

**TABLE 1**  
**MEYRING 13-27 FLOWLINE**  
**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 <sup>(2)</sup> (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>	
#1W Center Liner	10/10/2017	1,215	1,964	103	726	N/A
#2W South West	10/10/2017	41.3	42.3	3.6	79.1	N/A
#3W East Center	10/10/2017	1.5	3.5	<1.0	23.8	N/A
#1E Center Liner	10/10/2017	5.4	<1.0	<1.0	1.5	N/A
West Site Flow Line	10/16/2017	36	14	<1.0	32	N/A
Creek - Flowline	10/16/2017	<1.0	<1.0	<1.0	<1.0	N/A
West Site SW	10/16/2017	46	9	<1.0	30	N/A
Creek 40' South FL	10/16/2017	<1.0	<1.0	<1.0	<1.0	N/A
East Site Liner	10/16/2017	34	12	1	44	N/A
Creek - Flowline	10/19/2017	<1.0	<1.0	<1.0	<1.0	N/A
Creek 40' South FL	10/19/2017	<1.0	<1.0	<1.0	<1.0	N/A
BH01	12/11/2017	610	52	<1.0	460	N/A
BH02	12/11/2017	270	7.9	<1.0	410	N/A
BH03	12/11/2017	<1.0	<1.0	<1.0	<2.0	N/A
BH04	12/11/2017	<1.0	<1.0	<1.0	<2.0	N/A
BH05	12/11/2017	<1.0	<1.0	<1.0	<2.0	N/A
BH06	12/11/2017	<1.0	<1.0	<1.0	<2.0	N/A
BH07	12/11/2017	<1.0	<1.0	<1.0	<2.0	N/A
BH08	12/11/2017	<1.0	<1.0	<1.0	<2.0	N/A
BH09	1/2/2018	<1.0	<1.0	<1.0	<2.0	N/A
BH10	1/2/2018	<1.0	<1.0	<1.0	<2.0	N/A
BH11	1/2/2018	<1.0	<1.0	<1.0	<2.0	N/A
BH12	1/2/2018	<1.0	<1.0	<1.0	<2.0	N/A

**Notes:**

1. Groundwater standards referenced from 2 CCR 404-1, Table 910-1, effective January 30, 2015.
2. Groundwater measurements for excavation samples were estimated from ground surface. Depth to water measurements collected prior to the second quarter 2018 were measured from top of well casing. Subsequent measurements were collected from top of casing and adjusted using survey data and product thickness to reflect depth of water from ground surface.

**TABLE 1**  
**MEYRING 13-27 FLOWLINE**  
**GROUNDWATER ANALYTICAL RESULTS SUMMARY TABLE**

COGCC = Colorado Oil and Gas Conservation Commission

µg/L = Micrograms per liter

N/A = Data was collected by LT Environmental, Inc. and is not available.

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

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

**TABLE 2**  
**MEYRING 13-27 FLOWLINE**  
**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 <sup>(2)</sup> (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>	
#1W Center Liner	10/10/2017	1,215	1,964	103	726	N/A
#2W South West	10/10/2017	41.3	42.3	3.6	79.1	N/A
#3W East Center	10/10/2017	1.5	3.5	<1.0	23.8	N/A
#1E Center Liner	10/10/2017	5.4	<1.0	<1.0	1.5	N/A
West Site Flow Line	10/16/2017	36	14	<1.0	32	N/A
Creek - Flowline	10/16/2017	<1.0	<1.0	<1.0	<1.0	N/A
West Site SW	10/16/2017	46	9	<1.0	30	N/A
Creek 40' South FL	10/16/2017	<1.0	<1.0	<1.0	<1.0	N/A
East Site Liner	10/16/2017	34	12	1	44	N/A
Creek - Flowline	10/19/2017	<1.0	<1.0	<1.0	<1.0	N/A
Creek 40' South FL	10/19/2017	<1.0	<1.0	<1.0	<1.0	N/A
MW01	12/11/2017	610	52	<1.0	460	N/A
MW01	2/7/2018	240	<1.0	4.7	32	3.46
MW02	12/11/2017	270	7.9	<1.0	410	N/A
MW02	2/7/2018	27	<1.0	<1.0	<2.0	3.44
MW03	12/11/2017	<1.0	<1.0	<1.0	<2.0	N/A
MW03	2/7/2018	5.8	<1.0	<1.0	<2.0	3.07
MW04	12/11/2017	<1.0	<1.0	<1.0	<2.0	N/A
MW04	2/7/2018	<1.0	<1.0	<1.0	<2.0	3.42
MW05	12/11/2017	<1.0	<1.0	<1.0	<2.0	N/A
MW05	2/7/2018	42	<1.0	<1.0	8.0	5.53
MW06	12/11/2017	<1.0	<1.0	<1.0	<2.0	N/A
MW06	2/7/2018	<1.0	<1.0	<1.0	<2.0	5.39
MW07	12/11/2017	<1.0	<1.0	<1.0	<2.0	N/A
MW07	2/7/2018	<1.0	<1.0	<1.0	<2.0	5.49
MW08	12/11/2017	<1.0	<1.0	<1.0	<2.0	N/A
MW08	2/7/2018	<1.0	<1.0	<1.0	<2.0	5.78
MW09	1/2/2018	<1.0	<1.0	<1.0	<2.0	N/A
MW09	2/7/2018	<1.0	<1.0	<1.0	<2.0	3.15

