrogate: 1,2-Dichloroethane-d4	8.68		"	13.3		65.1	23-173			
Surrogate: Toluene-d8	12.8		"	13.3		96.1	20-170			
Surrogate: 4-Bromofluorobenzene	12.7		"	13.3		95.6	21-167			

Matrix Spike (2004010-MS1)

Source: 2003362-01

Prepared & Analyzed: 04/01/20

Benzene	25.6	1.0	ug/l	33.3	ND	76.7	34-141			
Toluene	26.4	1.0	"	33.3	ND	79.3	27-151			
Ethylbenzene	32.9	1.0	"	33.3	ND	98.7	29-160			
m,p-Xylene	65.6	2.0	"	66.7	ND	98.3	20-166			
o-Xylene	29.6	1.0	"	33.3	ND	88.8	33-159			
Surrogate: 1,2-Dichloroethane-d4	8.09		"	13.3		60.7	23-173			
Surrogate: Toluene-d8	12.9		"	13.3		96.7	20-170			
Surrogate: 4-Bromofluorobenzene	12.6		"	13.3		94.7	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: Webster 31-11

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 04/02/20 13:35

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 2004010 - EPA 5030 Water MS

Matrix Spike Dup (2004010-MSD1)	Source: 2003362-01			Prepared & Analyzed: 04/01/20						
Benzene	26.5	1.0	ug/l	33.3	ND	79.5	34-141	3.53	30	
Toluene	26.5	1.0	"	33.3	ND	79.4	27-151	0.113	30	
Ethylbenzene	30.5	1.0	"	33.3	ND	91.6	29-160	7.41	30	
m,p-Xylene	60.5	2.0	"	66.7	ND	90.8	20-166	7.98	30	
o-Xylene	27.8	1.0	"	33.3	ND	83.3	33-159	6.42	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>10.7</i>		<i>"</i>	<i>13.3</i>		<i>80.1</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>12.9</i>		<i>"</i>	<i>13.3</i>		<i>96.8</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>12.7</i>		<i>"</i>	<i>13.3</i>		<i>95.0</i>	<i>21-167</i>			

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: Webster 31-11
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
04/02/20 13:35

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