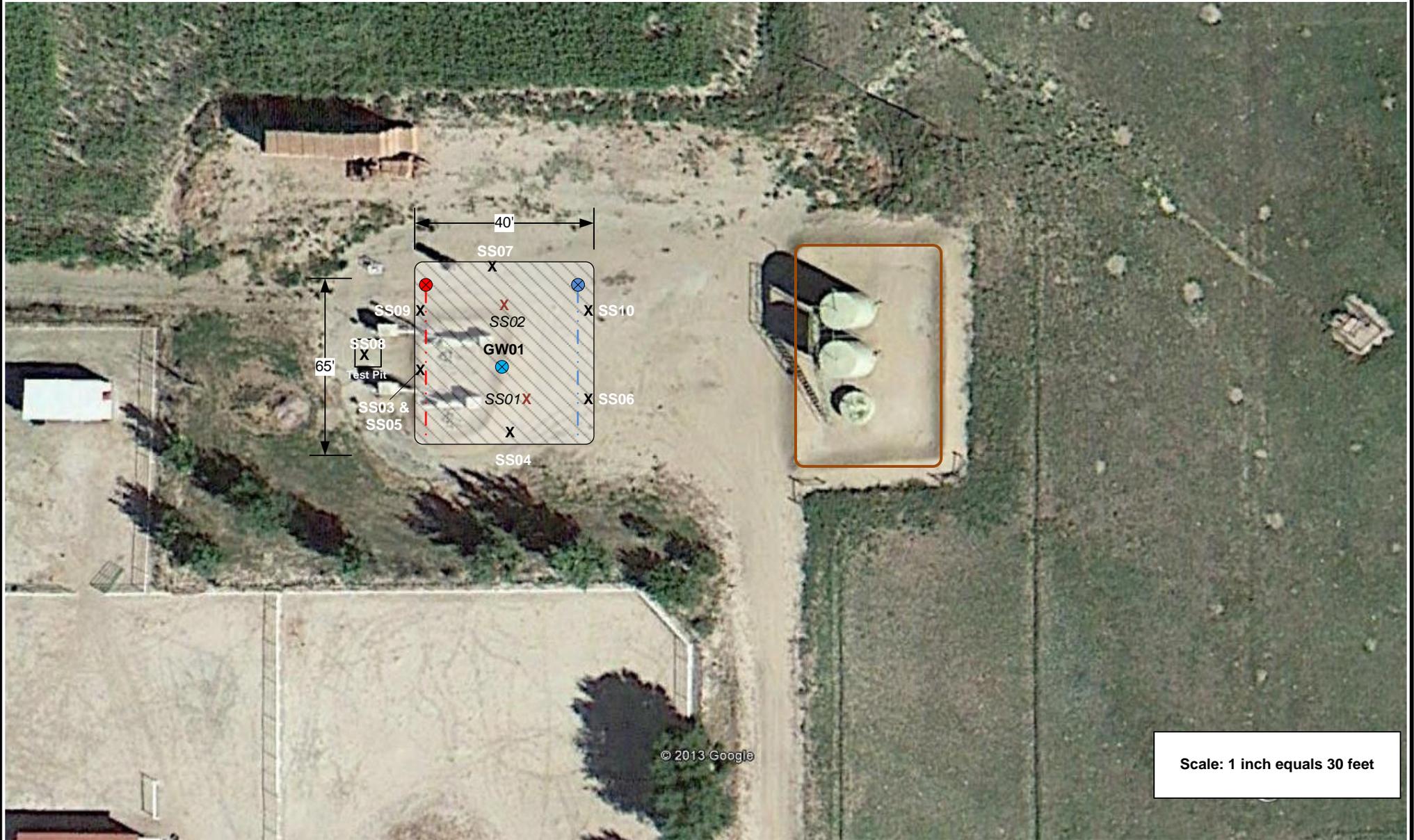


Figure 1

Site Location Map
Sitzman 1 & 32-4 / French 1, 5; 41-4
SEW S4 T5N R65W
Weld County, Colorado

Drawn By: DBA
Date: 01/10/2014





Scale: 1 inch equals 30 feet

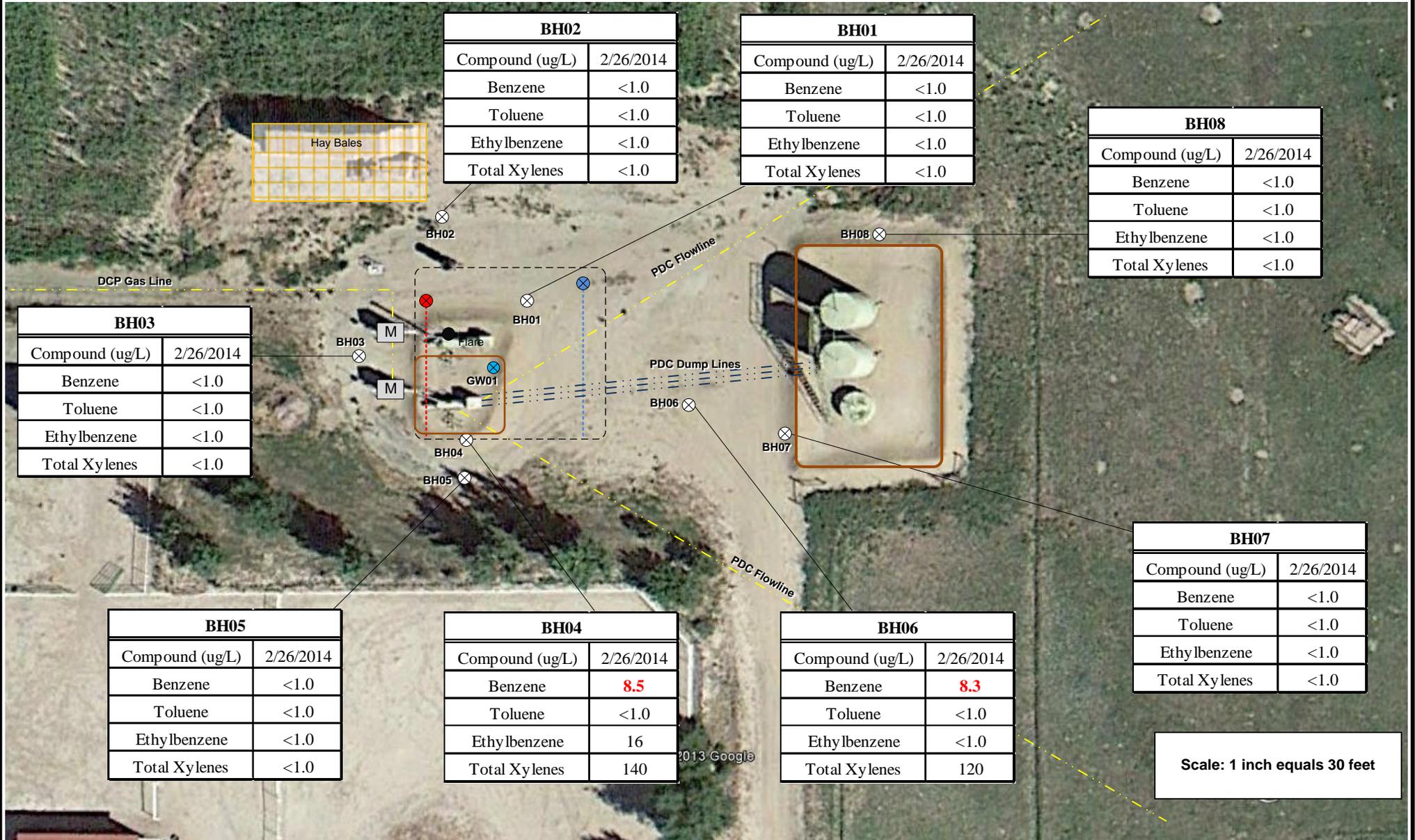
DRAWN BY: CAW
DATE: 1/24/2014

Facility Diagram
PDC Energy – DJ Basin
Sitzman 1 & 32-4 / French 1, 5; 41-1
SENW S4 T5N R64W
Weld County, CO

