



FIGURE 1  
 SITE MAP  
 PFEIFFER 10-26  
 NWSE 26-T6N-R64W  
 WELD COUNTY, COLORADO  
 BONANZA CREEK ENERGY OPERATING COMPANY LLC



AST: ABOVEGROUND STORAGE TANK  
 ECD: EMISSION CONTROL DEVICE  
 PDC: PDC ENERGY, INC.

**TABLE 1**  
**GROUNDWATER MONITORING WELL ANALYTICAL DATA**  
**PFEIFFER 10-26**  
**BONANZA CREEK ENERGY OPERATING COMPANY LLC**

SAMPLE ID	SAMPLE DATE	DEPTH (feet bgs)	RELATIVE ELEVATION <sup>1</sup> (feet)	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYLBENZENE (µg/L)	XYLENES (Total) (µg/L)
MW01	1/30/2012	5.71		<b>9,300</b>	170	370	<1.0
	4/6/2012	8.73		<b>3,500</b>	84	260	720
	7/11/2012	5.74		<b>5,300</b>	2.1	230	1,100
	10/22/2012	7.70		<b>9,100</b>	8.8	500	1,600
	1/24/2013	8.07		<b>7,700</b>	1.9	400	1,000
	4/22/2013	NM		<b>3,100</b>	1.6	400	750
	7/22/2013	7.15		<b>8,100</b>	1.1	260	870
	10/30/2013	7.29		<b>1,900</b>	<1.0	110	190
MW01 destroyed as of January 2014 quarterly monitoring event.							
MW01R	9/24/2014	4.36		<1.0	<1.0	<1.0	2.0
	12/19/2014	5.42		<1.0	<1.0	<1.0	<1.0
	3/16/2015	5.72		<1.0	<1.0	<1.0	<1.0
	6/26/2015	4.33		<1.0	<1.0	<1.0	<1.0
	9/4/2015	1.94		2.6	<1.0	<1.0	<1.0
	12/30/2015	4.97		4.5	<1.0	<1.0	<1.0
MW02	1/30/2012	5.21	91.71	<b>6.0</b>	<1.0	1.1	5.4
	4/6/2012	8.39	88.53	<1.0	<1.0	<1.0	<1.0
	7/11/2012	5.19	91.73	<1.0	<1.0	<1.0	<1.0
	10/22/2012	7.12	89.80	<1.0	<1.0	<1.0	<1.0
	1/24/2013	7.52	89.40	<1.0	<1.0	<1.0	<1.0
	4/22/2013	NM		1.1	<1.0	<1.0	<1.0
	7/22/2013	6.62	90.30	<1.0	<1.0	<1.0	<1.0
	10/30/2013	6.69	90.23	<1.0	<1.0	<1.0	<1.0
	1/2/2014	7.07	89.85	<1.0	<1.0	<1.0	<1.0
	1/22/2014	7.14	89.78	Not Sampled - Survey Only			
	4/23/2014	7.22	89.70	<1.0	<1.0	<1.0	<1.0
	9/24/2014	4.63	92.29	<1.0	<1.0	<1.0	<1.0
	12/19/2014	5.59	91.33	<1.0	<1.0	<1.0	<1.0
	3/16/2015	5.93	90.99	<1.0	<1.0	<1.0	<1.0
	6/26/2015	4.58	92.34	<b>140</b>	<1.0	<1.0	<1.0
	9/4/2015	2.15	94.77	<1.0	<1.0	<1.0	<1.0
12/30/2015	5.19	91.73	<1.0	<1.0	<1.0	<1.0	
MW03	1/30/2012	4.60	91.76	<b>280</b>	<1.0	8.4	9.3
	4/6/2012	4.73	91.63	<b>240</b>	<1.0	3.9	<1.0
	7/11/2012	4.68	91.68	4.9	<1.0	<1.0	<1.0
	10/22/2012	6.52	89.84	1.2	<1.0	<1.0	<1.0
	1/24/2013	6.97	89.39	2.2	<1.0	<1.0	<1.0
	4/22/2013	NM		2.2	<1.0	<1.0	<1.0
	7/22/2013	6.22	90.14	<b>6.6</b>	<1.0	<1.0	<1.0
	10/30/2013	6.15	90.21	<1.0	<1.0	<1.0	<1.0
	1/2/2014	NM		Not Sampled - Well could not be located.			
	1/22/2014	6.62	89.74	Not Sampled - Survey Only			
	4/23/2014	6.57	89.79	1.3	<1.0	<1.0	<1.0
	9/24/2014	4.23	92.13	<b>7.0</b>	<1.0	<1.0	<1.0
	12/19/2014	5.19	91.17	<1.0	<1.0	<1.0	<1.0
	3/16/2015	5.56	90.80	<1.0	<1.0	<1.0	<1.0
	6/26/2015	4.22	92.14	<1.0	<1.0	<1.0	<1.0
	9/4/2015	1.97	94.39	<1.0	<1.0	<1.0	<1.0
12/30/2015	4.78	91.58	<1.0	<1.0	<1.0	<1.0	

