



**PDC Energy, Inc.**  
Third Quarter 2015 Groundwater Monitoring Summary

October 26, 2015

received 01/22/2016  
Project 6926  
Document 2144857

Seele 31, 41, 42-31 Tank Battery  
NWNW Section 31 T4N R67W  
Weld County, API # 05-123-20106  
Spill Tracking # 2223041  
Remediation # 6926

This groundwater monitoring summary has been prepared by Tasman Geosciences, Inc. for the Seele 31, 41, 42-31 tank battery. On July 31, 2015, groundwater sampling was conducted at five of the six temporary monitoring well locations. Monitoring well BH03 contained insufficient water and was not sampled. Groundwater samples were submitted for laboratory analysis of benzene, toluene, ethylbenzene, and total xylene (BTEX) constituents using USEPA Method 8260B. Analytical results are summarized in Table 1 and are illustrated on Figure 1. The laboratory analytical report is included as Attachment A. Third quarter 2015 analytical results indicate that constituent concentrations are below applicable COGCC Table 910-1 standards at each of the five locations sampled.

Bi-weekly enhanced fluid recovery (EFR) with air sparge (AS) events were initiated on August 22, 2012. EFR/AS events were discontinued in the second quarter of 2013 due to a site-wide decrease in groundwater elevation. EFR/AS events were restarted during the third quarter 2014, following the installation of new wells. A summary of EFR/AS operational data is provided in Table 2. EFR/AS were discontinued following the third quarter 2015, as constituent concentrations have remained below regulatory standards. Monitored natural attenuation (MNA) will be implemented as the selected remediation strategy during the fourth quarter 2015.

Fourth quarter 2015 groundwater sampling will be conducted during October 2015.

**TABLE 1**  
**SEELE 31, 41, 42-31 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 (feet)
<b>COGCC Table 910-1 Groundwater Standard (µg/L) <sup>(1)</sup></b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1,400</b>	
BH01	1/27/2012	5,300	1,200	180	1,300	13.14
BH01	7/17/2012	900	2.2	10	78	12.60
BH01	10/1/2012	<1.0	<1.0	<1.0	<1.0	13.82
BH01	1/28/2013	DRY	DRY	DRY	DRY	DRY
BH01	5/3/2013	3,000	2.3	17	240	13.90
BH01	7/25/2013	DRY	DRY	DRY	DRY	DRY
BH01	11/1/2013	<1.0	<1.0	4.2	28	13.09
BH01	1/29/2014	DRY	DRY	DRY	DRY	DRY
BH01	4/28/2014	DRY	DRY	DRY	DRY	DRY
BH01	7/25/2014	<1.0	<1.0	1.6	4.3	12.47
BH01	10/27/2014	DRY	DRY	DRY	DRY	DRY
BH01	1/20/2015	DRY	DRY	DRY	DRY	DRY
BH01	4/24/2015	DRY	DRY	DRY	DRY	DRY
BH01	7/31/2015	<1.0	<1.0	49	100	12.87
BH02	1/27/2012	7,500	680	240	1,400	11.93
BH02	7/17/2012	10,000	2,200	220	2,140	10.92
BH02	10/1/2012	DRY	DRY	DRY	DRY	DRY
BH02	1/28/2013	DRY	DRY	DRY	DRY	DRY
BH02	5/3/2013	DRY	DRY	DRY	DRY	DRY
BH02	7/25/2013	DRY	DRY	DRY	DRY	DRY
BH02	10/31/2013	DRY	DRY	DRY	DRY	DRY
BH02	1/29/2014	DRY	DRY	DRY	DRY	DRY
BH02	4/28/2014	DRY	DRY	DRY	DRY	DRY
BH02R	7/25/2014	93	14	89	230	10.12
BH02R	10/27/2014	1.4	<1.0	1.5	8.7	10.72
BH02R	1/20/2015	<1.0	<1.0	<1.0	<1.0	11.42
BH02R	4/24/2015	<1.0	<1.0	<1.0	<1.0	11.28
BH02R	7/31/2015	<1.0	<1.0	<1.0	<1.0	9.70
BH03	1/27/2012	16,000	4,400	420	2,900	15.02
BH03	7/17/2012	18,000	2,700	15	3,590	12.56
BH03	10/1/2012	7,300	1,400	250	2,400	12.69
BH03	1/28/2013	DRY	DRY	DRY	DRY	DRY
BH03	5/3/2013	DRY	DRY	DRY	DRY	DRY
BH03	7/25/2013	DRY	DRY	DRY	DRY	DRY
BH03	10/31/2013	DRY	DRY	DRY	DRY	DRY
BH03	1/29/2014	DRY	DRY	DRY	DRY	DRY
BH03	4/28/2014	DRY	DRY	DRY	DRY	DRY
BH03	7/25/2014	DRY	DRY	DRY	DRY	DRY
BH03	10/27/2014	DRY	DRY	DRY	DRY	DRY
BH03	1/20/2015	DRY	DRY	DRY	DRY	DRY
BH03	4/24/2015	DRY	DRY	DRY	DRY	DRY
BH03	7/31/2015	DRY	DRY	DRY	DRY	DRY