 6899 Pecos Street
Unit C
Denver, CO 80221

LEGEND
 Approximate Area of Excavation
 Horizontal Remediation Pipe - AS
 Horizontal Remediation Pipe - SVE
 Soil Sample Location
 Groundwater Sample Location
 SS01 Soil Sample Location Subsequently Excavated
 Earthen Berm

FIGURE 2
EXCAVATION
SITE MAP



Scale: 1 inch equals 30 feet

Facility Diagram

PDC Energy – DJ Basin
 Sitzman 1 & 32-4 / French 1, 5; 41-1
 SENW S4 T5N R64W
 Weld County, CO



6899 Pecos Street
 Unit C
 Denver, CO 80221

LEGEND

- Approximate Area of Excavation
- Horizontal Remediation Pipe - AS
- Horizontal Remediation Pipe - SVE
- Groundwater Sample Location
- Temporary Monitoring Well Location
- Earthen Berm

FIGURE 3

GROUNDWATER ANALYTICAL RESULTS

DRAWN BY: ESS

DATE: 3/7/2014

TABLE 1
SITZMAN 1 32-4 / FRENCH 1, 5; 41-1
SOIL ANALYTICAL RESULTS SUMMARY TABLE

Sample ID	Date Sampled	Depth (Feet bgs)	PID Readings (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TPH ⁽²⁾ (mg/kg)
SS01	12/20/2013	5	2,105	<0.002	<0.005	0.098	0.091	0.26	5,270
SS02	12/20/2013	6	1,950	0.0055	<0.005	0.13	1.1	0.088	5,700
SS03	12/20/2013	12	2,050	0.015	<0.005	0.83	21	0.39	3,900
SS04	12/20/2013	8	7.4	<0.002	<0.005	<0.005	<0.010	<0.010	2.1
SS05	12/23/2013	6	1,475	0.027	<0.005	1.2	7	0.38	2,790
SS06	12/23/2013	6	3.5	<0.002	<0.005	<0.005	<0.010	<0.010	<50
SS07	12/23/2013	6	4.1	<0.002	<0.005	<0.005	<0.010	0.012	<50
SS08	12/26/2013	6	2.6	<0.002	<0.005	<0.005	<0.010	<0.010	<50
SS09	12/27/2013	6	10.1	<0.002	<0.005	<0.005	<0.010	<0.010	<50
SS10	12/30/2013	6	8.4	<0.002	<0.005	<0.005	<0.010	<0.010	<50
COGCC standards for soil (mg/kg) ⁽¹⁾				0.17	85	100	175	23	500

Notes:

1). Standards for Soil are taken from 2 CCR 404-1, Table 910-1, effective April 1, 2009.

2). TPH - Total volatile and extractable petroleum hydrocarbons. Value calculated by adding GRO and DRO concentrations.

GRO - Gasoline range organics.

DRO - Diesel range organics.

mg/kg - Milligrams per kilogram.

bgs - Below ground surface.

ppm - Parts per million

Bold red values indicate an exceedance of the COGCC soil standards for the Site.

TABLE 2
SITZMAN 1, 32-4 / FRENCH 1, 5; 41-1
GROUNDWATER ANALYTICAL RESULTS SUMMARY TABLE

Sample ID	Date Sampled	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)
GW01	12/30/2013	5.7	<1.0	56	520
GW02	1/2/2014	38	<1.0	62	480
BH01	2/26/2014	<1.0	<1.0	<1.0	<1.0
BH02	2/26/2014	<1.0	<1.0	<1.0	<1.0
BH03	2/26/2014	<1.0	<1.0	<1.0	<1.0
BH04	2/26/2014	8.5	<1.0	16	140
BH05	2/26/2014	<1.0	<1.0	<1.0	<1.0
BH06	2/26/2014	8.3	<1.0	<1.0	120
BH07	2/26/2014	<1.0	<1.0	<1.0	<1.0
BH08	2/26/2014	<1.0	<1.0	<1.0	<1.0
COGCC standards for groundwater (ug/L) ⁽¹⁾		5	560	700	1,400

Notes:

1). The environmental cleanup standards for groundwater that are applicable to this site are the Colorado Oil and Gas Conservation Commission (COGCC) standards for contaminants in groundwater according to Table 910-1 of the COGCC 900 Series Rule for E&P Waste Management.

Bold red values indicate an exceedance of the COGCC groundwater standards for the Site.

ug/L - Micrograms per liter.

ATTACHMENT A

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

December 22, 2013

Brandon Bruns

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Stizman 1 & 32-4/French 1 & 41-4&5

Enclosed are the results of analyses for samples received by Summit Scientific on 12/20/13 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to be 'BS', with a long, sweeping horizontal line extending to the right.

Ben Shrewsbury

President / Laboratory Manager



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

Project: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/22/13 20:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS01@5' (E)	R312137-01	Soil	12/20/13 00:00	12/20/13 16:30
SS02@6' (N)	R312137-02	Soil	12/20/13 00:00	12/20/13 16:30
SS03@12' (W)	R312137-03	Soil	12/20/13 00:00	12/20/13 16:30
SS04@8' (S)	R312137-04	Soil	12/20/13 00:00	12/20/13 16:30

Summit Scientific

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



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

Project: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
 Project Manager: Brandon Bruns

Reported:
 12/22/13 20:30

R312137

Summit Scientific

741 Corporate Circle Suite 1 • Golden, Colorado 80401
 303-277-9910 • 303-274-9933 Fax

Client: PDC Energy
 Address: _____
 City/State/Zip: _____
 Phone: _____
 Project Manager: Brandon Bruns
 E-Mail: _____
 Project Name: Stizman 1 & 32-4 / French 1 & 41-4&5
 Project Number: _____
 Sampler Name: J. Burkau

Page 1 of 1

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix				Analyze For	Special Instructions
				HCl	Zone	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	Other (Specify)		
SS0105	12/17/13		1	X	X	X	X	X	X	X	X	NOPT/NOPT	
SS0706	12/17/13		1	X	X	X	X	X	X	X	X	NOPT/NOPT	
SS0807	12/17/13		1	X	X	X	X	X	X	X	X	NOPT/NOPT	
SS0108	12/17/13		1	X	X	X	X	X	X	X	X	NOPT/NOPT	

Relinquished by: _____	Date/Time: 12/17/13 16:54	Received by: _____	Date/Time: 12/22/13 16:54	Turn Around Time (Check): <input checked="" type="checkbox"/> Same Day <input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 72 Hours <input type="checkbox"/> Standard	Notes: 7 AM 12/23/13 12/23/13 12/23/13
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____	Sample Integrity: Temperature Upon Receipt: 6°C Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Relinquished by: _____	Date/Time: _____	Received in Lab by: _____	Date/Time: _____		

www.summitscientific.com



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

Project: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
Project Manager: Brandon Brunns