**TABLE 1**  
**GROUNDWATER MONITORING WELL ANALYTICAL DATA**  
**PFEIFFER 10-26**  
**BONANZA CREEK ENERGY OPERATING COMPANY LLC**

SAMPLE ID	SAMPLE DATE	DEPTH (feet bgs)	RELATIVE ELEVATION <sup>1</sup> (feet)	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYLBENZENE (µg/L)	XYLENES (Total) (µg/L)
MW04	1/30/2012	4.32		<b>4,000</b>	<1.0	430	<b>3,000</b>
	4/6/2012	4.47		<b>2,200</b>	<1.0	120	380
	7/11/2012	4.41		<b>2,100</b>	<1.0	160	490
	10/22/2012	6.76		<b>1,100</b>	<1.0	60	150
	1/24/2013	6.70		<b>2,600</b>	<1.0	59	140
	4/22/2013	NM		<b>2,000</b>	1.1	180	510
	7/22/2013	6.25		<b>4,000</b>	<1.0	220	400
	10/30/2013	5.84		<b>360</b>	<1.0	16	45
MW04 destroyed as of January 2014 quarterly monitoring event.							
MW04R	9/24/2014	4.88		<b>97</b>	<1.0	<1.0	100
	12/19/2014	5.81		<1.0	<1.0	<1.0	<1.0
	3/16/2015	6.12		<1.0	<1.0	<1.0	<1.0
	6/26/2015	4.81		<b>24</b>	<1.0	1.4	<1.0
	9/4/2015	2.25		2.1	<1.0	<1.0	<1.0
	12/30/2015	5.42		<b>35</b>	<1.0	7.2	7
MW05	1/30/2012	4.79	91.60	<1.0	<1.0	1.4	1.3
	4/6/2012	4.97	91.42	<b>17</b>	<1.0	<1.0	<1.0
	7/11/2012	4.92	91.47	<1.0	<1.0	<1.0	<1.0
	10/22/2012	7.09	89.30	<1.0	<1.0	<1.0	<1.0
	1/24/2013	7.19	89.20	<b>14</b>	<1.0	<1.0	<1.0
	4/22/2013	NM		1.1	<1.0	<1.0	<1.0
	7/22/2013	6.54	89.85	<1.0	<1.0	<1.0	<1.0
	10/30/2013	6.33	90.06	<1.0	<1.0	<1.0	<1.0
	1/2/2014	NM		Not Sampled - Well could not be located.			
	1/22/2014	6.75	89.64	Not Sampled - Survey Only			
	4/23/2014	6.61	89.78	<b>94</b>	<1.0	<1.0	<1.0
	9/24/2014	4.56	91.83	<1.0	<1.0	<1.0	<1.0
	12/19/2014	5.46	90.93	<1.0	<1.0	<1.0	<1.0
	3/16/2015	5.77	90.62	<1.0	<1.0	<1.0	<1.0
	6/26/2015	4.41	91.98	<b>8.7</b>	<1.0	<1.0	<1.0
	9/4/2015	1.97	94.42	<1.0	<1.0	<1.0	<1.0
12/30/2015	6.03	90.36	<1.0	<1.0	<1.0	<1.0	
TMW06	10/22/2012	6.35		<1.0	<1.0	<1.0	<1.0
	1/24/2013	6.75		<1.0	<1.0	<1.0	<1.0
	4/22/2013	NM		<1.0	<1.0	<1.0	<1.0
	7/22/2013	Destroyed					
	11/6/2013	6.05		<1.0	<1.0	<1.0	<1.0
	4/23/2014	8.41		<1.0	<1.0	<1.0	<1.0
	9/24/2014	4.02		<1.0	<1.0	<1.0	<1.0
	12/19/2014	4.97		<1.0	<1.0	<1.0	<1.0
	3/16/2015	5.27		<1.0	<1.0	<1.0	<1.0
	6/26/2015	3.96		<1.0	<1.0	<1.0	<1.0
	9/4/2015	1.67		1.3	<1.0	<1.0	<1.0
	12/30/2015	4.51		<1.0	<1.0	<1.0	<1.0