**TABLE 1**  
**SEELE 31, 41, 42-31 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 (feet)
<b>COGCC Table 910-1 Groundwater Standard (µg/L) <sup>(1)</sup></b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1,400</b>	
BH07	7/25/2014	<1.0	<1.0	<1.0	<1.0	9.01
BH07	10/27/2014	<b>160</b>	<1.0	<1.0	<1.0	9.75
BH07	1/20/2015	<b>120</b>	<1.0	<1.0	<1.0	10.63
BH07	4/24/2015	<1.0	<1.0	<1.0	<1.0	10.60
BH07	7/31/2015	<1.0	<1.0	<1.0	<1.0	9.69
BH08	7/25/2014	3.8	<1.0	6.2	210	9.95
BH08	10/27/2014	<b>5.5</b>	<1.0	<1.0	36	10.86
BH08	1/20/2015	<1.0	<1.0	<1.0	<1.0	11.57
BH08	4/24/2015	<1.0	<1.0	<1.0	<1.0	11.43
BH08	7/31/2015	<1.0	<1.0	<1.0	<1.0	9.74
BH09	7/25/2014	<b>810</b>	<1.0	72	510	11.48
BH09	10/27/2014	<1.0	<1.0	<1.0	<1.0	11.73
BH09	1/20/2015	<1.0	<1.0	<1.0	<1.0	12.62
BH09	4/24/2015	<1.0	<1.0	<1.0	<1.0	12.33
BH09	7/31/2015	<1.0	<1.0	<1.0	<1.0	10.78

**Notes:**

1. Groundwater standards referenced from 2 CCR 404-1, Table 910-1, effective February 1, 2014.

COGCC = Colorado Oil and Gas Conservation Commission

µg/L = Micrograms per liter

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

DRY = Well contained insufficient volume to collect sample.

**BOLD** = Analytical result is in exceedance of COGCC groundwater standards.

**TABLE 2**  
**SEELE 31, 41, 42-31 TANK BATTERY**  
**EFR / AS OPERATIONAL SUMMARY TABLE**

Date	EFR Wells	Total EFR/AS Duration (hours)	Approximate Gallons Extracted	AS Wells	Air Injection Pressure (psi)
<b>Third Quarter 2012</b>					
8/22/2012	BH01, BH02, BH03	7	42	BH01, BH02, BH03	8
9/5/2012		7	42		8
<b>Quarterly Totals</b>		<b>14</b>	<b>84</b>		-
<b>Fourth Quarter 2012</b>					
10/2/2012	BH01, BH02, BH03	7	42	BH01, BH02, BH03	8
10/15/2012		7	42		8
10/29/2012		7	0		8
11/12/2012		6.25	0		8
11/26/2012		6	0		8
<b>Quarterly Totals</b>		<b>33.25</b>	<b>84</b>		-
<b>First Quarter 2013</b>					
1/8/2013	BH01, BH02, BH03	5	0	BH01, BH02, BH03	10
1/21/2013		7	6.5		10
2/8/2013		6.5	6		10
3/14/2013		6	3		10
<b>Quarterly Totals</b>		<b>24.5</b>	<b>15.5</b>		-
<b>Second Quarter 2013</b>					
4/2/2013	BH01, BH02, BH03	4.25	6	BH01, BH02, BH03	10
<b>Quarterly Totals</b>		<b>4.25</b>	<b>6</b>		
<b>Third Quarter 2014</b>					
9/3/2014	BH02, BH03, BH08	6	0	BH02R, BH09	20
9/17/2014		6	75		20
<b>Quarterly Totals</b>		<b>12</b>	<b>75</b>		
<b>Fourth Quarter 2014</b>					
10/3/2014	BH02, BH03, BH08	6	9	BH02R, BH09	20
10/21/2014		6	50		20
11/4/2014		8	45		20
11/19/2014		6	0		20
12/5/2014		6	10		20
12/15/2014		6	50		20
12/28/2014		6	0		20
<b>Quarterly Totals</b>		<b>44</b>	<b>164</b>		
<b>First Quarter 2015</b>					
1/12/2015	BH02, BH07, BH08	6	10	BH02R, BH09	20
1/22/2015	BH02, BH03, BH08	6	0		20
2/11/2015	BH02, BH02R, BH03, BH07, BH08	6	50	BH02R, BH07, BH09	20
3/11/2015		6	50		20
3/26/2015		6	50		20
<b>Quarterly Totals</b>		<b>30</b>	<b>160</b>		