Reported:
12/22/13 20:30

SS01@5' (E)
R312137-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	4800	50	mg/kg	1	3122002	12/20/13	12/20/13	8015M	

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		127 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	0.26	0.010	mg/kg	1	3122003	12/20/13	12/20/13	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.098	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.091	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	470	5.0	"	10	"	"	"	"	E

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		117 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		106 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.0 %	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: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/22/13 20:30

SS02@6' (N)
R312137-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	4400	50	mg/kg	1	3122002	12/20/13	12/20/13	8015M	

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		119 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	0.088	0.010	mg/kg	1	3122003	12/20/13	12/20/13	EPA 8260B	
Benzene	0.0055	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.13	0.0050	"	"	"	"	"	"	
Xylenes (total)	1.1	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	1300	5.0	"	10	"	"	"	"	E

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		111 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		110 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		76.3 %	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: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/22/13 20:30

SS03@12' (W)
R312137-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	2900	50	mg/kg	1	3122002	12/20/13	12/20/13	8015M	

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		132 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	0.39	0.010	mg/kg	1	3122003	12/20/13	12/20/13	EPA 8260B	
Benzene	0.015	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.83	0.0050	"	"	"	"	"	"	
Xylenes (total)	21	0.10	"	10	"	"	"	"	E
Gasoline Range Hydrocarbons	1000	5.0	"	"	"	"	"	"	E

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		116 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		118 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	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: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/22/13 20:30

SS04@8' (S)
R312137-04 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3122002	12/20/13	12/20/13	8015M	

Date Sampled: 12/20/13 00:00

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

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	0.010	mg/kg	1	3122003	12/20/13	12/20/13	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	2.1	0.50	"	"	"	"	"	"	

Date Sampled: 12/20/13 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		114 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.6 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.0 %	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: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
 Project Manager: Brandon Brunns

Reported:
 12/22/13 20:30

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 3122002 - EPA 3550A

Blank (3122002-BLK1)				Prepared & Analyzed: 12/20/13						
C10-C28 (DRO)	ND	50	mg/kg							
LCS (3122002-BS1)				Prepared & Analyzed: 12/20/13						
C10-C28 (DRO)	532	50	mg/kg	501	106	73-134				
Matrix Spike (3122002-MS1)				Source: R312137-04 Prepared & Analyzed: 12/20/13						
C10-C28 (DRO)	697	50	mg/kg	501	ND	139	50-148			
Matrix Spike Dup (3122002-MSD1)				Source: R312137-04 Prepared & Analyzed: 12/20/13						
C10-C28 (DRO)	717	50	mg/kg	501	ND	143	50-148	2.90	13	

Summit Scientific

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

Project: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
Project Manager: Brandon Brunns

Reported:
12/22/13 20:30

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 3122003 - EPA 5030 Soil MS

Blank (3122003-BLK1)

Prepared: 12/20/13 Analyzed: 12/21/13

Naphthalene	ND	0.010	mg/kg							
Benzene	ND	0.0020	"							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0438</i>		<i>"</i>	<i>0.0396</i>		<i>111</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0399</i>		<i>"</i>	<i>0.0400</i>		<i>99.8</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0409</i>		<i>"</i>	<i>0.0400</i>		<i>102</i>	<i>21-167</i>			

LCS (3122003-BS1)

Prepared: 12/20/13 Analyzed: 12/21/13

Naphthalene	ND	0.010	mg/kg				66-138			
Benzene	0.0934	0.0020	"	0.100		93.4	58-130			
Toluene	0.0980	0.0050	"	0.100		98.0	61-134			
Ethylbenzene	0.0980	0.0050	"	0.100		98.0	74-139			
m,p-Xylene	0.188	0.010	"	0.200		94.2	73-137			
o-Xylene	0.0928	0.0050	"	0.100		92.8	73-141			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0446</i>		<i>"</i>	<i>0.0396</i>		<i>113</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0412</i>		<i>"</i>	<i>0.0400</i>		<i>103</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0396</i>		<i>"</i>	<i>0.0400</i>		<i>99.0</i>	<i>21-167</i>			

Matrix Spike (3122003-MS1)

Source: R312137-04

Prepared: 12/20/13 Analyzed: 12/21/13

Naphthalene	ND	0.010	mg/kg		ND		10-158			
Benzene	0.0919	0.0020	"	0.100	ND	91.9	30-131			
Toluene	0.0944	0.0050	"	0.100	ND	94.4	30-134			
Ethylbenzene	0.101	0.0050	"	0.100	ND	101	22-153			
m,p-Xylene	0.196	0.010	"	0.200	ND	97.9	10-159			
o-Xylene	0.0942	0.0050	"	0.100	ND	94.2	31-151			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0442</i>		<i>"</i>	<i>0.0396</i>		<i>112</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0391</i>		<i>"</i>	<i>0.0400</i>		<i>97.7</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0389</i>		<i>"</i>	<i>0.0400</i>		<i>97.3</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: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
 Project Manager: Brandon Brunns

Reported:
 12/22/13 20:30

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 3122003 - EPA 5030 Soil MS

Matrix Spike Dup (3122003-MSD1)

Source: R312137-04

Prepared: 12/20/13

Analyzed: 12/21/13

Naphthalene	ND	0.010	mg/kg		ND		10-158		42	
Benzene	0.0925	0.0020	"	0.100	ND	92.5	30-131	0.683	34	
Toluene	0.0946	0.0050	"	0.100	ND	94.6	30-134	0.317	30	
Ethylbenzene	0.101	0.0050	"	0.100	ND	101	22-153	0.0297	24	
m,p-Xylene	0.193	0.010	"	0.200	ND	96.4	10-159	1.47	68	
o-Xylene	0.0942	0.0050	"	0.100	ND	94.2	31-151	0.00	38	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0452</i>		<i>"</i>	<i>0.0396</i>		<i>114</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0392</i>		<i>"</i>	<i>0.0400</i>		<i>98.1</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0399</i>		<i>"</i>	<i>0.0400</i>		<i>99.8</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: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/22/13 20:30

Notes and Definitions

- 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

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

December 23, 2013

Brandon Bruns

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Stizman 1 & 32-4/French 1 & 41-4&5

Enclosed are the results of analyses for samples received by Summit Scientific on 12/23/13 15:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to be 'BS', with a long, sweeping horizontal line extending to the right.

Ben Shrewsbury

President / Laboratory Manager



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

Project: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/23/13 22:00

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS05@6'	R312151-01	Soil	12/23/13 10:30	12/23/13 15:00
SS06@6'	R312151-02	Soil	12/23/13 10:30	12/23/13 15:00
SS07@6'	R312151-03	Soil	12/23/13 10:30	12/23/13 15:00

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.