**TABLE 1**  
**GROUNDWATER MONITORING WELL ANALYTICAL DATA**  
**PFEIFFER 10-26**  
**BONANZA CREEK ENERGY OPERATING COMPANY LLC**

SAMPLE ID	SAMPLE DATE	DEPTH (feet bgs)	RELATIVE ELEVATION <sup>1</sup> (feet)	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYLBENZENE (µg/L)	XYLENES (Total) (µg/L)
TMW07	10/22/2012	6.57		<1.0	<1.0	<1.0	<1.0
	1/24/2013	7.00		<1.0	<1.0	<1.0	<1.0
	4/22/2013	NM		<1.0	<1.0	<1.0	<1.0
	7/22/2013	Destroyed					
	11/6/2013	6.35	90.08	<1.0	<1.0	<1.0	<1.0
	1/2/2014	6.60	89.83	<1.0	<1.0	<1.0	<1.0
	1/22/2014	6.69	89.74	Not Sampled - Survey Only			
	4/23/2014	6.13	90.30	<1.0	<1.0	<1.0	<1.0
	9/24/2014	3.78	92.65	<1.0	<1.0	<1.0	<1.0
	12/19/2014	4.68	91.75	<1.0	<1.0	<1.0	<1.0
	3/16/2015	4.98	91.45	<1.0	<1.0	<1.0	<1.0
	6/26/2015	3.65	92.78	<1.0	<1.0	<1.0	<1.0
	9/4/2015	1.35	95.08	2.5	<1.0	<1.0	<1.0
12/30/2015	4.21	92.22	<1.0	<1.0	<1.0	<1.0	
TMW08	10/22/2012	6.33		<1.0	<1.0	<1.0	<1.0
	1/24/2013	6.88		<1.0	<1.0	<1.0	<1.0
	4/22/2013	NM		<1.0	<1.0	<1.0	<1.0
	7/22/2013	Destroyed					
	11/6/2013	6.01	90.06	<1.0	<1.0	<1.0	<1.0
	1/2/2014	6.28	89.79	<1.0	<1.0	<1.0	<1.0
	1/22/2014	6.37	89.70	Not Sampled - Survey Only			
	4/23/2014	6.55	89.52	<1.0	<1.0	<1.0	<1.0
	9/24/2014	4.19	91.88	<1.0	<1.0	<1.0	<1.0
	12/19/2014	5.08	90.99	<1.0	<1.0	<1.0	<1.0
	3/16/2015	5.42	90.65	<1.0	<1.0	<1.0	<1.0
	6/26/2015	4.07	92.00	<1.0	<1.0	<1.0	<1.0
	9/4/2015	1.62	94.45	<b>64</b>	<1.0	<1.0	<1.0
12/30/2015	4.65	91.42	<1.0	<1.0	<1.0	<1.0	
TMW09	10/22/2012	6.55		<1.0	<1.0	<1.0	<1.0
	1/24/2013	6.75		<1.0	<1.0	<1.0	<1.0
	4/22/2013	NM		<1.0	<1.0	<1.0	<1.0
	7/22/2013	Destroyed					
	11/6/2013	5.94	89.98	<1.0	<1.0	<1.0	<1.0
	1/2/2014	6.22	89.70	<1.0	<1.0	<1.0	<1.0
	1/22/2014	6.31	89.61	Not Sampled - Survey Only			
	4/23/2014	6.51	89.41	<1.0	<1.0	<1.0	<1.0
	9/24/2014	4.14	91.78	<1.0	<1.0	<1.0	<1.0
	12/19/2014	5.04	90.88	<1.0	<1.0	<1.0	<1.0
	3/16/2015	5.36	90.56	<1.0	<1.0	<1.0	<1.0
	6/26/2015	4.02	91.90	<1.0	<1.0	<1.0	<1.0
	9/4/2015	1.45	94.47	<1.0	<1.0	<1.0	<1.0
12/30/2015	4.60	91.32	<1.0	<1.0	<1.0	<1.0	
COGCC Concentration Level				5	560	700	1,400