**TABLE 2**  
**SEELE 31, 41, 42-31 TANK BATTERY**  
**EFR / AS OPERATIONAL SUMMARY TABLE**

Date	EFR Wells	Total EFR/AS Duration (hours)	Approximate Gallons Extracted	AS Wells	Air Injection Pressure (psi)
<b>Second Quarter 2015</b>					
4/1/2015	BH02, BH02R, BH03, BH07, BH08	6	10	BH02R, BH07, BH09	20
4/22/2015		6	90		20
5/6/2015		6	50		20
5/20/2015		6	40		20
6/3/2015		6	30		20
6/17/2015		6	30		30
<b>Quarterly Totals</b>		<b>36</b>	<b>250</b>		
<b>Third Quarter 2015</b>					
7/1/2015	BH02, BH02R, BH03, BH07, BH08	6	60	BH02R, BH07, BH09	20
7/15/2015		6	45		20
7/29/2015		6	75		20
8/12/2015		6	40		20
8/26/2015		6	50		20
9/9/2015		6	50		20
9/23/2015		6	80		20
<b>Quarterly Totals</b>		<b>42</b>	<b>400</b>		

**Notes:**

EFR = Enhanced fluid recovery

AS = Air sparge

psi = Pounds per square inch

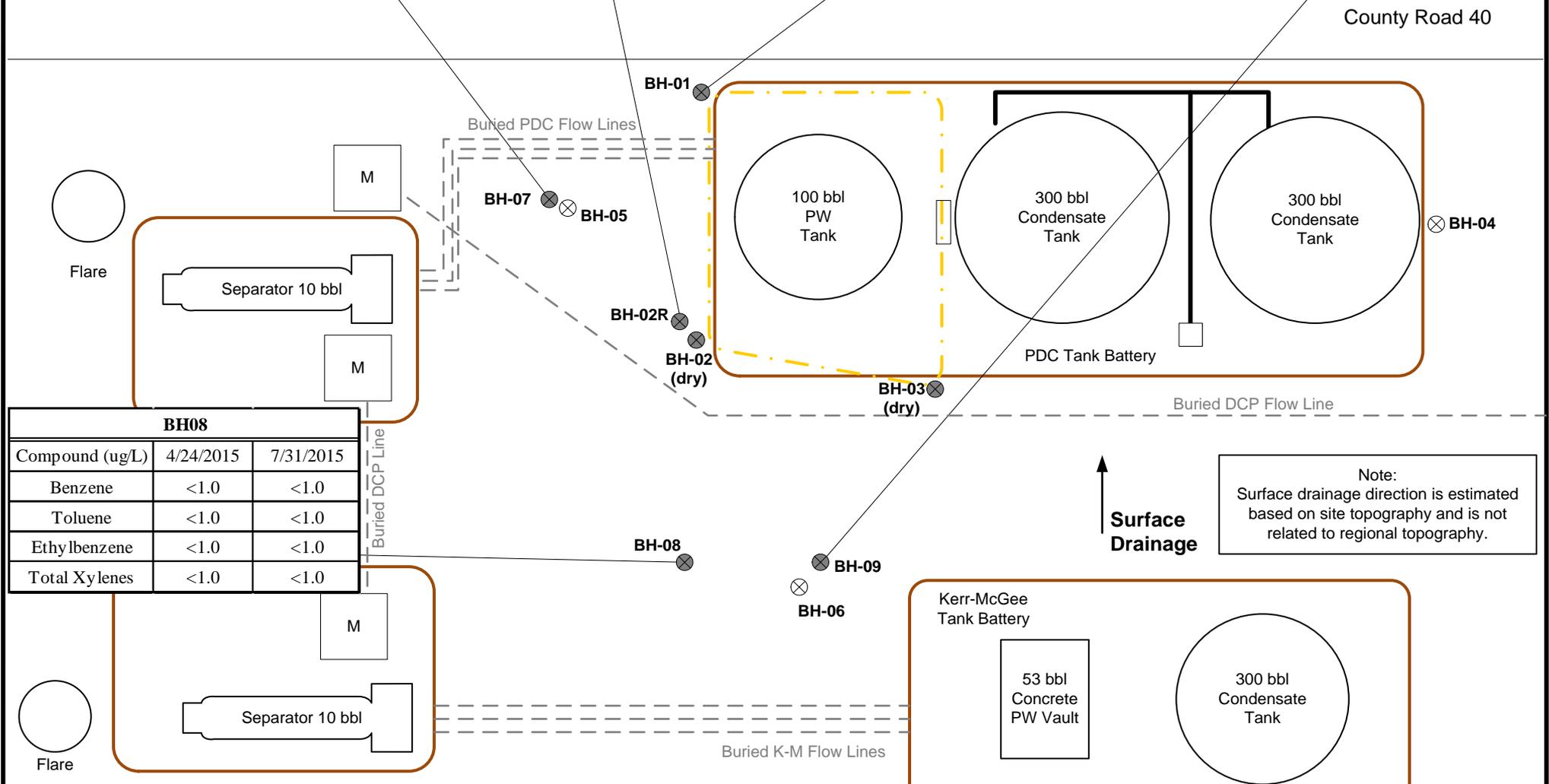


BH07		
Compound (ug/L)	4/24/2015	7/31/2015
Benzene	<1.0	<1.0
Toluene	<1.0	<1.0
Ethylbenzene	<1.0	<1.0
Total Xylenes	<1.0	<1.0

BH02R		
Compound (ug/L)	4/24/2015	7/31/2015
Benzene	<1.0	<1.0
Toluene	<1.0	<1.0
Ethylbenzene	<1.0	<1.0
Total Xylenes	<1.0	<1.0

BH01		
Compound (ug/L)	4/24/2015	7/31/2015
Benzene	DRY	<1.0
Toluene	DRY	<1.0
Ethylbenzene	DRY	49
Total Xylenes	DRY	100

BH09		
Compound (ug/L)	4/24/2015	7/31/2015
Benzene	<1.0	<1.0
Toluene	<1.0	<1.0
Ethylbenzene	<1.0	<1.0
Total Xylenes	<1.0	<1.0



BH08		
Compound (ug/L)	4/24/2015	7/31/2015
Benzene	<1.0	<1.0
Toluene	<1.0	<1.0
Ethylbenzene	<1.0	<1.0
Total Xylenes	<1.0	<1.0

DRAWN BY: ESS

DATE: 9/30/2015

**Facility Diagram**  
 PDC Energy – DJ Basin  
 Seele 31, 41, 42-31 Tank Battery  
 NWNW S31 T4N R67W  
 Weld County, CO

**TASMAN**  
 GEOSCIENCES

6899 Pecos St., Unit C  
 Denver CO 80221

**LEGEND**

- Earthen Berm
- Bore Hole Location, No Well Installed
- Bore Hole Location With Temporary Well Installed
- Approximate Extent of Excavation
- Meter Shed

**FIGURE 1**  
 GROUNDWATER  
 ANALYTICAL RESULTS

Not to Scale

**ATTACHMENT A**

# Summit Scientific

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741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