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

Project: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/23/13 22:00

SS05@6'
R312151-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/23/13 10:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	2000	50	mg/kg	1	3122304	12/23/13	12/23/13	8015M	

Date Sampled: 12/23/13 10:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		109 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/23/13 10:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	0.38	0.010	mg/kg	1	3122303	12/23/13	12/23/13	EPA 8260B	
Benzene	0.027	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	1.2	0.0050	"	"	"	"	"	"	
Xylenes (total)	7.0	0.010	"	"	"	"	"	"	E
Gasoline Range Hydrocarbons	790	5.0	"	10	"	"	"	"	E

Date Sampled: 12/23/13 10:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		129 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		84.7 %	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: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/23/13 22:00

SS06@6'
R312151-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/23/13 10:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3122304	12/23/13	12/23/13	8015M	

Date Sampled: 12/23/13 10:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		106 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/23/13 10:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	0.010	mg/kg	1	3122303	12/23/13	12/23/13	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 12/23/13 10:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		95.9 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		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: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/23/13 22:00

SS07@6'
R312151-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/23/13 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3122304	12/23/13	12/23/13	8015M	

Date Sampled: **12/23/13 10:30**

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

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/23/13 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	0.010	mg/kg	1	3122303	12/23/13	12/23/13	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.012	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **12/23/13 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		105 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		96.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		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: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
 Project Manager: Brandon Brunns

Reported:
 12/23/13 22:00

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 3122304 - EPA 3550A

Blank (3122304-BLK1)				Prepared & Analyzed: 12/23/13						
C10-C28 (DRO)	ND	50	mg/kg							
LCS (3122304-BS1)				Prepared & Analyzed: 12/23/13						
C10-C28 (DRO)	494	50	mg/kg	495		99.7	73-134			
Matrix Spike (3122304-MS1)				Source: R312151-02 Prepared & Analyzed: 12/23/13						
C10-C28 (DRO)	494	50	mg/kg	495	ND	99.7	50-148			
Matrix Spike Dup (3122304-MSD1)				Source: R312151-02 Prepared & Analyzed: 12/23/13						
C10-C28 (DRO)	484	50	mg/kg	492	ND	98.3	50-148	1.98	13	

Summit Scientific

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

Project: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
Project Manager: Brandon Brunns

Reported:
12/23/13 22:00

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 3122303 - EPA 5030 Soil MS

Blank (3122303-BLK1)

Prepared & Analyzed: 12/23/13

Naphthalene	ND	0.010	mg/kg							
Benzene	ND	0.0020	"							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0394</i>		<i>"</i>	<i>0.0387</i>		<i>102</i>		<i>23-173</i>		
<i>Surrogate: Toluene-d8</i>	<i>0.0377</i>		<i>"</i>	<i>0.0391</i>		<i>96.4</i>		<i>20-170</i>		
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0390</i>		<i>"</i>	<i>0.0391</i>		<i>99.9</i>		<i>21-167</i>		

LCS (3122303-BS1)

Prepared & Analyzed: 12/23/13

Naphthalene	ND	0.010	mg/kg					66-138		
Benzene	0.0823	0.0020	"	0.0960		85.7		58-130		
Toluene	0.101	0.0050	"	0.0960		105		61-134		
Ethylbenzene	0.132	0.0050	"	0.0960		138		74-139		
m,p-Xylene	0.231	0.010	"	0.192		120		73-137		
o-Xylene	0.120	0.0050	"	0.0960		126		73-141		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0381</i>		<i>"</i>	<i>0.0380</i>		<i>100</i>		<i>23-173</i>		
<i>Surrogate: Toluene-d8</i>	<i>0.0379</i>		<i>"</i>	<i>0.0384</i>		<i>98.6</i>		<i>20-170</i>		
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0368</i>		<i>"</i>	<i>0.0384</i>		<i>95.8</i>		<i>21-167</i>		

Matrix Spike (3122303-MS1)

Source: R312151-02

Prepared & Analyzed: 12/23/13

Naphthalene	ND	0.010	mg/kg		ND			10-158		
Benzene	0.0851	0.0020	"	0.0960	ND	88.7		30-131		
Toluene	0.103	0.0050	"	0.0960	ND	107		30-134		
Ethylbenzene	0.133	0.0050	"	0.0960	ND	138		22-153		
m,p-Xylene	0.232	0.010	"	0.192	ND	121		10-159		
o-Xylene	0.123	0.0050	"	0.0960	ND	128		31-151		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0415</i>		<i>"</i>	<i>0.0380</i>		<i>109</i>		<i>23-173</i>		
<i>Surrogate: Toluene-d8</i>	<i>0.0385</i>		<i>"</i>	<i>0.0384</i>		<i>100</i>		<i>20-170</i>		
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0374</i>		<i>"</i>	<i>0.0384</i>		<i>97.5</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: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
Project Manager: Brandon Brunns

Reported:
12/23/13 22:00

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 3122303 - EPA 5030 Soil MS

Matrix Spike Dup (3122303-MSD1)	Source: R312151-02			Prepared & Analyzed: 12/23/13						
Naphthalene	ND	0.010	mg/kg	ND	ND	10-158			42	
Benzene	0.0852	0.0020	"	0.0978	ND	87.0	30-131	0.0599	34	
Toluene	0.104	0.0050	"	0.0978	ND	106	30-134	0.786	30	
Ethylbenzene	0.135	0.0050	"	0.0978	ND	138	22-153	1.89	24	
m,p-Xylene	0.238	0.010	"	0.196	ND	122	10-159	2.66	68	
o-Xylene	0.125	0.0050	"	0.0978	ND	127	31-151	1.16	38	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0414</i>		<i>"</i>	<i>0.0387</i>		<i>107</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0387</i>		<i>"</i>	<i>0.0391</i>		<i>98.9</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0382</i>		<i>"</i>	<i>0.0391</i>		<i>97.7</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: Stizman 1 & 32-4/French 1 & 41-4&5

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/23/13 22:00

Notes and Definitions

- 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

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

December 30, 2013

Brandon Bruns

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Stizman 1 & 32-4/French 1-41-4

Enclosed are the results of analyses for samples received by Summit Scientific on 12/26/13 16:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to be 'BS', with a long, sweeping horizontal line extending to the right.

Ben Shrewsbury

President / Laboratory Manager



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

Project: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
Project Manager: Brandon Brunns

Reported:
12/30/13 16:47

SS08@6'
R312164-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/26/13 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3122601	12/26/13	12/26/13	8015M	

Date Sampled: 12/26/13 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		111 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/26/13 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	0.010	mg/kg	1	3122604	12/26/13	12/26/13	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 12/26/13 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		99.2 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		96.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.3 %	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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
 Project Manager: Brandon Brunns

Reported:
 12/30/13 16:47

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 3122601 - EPA 3550A

Blank (3122601-BLK1)					Prepared & Analyzed: 12/26/13						
C10-C28 (DRO)	ND	50	mg/kg								
LCS (3122601-BS1)					Prepared & Analyzed: 12/26/13						
C10-C28 (DRO)	497	50	mg/kg	501	33.6	101	73-134				
Matrix Spike (3122601-MS1)					Prepared & Analyzed: 12/26/13						
C10-C28 (DRO)	504	50	mg/kg	466	33.6	101	50-148				
Matrix Spike Dup (3122601-MSD1)					Prepared & Analyzed: 12/26/13						
C10-C28 (DRO)	490	50	mg/kg	462	33.6	98.8	50-148	2.72	13		

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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
Project Manager: Brandon Brunns

Reported:
12/30/13 16:47

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 3122604 - EPA 5030 Soil MS

Blank (3122604-BLK1)