Notes:

bgs - below ground surface

µg/L - micrograms per liter

< - Less than laboratory reporting limit.

COGCC - Colorado Oil and Gas Conservation Commission

Results noted in bold exceed COGCC concentration levels (Table 910-1).

1 - Monitoring wells without groundwater elevation data were installed/replaced after the January 22, 2014 survey date.

# Summit Scientific

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741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

January 07, 2016

Justin Solomon  
LT Environmental, Inc.  
4600 West 60th Avenue  
Arvada, CO 80003  
RE: Pfeiffer 10-26

Enclosed are the results of analyses for samples received by Summit Scientific on 12/30/15 16:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury  
President



LT Environmental, Inc.  
4600 West 60th Avenue  
Arvada CO, 80003

Project: Pfeiffer 10-26

Project Number: 034511009  
Project Manager: Justin Solomon

**Reported:**  
01/07/16 09:18

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01R	1512247-01	Water	12/30/15 10:00	12/30/15 16:35
MW02	1512247-02	Water	12/30/15 10:05	12/30/15 16:35
MW03	1512247-03	Water	12/30/15 10:10	12/30/15 16:35
MW04R	1512247-04	Water	12/30/15 10:15	12/30/15 16:35
MW05	1512247-05	Water	12/30/15 10:20	12/30/15 16:35
TMW06	1512247-06	Water	12/30/15 10:25	12/30/15 16:35
TMW07	1512247-07	Water	12/30/15 10:30	12/30/15 16:35
TMW08	1512247-08	Water	12/30/15 10:35	12/30/15 16:35
TMW09	1512247-09	Water	12/30/15 10:40	12/30/15 16:35

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.*



LT Environmental, Inc.  
4600 West 60th Avenue  
Arvada CO, 80003

Project: Pfeiffer 10-26

Project Number: 034511009  
Project Manager: Justin Solomon

Reported:  
01/07/16 09:18

# Summit Scientific

1512247

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

Client: LT ENVIRONMENTAL Project Manager: J. Crockett Justin Solomon Page 1 of 1  
Address: 4600 W 60th Ave E-Mail: Jsolomon@ltenv.com  
City/State/Zip: Arvada, Colorado 80003  
Phone: 303-433-9788 Fax: 303-433-1432 Project Name: Pfeiffer 10-26  
Sampler Name: Chad Terry Project Number: 034511009