August 07, 2015

Mark Longhurst  
PDC Energy  
1775 Sherman St. STE. 3000  
Denver, CO 80203  
RE: Seele 31, 41, 42-31

Enclosed are the results of analyses for samples received by Summit Scientific on 07/31/15 17:20. 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: Seele 31, 41, 42-31

Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
08/07/15 13:36

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01	1508002-01	Water	07/31/15 13:39	07/31/15 17:20
BH02R	1508002-02	Water	07/31/15 13:45	07/31/15 17:20
BH07	1508002-03	Water	07/31/15 13:51	07/31/15 17:20
BH08	1508002-04	Water	07/31/15 13:56	07/31/15 17:20
BH09	1508002-05	Water	07/31/15 14:02	07/31/15 17:20

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: Seele 31, 41, 42-31

Project Number: [none]  
 Project Manager: Mark Longhurst

**Reported:**  
 08/07/15 13:36

**BH01**  
**1508002-01 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **07/31/15 13:39**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1508008	08/06/15	08/06/15	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>49</b>	1.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>100</b>	1.0	"	"	"	"	"	"	

Date Sampled: **07/31/15 13:39**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		96.2 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		98.6 %	45-146		"	"	"	"	

Summit Scientific

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

Project: Seele 31, 41, 42-31

Project Number: [none]  
 Project Manager: Mark Longhurst

**Reported:**  
 08/07/15 13:36

**BH02R**  
**1508002-02 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **07/31/15 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1508008	08/06/15	08/06/15	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **07/31/15 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		<i>101 %</i>	<i>37-154</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	
<i>Surrogate: Toluene-d8</i>		<i>97.1 %</i>	<i>45-149</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>		<i>97.5 %</i>	<i>45-146</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	