Prepared & Analyzed: 12/26/13

Naphthalene	ND	0.010	mg/kg							
Benzene	ND	0.0020	"							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0384</i>		<i>"</i>	<i>0.0392</i>		<i>98.0</i>		<i>23-173</i>		
<i>Surrogate: Toluene-d8</i>	<i>0.0383</i>		<i>"</i>	<i>0.0396</i>		<i>96.6</i>		<i>20-170</i>		
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0396</i>		<i>"</i>	<i>0.0396</i>		<i>100</i>		<i>21-167</i>		

LCS (3122604-BS1)

Prepared & Analyzed: 12/26/13

Naphthalene	ND	0.010	mg/kg					66-138		
Benzene	0.0945	0.0020	"	0.0977		96.8		58-130		
Toluene	0.112	0.0050	"	0.0977		115		61-134		
Ethylbenzene	0.110	0.0050	"	0.0977		112		74-139		
m,p-Xylene	0.248	0.010	"	0.195		127		73-137		
o-Xylene	0.123	0.0050	"	0.0977		126		73-141		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0386</i>		<i>"</i>	<i>0.0387</i>		<i>99.8</i>		<i>23-173</i>		
<i>Surrogate: Toluene-d8</i>	<i>0.0391</i>		<i>"</i>	<i>0.0391</i>		<i>100</i>		<i>20-170</i>		
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0371</i>		<i>"</i>	<i>0.0391</i>		<i>94.9</i>		<i>21-167</i>		

Matrix Spike (3122604-MS1)

Source: R312164-01

Prepared & Analyzed: 12/26/13

Naphthalene	ND	0.010	mg/kg		ND			10-158		
Benzene	0.0894	0.0020	"	0.0938	ND	95.2		30-131		
Toluene	0.106	0.0050	"	0.0938	ND	113		30-134		
Ethylbenzene	0.132	0.0050	"	0.0938	ND	140		22-153		
m,p-Xylene	0.237	0.010	"	0.188	ND	126		10-159		
o-Xylene	0.120	0.0050	"	0.0938	ND	128		31-151		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0404</i>		<i>"</i>	<i>0.0371</i>		<i>109</i>		<i>23-173</i>		
<i>Surrogate: Toluene-d8</i>	<i>0.0372</i>		<i>"</i>	<i>0.0375</i>		<i>99.1</i>		<i>20-170</i>		
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0355</i>		<i>"</i>	<i>0.0375</i>		<i>94.7</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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
 Project Manager: Brandon Brunns

Reported:
 12/30/13 16:47

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 3122604 - EPA 5030 Soil MS

Matrix Spike Dup (3122604-MSD1)	Source: R312164-01			Prepared & Analyzed: 12/26/13						
Naphthalene	ND	0.010	mg/kg		ND		10-158		42	
Benzene	0.0884	0.0020	"	0.0929	ND	95.1	30-131	1.09	34	
Toluene	0.105	0.0050	"	0.0929	ND	113	30-134	0.934	30	
Ethylbenzene	0.132	0.0050	"	0.0929	ND	142	22-153	0.00166	24	
m,p-Xylene	0.235	0.010	"	0.186	ND	126	10-159	0.732	68	
o-Xylene	0.118	0.0050	"	0.0929	ND	127	31-151	1.71	38	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0388</i>		<i>"</i>	<i>0.0368</i>		<i>105</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0361</i>		<i>"</i>	<i>0.0372</i>		<i>97.2</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0359</i>		<i>"</i>	<i>0.0372</i>		<i>96.6</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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/30/13 16:47

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

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

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

December 29, 2013

Brandon Bruns

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Stizman 1 & 32-4/French 1-41-4

Enclosed are the results of analyses for samples received by Summit Scientific on 12/27/13 16:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'BS', with a long, sweeping horizontal line extending to the right.

Ben Shrewsbury

President / Laboratory Manager



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

Project: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/29/13 19:57

SS09@6'
R312173-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/27/13 09:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3122715	12/27/13	12/28/13	8015M	

Date Sampled: 12/27/13 09:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		119 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/27/13 09:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	0.010	mg/kg	1	3122714	12/27/13	12/27/13	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 12/27/13 09:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		96.1 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		93.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.8 %	21-167		"	"	"	"	

Summit Scientific

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



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

Project: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
 Project Manager: Brandon Brunns

Reported:
 12/29/13 19:57

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 3122715 - EPA 3550A

Blank (3122715-BLK1)				Prepared: 12/27/13 Analyzed: 12/28/13						
C10-C28 (DRO)	ND	50	mg/kg							
LCS (3122715-BS1)				Prepared: 12/27/13 Analyzed: 12/28/13						
C10-C28 (DRO)	508	50	mg/kg	488	104	73-134				
Matrix Spike (3122715-MS1)				Source: R312174-01 Prepared: 12/27/13 Analyzed: 12/28/13						
C10-C28 (DRO)	493	50	mg/kg	476	30.1	97.3	50-148			
Matrix Spike Dup (3122715-MSD1)				Source: R312174-01 Prepared: 12/27/13 Analyzed: 12/28/13						
C10-C28 (DRO)	466	50	mg/kg	468	30.1	93.0	50-148	5.84	13	

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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
Project Manager: Brandon Brunns

Reported:
12/29/13 19:57

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 3122714 - EPA 5030 Soil MS

Blank (3122714-BLK1)

Prepared: 12/27/13 Analyzed: 12/28/13

Naphthalene	ND	0.010	mg/kg							
Benzene	ND	0.0020	"							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0364</i>		<i>"</i>	<i>0.0378</i>		<i>96.4</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0369</i>		<i>"</i>	<i>0.0382</i>		<i>96.8</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0381</i>		<i>"</i>	<i>0.0382</i>		<i>99.8</i>	<i>21-167</i>			

LCS (3122714-BS1)

Prepared: 12/27/13 Analyzed: 12/28/13

Naphthalene	ND	0.010	mg/kg				66-138			
Benzene	0.0931	0.0020	"	0.0977		95.4	58-130			
Toluene	0.115	0.0050	"	0.0977		118	61-134			
Ethylbenzene	0.113	0.0050	"	0.0977		115	74-139			
m,p-Xylene	0.258	0.010	"	0.195		132	73-137			
o-Xylene	0.126	0.0050	"	0.0977		129	73-141			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0372</i>		<i>"</i>	<i>0.0387</i>		<i>96.1</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0401</i>		<i>"</i>	<i>0.0391</i>		<i>103</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0387</i>		<i>"</i>	<i>0.0391</i>		<i>99.0</i>	<i>21-167</i>			

Matrix Spike (3122714-MS1)

Source: R312174-01

Prepared: 12/27/13 Analyzed: 12/28/13

Naphthalene	ND	0.010	mg/kg		ND		10-158			
Benzene	0.0924	0.0020	"	0.0982	ND	94.1	30-131			
Toluene	0.116	0.0050	"	0.0982	0.00341	114	30-134			
Ethylbenzene	0.139	0.0050	"	0.0982	ND	141	22-153			
m,p-Xylene	0.257	0.010	"	0.196	0.00572	128	10-159			
o-Xylene	0.124	0.0050	"	0.0982	ND	126	31-151			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0395</i>		<i>"</i>	<i>0.0389</i>		<i>102</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0396</i>		<i>"</i>	<i>0.0393</i>		<i>101</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0375</i>		<i>"</i>	<i>0.0393</i>		<i>95.5</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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
 Project Manager: Brandon Brunns