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested				Special Instructions
					HCl	HNO3	None	Other (Specify)	Groundwater	Soil	Air-Canister #	Other (Specify)					
1	MW01R	12/30/15	1000	3	X				X								
2	MW02		1005	3	X				X								
3	MW03		1010	2	X				X								
4	MW04R		1015	3	X				X								
5	MW05		1020	3	X				X								
6	TMW06		1025	3	X				X								
7	TMW07		1030	3	X				X								
8	TMW08		1035	3	X				X								
9	TMW09		1040	3	X				X								
10																	

  

Relinquished by: <u>CTZ</u> Date/Time: <u>12/30/15 1635</u>	Received by: <u>MS</u> Date/Time: <u>12/30/15 1635</u>	Turn Around Time (Check) Same Day <input type="checkbox"/> 72 hours 24 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 hours <input type="checkbox"/>	Notes: <u>on ice</u>
Relinquished by: <u>MS</u> Date/Time: <u>12/30/15 1735</u>	Received by:	Sample Integrity: <u>52°C</u>	
Relinquished by:	Received by:	Temperature Upon Receipt: <u>52°C</u> Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	

www.s2scientific.com



LT Environmental, Inc.  
 4600 West 60th Avenue  
 Arvada CO, 80003

Project: Pfeiffer 10-26  
 Project Number: 034511009  
 Project Manager: Justin Solomon

**Reported:**  
 01/07/16 09:18

**MW01R**  
**1512247-01 (Water)**

**Summit Scientific**

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

Date Sampled: 12/30/15 10:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>4.5</b>	1.0	ug/l	1	1512283	01/01/16	01/01/16	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 12/30/15 10:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		104 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		99.3 %	45-146		"	"	"	"	

Summit Scientific

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 4600 West 60th Avenue  
 Arvada CO, 80003

Project: Pfeiffer 10-26

Project Number: 034511009  
 Project Manager: Justin Solomon

**Reported:**  
 01/07/16 09:18

**MW02**  
**1512247-02 (Water)**

**Summit Scientific**

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

Date Sampled: 12/30/15 10:05

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1512283	01/01/16	01/01/16	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 12/30/15 10:05

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		101 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.0 %	45-146		"	"	"	"	

Summit Scientific

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LT Environmental, Inc.  
 4600 West 60th Avenue  
 Arvada CO, 80003

Project: Pfeiffer 10-26

Project Number: 034511009  
 Project Manager: Justin Solomon

**Reported:**  
 01/07/16 09:18

**MW03**  
**1512247-03 (Water)**

**Summit Scientific**

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

Date Sampled: 12/30/15 10:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1512283	01/01/16	01/01/16	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 12/30/15 10:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		104 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		101 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.4 %	45-146		"	"	"	"	

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LT Environmental, Inc.  
 4600 West 60th Avenue  
 Arvada CO, 80003

Project: Pfeiffer 10-26

Project Number: 034511009  
 Project Manager: Justin Solomon

**Reported:**  
 01/07/16 09:18

**MW04R**  
**1512247-04 (Water)**

**Summit Scientific**

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

Date Sampled: 12/30/15 10:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>35</b>	1.0	ug/l	1	1512283	01/01/16	01/01/16	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>7.2</b>	1.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>6.9</b>	1.0	"	"	"	"	"	"	

Date Sampled: 12/30/15 10:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.7 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		103 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		98.1 %	45-146		"	"	"	"	

Summit Scientific

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LT Environmental, Inc.  
 4600 West 60th Avenue  
 Arvada CO, 80003

Project: Pfeiffer 10-26  
 Project Number: 034511009  
 Project Manager: Justin Solomon

**Reported:**  
 01/07/16 09:18

**MW05**  
**1512247-05 (Water)**

**Summit Scientific**

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

Date Sampled: 12/30/15 10:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1512283	01/01/16	01/01/16	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 12/30/15 10:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		101 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.5 %	45-146		"	"	"	"	

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 Project Manager: Justin Solomon

**Reported:**  
 01/07/16 09:18

**TMW06**  
**1512247-06 (Water)**

**Summit Scientific**

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

Date Sampled: 12/30/15 10:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1512283	01/01/16	01/01/16	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 12/30/15 10:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		105 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		101 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.2 %	45-146		"	"	"	"	