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

Project: Seele 31, 41, 42-31

Project Number: [none]  
 Project Manager: Mark Longhurst

**Reported:**  
 08/07/15 13:36

**BH07**  
**1508002-03 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **07/31/15 13:51**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1508008	08/06/15	08/06/15	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **07/31/15 13:51**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		97.2 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		95.9 %	45-146		"	"	"	"	

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

Project: Seele 31, 41, 42-31

Project Number: [none]  
 Project Manager: Mark Longhurst

**Reported:**  
 08/07/15 13:36

**BH08**  
**1508002-04 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **07/31/15 13:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1508008	08/06/15	08/06/15	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **07/31/15 13:56**

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>		96.8 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		100 %	45-146		"	"	"	"	

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

Project: Seele 31, 41, 42-31

Project Number: [none]  
 Project Manager: Mark Longhurst

**Reported:**  
 08/07/15 13:36

**BH09**  
**1508002-05 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **07/31/15 14:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1508008	08/06/15	08/06/15	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **07/31/15 14:02**

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>		95.9 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		94.8 %	45-146		"	"	"	"	

Summit Scientific

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

Project: Seele 31, 41, 42-31

Project Number: [none]  
Project Manager: Mark Longhurst

Reported:  
08/07/15 13:36

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

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

**Batch 1508008 - EPA 5030 Water MS**

**Blank (1508008-BLK1)**

Prepared & Analyzed: 08/05/15

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	13.0		"	13.3		97.4	45-149			
Surrogate: 4-Bromofluorobenzene	13.1		"	13.3		98.4	45-146			

**LCS (1508008-BS1)**

Prepared & Analyzed: 08/05/15

Benzene	51.0	1.0	ug/l	50.0		102	51-132			
Toluene	51.7	1.0	"	50.0		103	51-138			
Ethylbenzene	50.9	1.0	"	50.0		102	58-146			
m,p-Xylene	102	2.0	"	100		102	57-144			
o-Xylene	50.9	1.0	"	50.0		102	53-146			
Surrogate: 1,2-Dichloroethane-d4	13.2		"	13.2		100	37-154			
Surrogate: Toluene-d8	13.8		"	13.3		103	45-149			
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3		100	45-146			

**Matrix Spike (1508008-MS1)**

Source: 1507302-01

Prepared & Analyzed: 08/05/15

Benzene	317	1.0	ug/l	50.0	238	159	34-141			QM-07
Toluene	62.2	1.0	"	50.0	1.58	121	27-151			
Ethylbenzene	190	1.0	"	50.0	128	125	29-160			
m,p-Xylene	120	2.0	"	100	1.86	118	20-166			
o-Xylene	60.6	1.0	"	50.0	ND	121	33-159			
Surrogate: 1,2-Dichloroethane-d4	14.3		"	13.2		108	37-154			
Surrogate: Toluene-d8	13.5		"	13.3		101	45-149			
Surrogate: 4-Bromofluorobenzene	13.6		"	13.3		102	45-146			

Summit Scientific

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

Project: Seele 31, 41, 42-31

Project Number: [none]  
 Project Manager: Mark Longhurst

**Reported:**  
 08/07/15 13:36

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

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

**Batch 1508008 - EPA 5030 Water MS**

<b>Matrix Spike Dup (1508008-MSD1)</b>	<b>Source: 1507302-01</b>			<b>Prepared &amp; Analyzed: 08/05/15</b>						
Benzene	342	1.0	ug/l	50.0	238	209	34-141	7.60	32	QM-07
Toluene	69.0	1.0	"	50.0	1.58	135	27-151	10.4	25	
Ethylbenzene	217	1.0	"	50.0	128	178	29-160	13.0	50	QM-07
m,p-Xylene	138	2.0	"	100	1.86	136	20-166	13.6	36	
o-Xylene	69.1	1.0	"	50.0	ND	138	33-159	13.1	26	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>13.4</i>		<i>"</i>	<i>13.2</i>		<i>102</i>	<i>37-154</i>			
<i>Surrogate: Toluene-d8</i>	<i>13.2</i>		<i>"</i>	<i>13.3</i>		<i>99.1</i>	<i>45-149</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>13.3</i>		<i>"</i>	<i>13.3</i>		<i>99.9</i>	<i>45-146</i>			

Summit Scientific

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1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: Seele 31, 41, 42-31

Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
08/07/15 13:36

### Notes and Definitions

- 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.
- 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