Reported:
 12/29/13 19:57

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 3122714 - EPA 5030 Soil MS

Matrix Spike Dup (3122714-MSD1)

Source: R312174-01

Prepared: 12/27/13

Analyzed: 12/28/13

Naphthalene	ND	0.010	mg/kg		ND		10-158		42	
Benzene	0.0974	0.0020	"	0.0998	ND	97.6	30-131	5.28	34	
Toluene	0.121	0.0050	"	0.0998	0.00341	117	30-134	4.33	30	
Ethylbenzene	0.146	0.0050	"	0.0998	ND	146	22-153	5.24	24	
m,p-Xylene	0.269	0.010	"	0.200	0.00572	132	10-159	4.60	68	
o-Xylene	0.131	0.0050	"	0.0998	ND	131	31-151	5.29	38	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0399</i>		<i>"</i>	<i>0.0395</i>		<i>101</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0395</i>		<i>"</i>	<i>0.0399</i>		<i>99.0</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0386</i>		<i>"</i>	<i>0.0399</i>		<i>96.6</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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/29/13 19:57

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

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

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

December 30, 2013

Brandon Bruns

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Stizman 1 & 32-4/French 1-41-4

Enclosed are the results of analyses for samples received by Summit Scientific on 12/30/13 17:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to be 'BS', with a long, sweeping horizontal line extending to the right.

Ben Shrewsbury

President / Laboratory Manager



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

Project: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/30/13 22:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS10@6'	R312181-01	Soil	12/30/13 12:00	12/30/13 17:00
GW01	R312181-02	Water	12/30/13 12:00	12/30/13 17:00

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.



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

Project: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/30/13 22:43

SS10@6'
R312181-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/30/13 12:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3123005	12/30/13	12/30/13	8015M	

Date Sampled: 12/30/13 12:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		96.5 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/30/13 12:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	0.010	mg/kg	1	3123004	12/30/13	12/30/13	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 12/30/13 12:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		94.5 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		95.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.0 %	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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
 Project Manager: Brandon Brunns

Reported:
 12/30/13 22:43

GW01
R312181-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/30/13 12:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	5.7	1.0	ug/l	1	3123003	12/30/13	12/30/13	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	56	1.0	"	"	"	"	"	"	
Xylenes (total)	520	1.0	"	"	"	"	"	"	

Date Sampled: 12/30/13 12:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		100 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		84.2 %	45-146		"	"	"	"	

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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
 Project Manager: Brandon Brunns

Reported:
 12/30/13 22:43

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 3123005 - EPA 3550A

Blank (3123005-BLK1)

Prepared & Analyzed: 12/30/13

C10-C28 (DRO) ND 50 mg/kg

LCS (3123005-BS1)

Prepared & Analyzed: 12/30/13

C10-C28 (DRO) 482 50 mg/kg 495 97.4 73-134

Matrix Spike (3123005-MS1)

Source: R312182-01

Prepared & Analyzed: 12/30/13

C10-C28 (DRO) 452 50 mg/kg 489 30.5 86.2 50-148

Matrix Spike Dup (3123005-MSD1)

Source: R312182-01

Prepared & Analyzed: 12/30/13

C10-C28 (DRO) 459 50 mg/kg 488 30.5 87.7 50-148 1.35 13

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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/30/13 22:43

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 3123004 - EPA 5030 Soil MS

Blank (3123004-BLK1)

Prepared & Analyzed: 12/30/13

Naphthalene	ND	0.010	mg/kg							
Benzene	ND	0.0020	"							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0442</i>		<i>"</i>	<i>0.0381</i>		<i>116</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0371</i>		<i>"</i>	<i>0.0384</i>		<i>96.5</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0381</i>		<i>"</i>	<i>0.0384</i>		<i>99.1</i>	<i>21-167</i>			

LCS (3123004-BS1)

Prepared & Analyzed: 12/30/13

Naphthalene	ND	0.010	mg/kg				66-138			
Benzene	0.0779	0.0020	"	0.0931		83.7	58-130			
Toluene	0.0837	0.0050	"	0.0931		89.8	61-134			
Ethylbenzene	0.0897	0.0050	"	0.0931		96.4	74-139			
m,p-Xylene	0.174	0.010	"	0.186		93.3	73-137			
o-Xylene	0.0836	0.0050	"	0.0931		89.8	73-141			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0388</i>		<i>"</i>	<i>0.0370</i>		<i>105</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0369</i>		<i>"</i>	<i>0.0372</i>		<i>99.0</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0363</i>		<i>"</i>	<i>0.0372</i>		<i>97.6</i>	<i>21-167</i>			

Matrix Spike (3123004-MS1)

Source: R312182-01

Prepared & Analyzed: 12/30/13

Naphthalene	ND	0.010	mg/kg		ND		10-158			
Benzene	0.0821	0.0020	"	0.0965	ND	85.0	30-131			
Toluene	0.0872	0.0050	"	0.0965	ND	90.4	30-134			
Ethylbenzene	0.0931	0.0050	"	0.0965	ND	96.4	22-153			
m,p-Xylene	0.180	0.010	"	0.193	ND	93.1	10-159			
o-Xylene	0.0872	0.0050	"	0.0965	ND	90.3	31-151			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0422</i>		<i>"</i>	<i>0.0383</i>		<i>110</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0373</i>		<i>"</i>	<i>0.0386</i>		<i>96.6</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0379</i>		<i>"</i>	<i>0.0386</i>		<i>98.2</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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
Project Manager: Brandon Brunns

Reported:
12/30/13 22:43

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 3123004 - EPA 5030 Soil MS

Matrix Spike Dup (3123004-MSD1)	Source: R312182-01			Prepared & Analyzed: 12/30/13						
Naphthalene	ND	0.010	mg/kg	ND	ND	10-158			42	
Benzene	0.0843	0.0020	"	0.0952	ND	88.6	30-131	2.70	34	
Toluene	0.0877	0.0050	"	0.0952	ND	92.1	30-134	0.598	30	
Ethylbenzene	0.0941	0.0050	"	0.0952	ND	98.8	22-153	1.06	24	
m,p-Xylene	0.182	0.010	"	0.190	ND	95.5	10-159	1.19	68	
o-Xylene	0.0882	0.0050	"	0.0952	ND	92.6	31-151	1.22	38	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0435</i>		<i>"</i>	<i>0.0378</i>		<i>115</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0379</i>		<i>"</i>	<i>0.0381</i>		<i>99.4</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0372</i>		<i>"</i>	<i>0.0381</i>		<i>97.6</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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
12/30/13 22:43

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

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Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

January 03, 2014

Brandon Bruns

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Stizman 1 & 32-4/French 1-41-4

Enclosed are the results of analyses for samples received by Summit Scientific on 01/02/14 17:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to be 'BS', with a long, sweeping horizontal line extending to the right.