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 Project Manager: Justin Solomon

**Reported:**  
 01/07/16 09:18

**TMW07**  
**1512247-07 (Water)**

**Summit Scientific**

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

Date Sampled: 12/30/15 10:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1512283	01/01/16	01/01/16	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 12/30/15 10:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		106 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		101 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.5 %	45-146		"	"	"	"	

Summit Scientific

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 Project Manager: Justin Solomon

**Reported:**  
 01/07/16 09:18

**TMW08**  
**1512247-08 (Water)**

**Summit Scientific**

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

Date Sampled: 12/30/15 10:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1512283	01/01/16	01/01/16	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 12/30/15 10:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		101 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.0 %	45-146		"	"	"	"	

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**Reported:**  
 01/07/16 09:18

**TMW09**  
**1512247-09 (Water)**

**Summit Scientific**

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

Date Sampled: 12/30/15 10:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1512283	01/01/16	01/01/16	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 12/30/15 10:40

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

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Reported:  
01/07/16 09:18

**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 1512283 - EPA 5030 Water MS**

**Blank (1512283-BLK1)**

Prepared & Analyzed: 12/31/15

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	14.9		"	13.3		111	37-154			
Surrogate: Toluene-d8	13.7		"	13.3		103	45-149			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		99.0	45-146			

**LCS (1512283-BS1)**

Prepared & Analyzed: 12/31/15

Benzene	49.2	1.0	ug/l	50.0		98.4	51-132			
Toluene	49.0	1.0	"	50.0		98.1	51-138			
Ethylbenzene	49.0	1.0	"	50.0		97.9	58-146			
m,p-Xylene	98.4	2.0	"	100		98.4	57-144			
o-Xylene	47.4	1.0	"	50.0		94.8	53-146			
Surrogate: 1,2-Dichloroethane-d4	13.9		"	13.3		104	37-154			
Surrogate: Toluene-d8	13.4		"	13.3		100	45-149			
Surrogate: 4-Bromofluorobenzene	12.6		"	13.3		94.5	45-146			

**Matrix Spike (1512283-MS1)**

Source: 1512241-01

Prepared & Analyzed: 12/31/15

Benzene	55.3	1.0	ug/l	50.0	ND	111	34-141			
Toluene	55.1	1.0	"	50.0	ND	110	27-151			
Ethylbenzene	56.9	1.0	"	50.0	ND	114	29-160			
m,p-Xylene	113	2.0	"	100	ND	113	20-166			
o-Xylene	54.0	1.0	"	50.0	ND	108	33-159			
Surrogate: 1,2-Dichloroethane-d4	13.2		"	13.3		99.2	37-154			
Surrogate: Toluene-d8	13.4		"	13.3		100	45-149			
Surrogate: 4-Bromofluorobenzene	12.9		"	13.3		96.5	45-146			

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 01/07/16 09:18

**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 1512283 - EPA 5030 Water MS**

<b>Matrix Spike Dup (1512283-MSD1)</b>	<b>Source: 1512241-01</b>			<b>Prepared &amp; Analyzed: 12/31/15</b>						
Benzene	54.0	1.0	ug/l	50.0	ND	108	34-141	2.49	32	
Toluene	54.4	1.0	"	50.0	ND	109	27-151	1.33	25	
Ethylbenzene	55.8	1.0	"	50.0	ND	112	29-160	1.95	50	
m,p-Xylene	112	2.0	"	100	ND	112	20-166	1.11	36	
o-Xylene	52.9	1.0	"	50.0	ND	106	33-159	2.00	26	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>12.8</i>		<i>"</i>	<i>13.3</i>		<i>95.8</i>	<i>37-154</i>			
<i>Surrogate: Toluene-d8</i>	<i>13.3</i>		<i>"</i>	<i>13.3</i>		<i>99.9</i>	<i>45-149</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>12.8</i>		<i>"</i>	<i>13.3</i>		<i>95.9</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