Ben Shrewsbury

President / Laboratory Manager



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

Project: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
 Project Manager: Brandon Bruns

Reported:
 01/03/14 06:47

GW02
1401001-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/02/14 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	38	1.0	ug/l	1	1401002	01/02/14	01/02/14	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	62	1.0	"	"	"	"	"	"	
Xylenes (total)	480	1.0	"	"	"	"	"	"	

Date Sampled: **01/02/14 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		97.4 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		90.0 %	45-146		"	"	"	"	

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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
01/03/14 06:47

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 1401002 - EPA 5030 Water MS

Blank (1401002-BLK1)

Prepared & Analyzed: 01/03/14

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	13.3		"	13.2		100	37-154			
Surrogate: Toluene-d8	12.7		"	13.3		95.3	45-149			
Surrogate: 4-Bromofluorobenzene	13.1		"	13.3		98.3	45-146			

LCS (1401002-BS1)

Prepared & Analyzed: 01/03/14

Benzene	29.2	1.0	ug/l	33.3		87.6	51-132			
Toluene	30.6	1.0	"	33.3		91.7	51-138			
Ethylbenzene	32.9	1.0	"	33.3		98.7	58-146			
m,p-Xylene	64.7	2.0	"	66.7		97.1	57-144			
o-Xylene	31.0	1.0	"	33.3		93.1	53-146			
Surrogate: 1,2-Dichloroethane-d4	13.9		"	13.2		105	37-154			
Surrogate: Toluene-d8	12.6		"	13.3		94.2	45-149			
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3		97.4	45-146			

Matrix Spike (1401002-MS1)

Source: 1401004-01

Prepared & Analyzed: 01/03/14

Benzene	30.4	1.0	ug/l	33.3	ND	91.1	34-141			
Toluene	31.8	1.0	"	33.3	ND	95.3	27-151			
Ethylbenzene	33.2	1.0	"	33.3	ND	99.7	29-160			
m,p-Xylene	66.1	2.0	"	66.7	ND	99.2	20-166			
o-Xylene	31.4	1.0	"	33.3	ND	94.2	33-159			
Surrogate: 1,2-Dichloroethane-d4	14.6		"	13.2		111	37-154			
Surrogate: Toluene-d8	13.0		"	13.3		97.7	45-149			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		98.6	45-146			

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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
 Project Manager: Brandon Bruns

Reported:
 01/03/14 06:47

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 1401002 - EPA 5030 Water MS

Matrix Spike Dup (1401002-MSD1)	Source: 1401004-01			Prepared & Analyzed: 01/03/14						
Benzene	29.7	1.0	ug/l	33.3	ND	89.1	34-141	2.23	32	
Toluene	31.3	1.0	"	33.3	ND	93.9	27-151	1.55	25	
Ethylbenzene	33.5	1.0	"	33.3	ND	100	29-160	0.750	50	
m,p-Xylene	65.4	2.0	"	66.7	ND	98.1	20-166	1.08	36	
o-Xylene	31.8	1.0	"	33.3	ND	95.3	33-159	1.14	26	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>15.0</i>		<i>"</i>	<i>13.2</i>		<i>114</i>	<i>37-154</i>			
<i>Surrogate: Toluene-d8</i>	<i>12.9</i>		<i>"</i>	<i>13.3</i>		<i>96.8</i>	<i>45-149</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>13.0</i>		<i>"</i>	<i>13.3</i>		<i>97.1</i>	<i>45-146</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: Stizman 1 & 32-4/French 1-41-4

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
01/03/14 06:47

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

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Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

March 05, 2014

Brandon Bruns

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Sitzman 1&32-4/French 1,5;41-1

Enclosed are the results of analyses for samples received by Summit Scientific on 02/27/14 10:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to be 'BS', with a long, sweeping horizontal line extending to the right.

Ben Shrewsbury

President / Laboratory Manager



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

Project: Sitzman 1&32-4/French 1,5;41-1

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
03/05/14 12:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01	1402164-01	Water	02/26/14 14:35	02/27/14 10:00
BH02	1402164-02	Water	02/26/14 14:40	02/27/14 10:00
BH03	1402164-03	Water	02/26/14 14:45	02/27/14 10:00
BH04	1402164-04	Water	02/26/14 14:50	02/27/14 10:00
BH05	1402164-05	Water	02/26/14 14:55	02/27/14 10:00
BH06	1402164-06	Water	02/26/14 15:00	02/27/14 10:00
BH07	1402164-07	Water	02/26/14 15:05	02/27/14 10:00
BH08	1402164-08	Water	02/26/14 15:10	02/27/14 10:00

Summit Scientific

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

Project: Sitzman 1&32-4/French 1,5;41-1

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
03/05/14 12:26

Summit Scientific 1402164

741 Corporate Circle, Suite J&K • Golden, Colorado 80401
303-277-9310 • 303-374-5933

Client: PDC Energy Project Manager: Brandon Bruns Page 1 of 1

Address: _____ E-Mail: _____

City/State/Zip: _____

Phone: _____ Project Name: Sitzman 1 + 32-4 French 1,5,41-1

Sampler Name: Eric Siegel Project Number: _____

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix		Analysis Requested	Special Instructions
					HCl	HNO3	None	Other (Specify)	Groundwater	Soil		
1	BH01	2/26/14	1435	3			X				X	glo box
2	BH02		1440									
3	BH03		1445									
4	BH04		1450									
5	BH05		1455									
6	BH06		1500									
7	BH07		1505									
8	BH08		1510									
9												
10												

Requisitioned by: Eric A. Siegel Date/Time: 2/26/14 Received by: MB Date/Time: 2/27/14 Turn Around Time (Check) Same Day 24 hours 48 hours Standard Notes:

Requisitioned by: _____ Date/Time: _____ Received by: _____ Date/Time: _____ Sample Integrity: Y Temperature Upon Receipt: Y Intact: Yes No

Requisitioned by: _____ Date/Time: _____ Received by: _____ Date/Time: _____

www.s2scientific.com

Summit Scientific

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

Project: Sitzman 1&32-4/French 1,5;41-1

Project Number: [none]
 Project Manager: Brandon Brunns

Reported:
 03/05/14 12:26

BH01
1402164-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/26/14 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1403002	03/03/14	03/03/14	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **02/26/14 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		94.4 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		93.8 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.6 %	45-146		"	"	"	"	

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: Sitzman 1&32-4/French 1,5;41-1

Project Number: [none]
 Project Manager: Brandon Bruns

Reported:
 03/05/14 12:26

BH02
1402164-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/26/14 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1403002	03/03/14	03/03/14	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **02/26/14 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		91.9 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		93.9 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		97.1 %	45-146		"	"	"	"	

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: Sitzman 1&32-4/French 1,5;41-1

Project Number: [none]
 Project Manager: Brandon Brunns

Reported:
 03/05/14 12:26

BH03
1402164-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/26/14 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1403002	03/04/14	03/04/14	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **02/26/14 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		95.1 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		94.7 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		97.4 %	45-146		"	"	"	"	

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: Sitzman 1&32-4/French 1,5;41-1

Project Number: [none]
 Project Manager: Brandon Brunns

Reported:
 03/05/14 12:26

BH04
1402164-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/26/14 14:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	8.5	1.0	ug/l	1	1403002	03/04/14	03/04/14	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	16	1.0	"	"	"	"	"	"	
Xylenes (total)	140	1.0	"	"	"	"	"	"	

Date Sampled: **02/26/14 14:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.8 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		95.8 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.6 %	45-146		"	"	"	"	

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: Sitzman 1&32-4/French 1,5;41-1

Project Number: [none]
 Project Manager: Brandon Brunns

Reported:
 03/05/14 12:26

BH05
1402164-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/26/14 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1403002	03/04/14	03/04/14	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **02/26/14 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		96.2 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		93.9 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		97.9 %	45-146		"	"	"	"	

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: Sitzman 1&32-4/French 1,5;41-1

Project Number: [none]
 Project Manager: Brandon Bruns

Reported:
 03/05/14 12:26

BH06
1402164-06 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/26/14 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	8.3	1.0	ug/l	1	1403002	03/04/14	03/04/14	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	120	1.0	"	"	"	"	"	"	

Date Sampled: **02/26/14 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		97.2 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		95.3 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		96.6 %	45-146		"	"	"	"	

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: Sitzman 1&32-4/French 1,5;41-1

Project Number: [none]
 Project Manager: Brandon Bruns

Reported:
 03/05/14 12:26

BH07
1402164-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/26/14 15:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1403002	03/04/14	03/04/14	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **02/26/14 15:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.8 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		93.2 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		96.2 %	45-146		"	"	"	"	

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: Sitzman 1&32-4/French 1,5;41-1

Project Number: [none]
 Project Manager: Brandon Brunns

Reported:
 03/05/14 12:26

BH08
1402164-08 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/26/14 15:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1403002	03/04/14	03/04/14	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **02/26/14 15:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.7 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		94.2 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		95.5 %	45-146		"	"	"	"	

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: Sitzman 1&32-4/French 1,5;41-1

Project Number: [none]
Project Manager: Brandon Brunns

Reported:
03/05/14 12:26

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 1403002 - EPA 5030 Water MS

Blank (1403002-BLK1)

Prepared & Analyzed: 03/01/14

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	12.6		"	13.2		94.8	37-154			
Surrogate: Toluene-d8	12.6		"	13.3		94.6	45-149			
Surrogate: 4-Bromofluorobenzene	13.1		"	13.3		98.6	45-146			

LCS (1403002-BS1)

Prepared & Analyzed: 03/01/14

Benzene	29.5	1.0	ug/l	33.2		88.8	51-132			
Toluene	31.9	1.0	"	33.3		95.7	51-138			
Ethylbenzene	34.0	1.0	"	33.1		103	58-146			
m,p-Xylene	67.7	2.0	"	66.7		101	57-144			
o-Xylene	33.3	1.0	"	32.9		101	53-146			
Surrogate: 1,2-Dichloroethane-d4	12.6		"	13.2		95.4	37-154			
Surrogate: Toluene-d8	12.8		"	13.3		96.2	45-149			
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3		97.4	45-146			

LCS (1403002-BS2)

Prepared & Analyzed: 03/01/14

Benzene	29.7	1.0	ug/l	33.2		89.5	51-132			
Toluene	32.1	1.0	"	33.3		96.2	51-138			
Ethylbenzene	34.2	1.0	"	33.1		103	58-146			
m,p-Xylene	68.8	2.0	"	66.7		103	57-144			
o-Xylene	33.6	1.0	"	32.9		102	53-146			
Surrogate: 1,2-Dichloroethane-d4	12.8		"	13.2		97.0	37-154			
Surrogate: Toluene-d8	12.9		"	13.3		97.0	45-149			
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3		97.8	45-146			

Summit Scientific

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

Project: Sitzman 1&32-4/French 1,5;41-1

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
03/05/14 12:26

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 1403002 - EPA 5030 Water MS

Matrix Spike (1403002-MS1)	Source: 1402146-04			Prepared & Analyzed: 03/01/14							
Benzene	43.0	1.0	ug/l	33.2	15.2	83.7	34-141				
Toluene	31.9	1.0	"	33.3	ND	95.6	27-151				
Ethylbenzene	55.0	1.0	"	33.1	22.3	98.8	29-160				
m,p-Xylene	92.3	2.0	"	66.7	38.0	81.5	20-166				
o-Xylene	35.4	1.0	"	32.9	2.52	99.8	33-159				
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>12.0</i>		<i>"</i>	<i>13.2</i>		<i>90.5</i>	<i>37-154</i>				
<i>Surrogate: Toluene-d8</i>	<i>15.4</i>		<i>"</i>	<i>13.3</i>		<i>115</i>	<i>45-149</i>				
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>13.1</i>		<i>"</i>	<i>13.3</i>		<i>98.2</i>	<i>45-146</i>				

Matrix Spike (1403002-MS2)	Source: 1402146-05			Prepared & Analyzed: 03/01/14							
Benzene	30.1	1.0	ug/l	33.2	ND	90.5	34-141				
Toluene	32.3	1.0	"	33.3	ND	96.8	27-151				
Ethylbenzene	33.6	1.0	"	33.1	ND	102	29-160				
m,p-Xylene	67.3	2.0	"	66.7	ND	101	20-166				
o-Xylene	33.3	1.0	"	32.9	ND	101	33-159				
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>13.0</i>		<i>"</i>	<i>13.2</i>		<i>98.1</i>	<i>37-154</i>				
<i>Surrogate: Toluene-d8</i>	<i>13.0</i>		<i>"</i>	<i>13.3</i>		<i>97.4</i>	<i>45-149</i>				
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>12.9</i>		<i>"</i>	<i>13.3</i>		<i>96.5</i>	<i>45-146</i>				

Matrix Spike Dup (1403002-MSD1)	Source: 1402146-04			Prepared & Analyzed: 03/01/14							
Benzene	41.1	1.0	ug/l	33.2	15.2	77.8	34-141		4.61	32	
Toluene	32.3	1.0	"	33.3	ND	96.8	27-151		1.25	25	
Ethylbenzene	51.7	1.0	"	33.1	22.3	88.9	29-160		6.11	50	
m,p-Xylene	89.2	2.0	"	66.7	38.0	76.9	20-166		3.39	36	
o-Xylene	35.5	1.0	"	32.9	2.52	100	33-159		0.198	26	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>13.0</i>		<i>"</i>	<i>13.2</i>		<i>97.9</i>	<i>37-154</i>				
<i>Surrogate: Toluene-d8</i>	<i>15.0</i>		<i>"</i>	<i>13.3</i>		<i>112</i>	<i>45-149</i>				
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>13.2</i>		<i>"</i>	<i>13.3</i>		<i>98.6</i>	<i>45-146</i>				

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Volatile Organic Compounds by EPA Method 8260B - Quality Control
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Analyte	Reporting			Spike	Source	%REC			RPD	Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch 1403002 - EPA 5030 Water MS

Matrix Spike Dup (1403002-MSD2)	Source: 1402146-05			Prepared & Analyzed: 03/01/14						
Benzene	29.2	1.0	ug/l	33.2	ND	87.7	34-141	3.04	32	
Toluene	31.4	1.0	"	33.3	ND	94.2	27-151	2.73	25	
Ethylbenzene	34.4	1.0	"	33.1	ND	104	29-160	2.50	50	
m,p-Xylene	68.3	2.0	"	66.7	ND	102	20-166	1.49	36	
o-Xylene	33.6	1.0	"	32.9	ND	102	33-159	0.837	26	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>13.1</i>		<i>"</i>	<i>13.2</i>		<i>99.1</i>	<i>37-154</i>			
<i>Surrogate: Toluene-d8</i>	<i>12.7</i>		<i>"</i>	<i>13.3</i>		<i>95.2</i>	<i>45-149</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>12.9</i>		<i>"</i>	<i>13.3</i>		<i>96.6</i>	<i>45-146</i>			

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Notes and Definitions

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

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