**TABLE 2**  
**MEYRING 13-27 FLOWLINE**  
**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 <sup>(2)</sup> (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>	
MW10	1/2/2018	<1.0	<1.0	<1.0	<2.0	N/A
MW10	2/7/2018	<1.0	<1.0	<1.0	<2.0	3.32
MW11	1/2/2018	<1.0	<1.0	<1.0	<2.0	N/A
MW11	2/7/2018	<1.0	<1.0	<1.0	<2.0	3.32
MW12	1/2/2018	<1.0	<1.0	<1.0	<2.0	N/A
MW12	2/7/2018	<1.0	<1.0	<1.0	<2.0	3.34

**Notes:**

1. Groundwater standards referenced from 2 CCR 404-1, Table 910-1, effective January 30, 2015.
2. Groundwater measurements for excavation samples were estimated from ground surface. Depth to water measurements collected in January 2018 were measured from top of well casing. Subsequent measurements were collected from top of casing and adjusted using survey data and product thickness to reflect depth of water from ground surface.

COGCC = Colorado Oil and Gas Conservation Commission

µg/L = Micrograms per liter

N/A = Data was collected by LT Environmental, Inc. and is not available.

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

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

**TABLE 3**  
**MEYRING 13-27 FLOWLINE**  
**GROUNDWATER ANALYTICAL RESULTS SUMMARY TABLE**  
**TOTAL PETROLEUM HYDROCARBONS - GASOLINE RANGE ORGANICS**

Sample ID	Date Sampled	TPH - GRO <sup>(1)</sup> (mg/L)
#1W Center Liner	10/10/2017	10.4
#2W South West	10/10/2017	9.07
#3W East Center	10/10/2017	<0.50
#1E Center Liner	10/10/2017	<0.50
West Site Flow Line	10/16/2017	0.56
Creek - Flowline	10/16/2017	<0.50
West Site SW	10/16/2017	0.57
Creek 40' South FL	10/16/2017	<0.50
East Site Liner	10/16/2017	0.94
Creek - Flowline	10/19/2017	<0.50
Creek 40' South FL	10/19/2017	<0.50

**Notes:**

1. Colorado Department of Public Health Water Quality Control Commission 5CCR 1002-41 Basic Standards for Groundwater and the Colorado Oil and Gas Conservation Commission 2 CCR 404-1, Table 910-1 do not provide guidance on TPH - GRO in groundwater. Consequently, there is no applicable standard for this constituent.

TPH - GRO = Total petroleum hydrocarbons - gasoline range organics

mg/L = Milligrams per liter

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

## **ATTACHMENT A**

# Summit Scientific

---

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

December 12, 2017

Andy Verbonitz  
LT Environmental, Inc.  
4600 West 60th Avenue  
Arvada, CO 80003  
RE: Meyring 13-27 FL

Enclosed are the results of analyses for samples received by Summit Scientific on 12/11/17 17:56. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Paul Shrewsbury  
President



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

Project: Meyring 13-27 FL  
Project Number: 062317002  
Project Manager: Andy Verbonitz

**Reported:**  
12/12/17 06:46

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01	1712111-01	Water	12/11/17 13:00	12/11/17 17:56
MW02	1712111-02	Water	12/11/17 13:05	12/11/17 17:56
MW03	1712111-03	Water	12/11/17 13:10	12/11/17 17:56
MW04	1712111-04	Water	12/11/17 13:15	12/11/17 17:56
MW05	1712111-05	Water	12/11/17 13:20	12/11/17 17:56
MW06	1712111-06	Water	12/11/17 13:25	12/11/17 17:56
MW07	1712111-07	Water	12/11/17 13:30	12/11/17 17:56
MW08	1712111-08	Water	12/11/17 13:35	12/11/17 17:56

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: Meyring 13-27 FL  
Project Number: 062317002  
Project Manager: Andy Verbonitz

Reported:  
12/12/17 06:46

### Sample Receipt Checklist

S2 Work Order: 1712111  
Client: LTE Client Project ID: Meyring 13-27 FL  
Shipped Via: P/U Airbill #: \_\_\_\_\_  
(UPS, FedEx, Hand Delivered, Pick-up, etc.)  
Matrix (check all that apply):    Air    Soil/Solid    ☒ Water    Other: \_\_\_\_\_  
(Describe)

Cooler ID					
Temp (°C)	10.0				

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.				
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
If custody seals are present, are they intact <sup>(1)</sup> ?			<input checked="" type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present?			<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.		<input checked="" type="checkbox"/>		
Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ?				
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect			<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ?			<input checked="" type="checkbox"/>	
Record the pH in Comments.			<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

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

Nakita  
Custodian Printed Name

[Signature]  
Signature or Initials of Custodian

12/11/17 1820  
Date/Time

[Signature]



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

Project: Meyring 13-27 FL  
Project Number: 062317002  
Project Manager: Andy Verbonitz

**Reported:**  
12/12/17 06:46

**MW01**  
**1712111-01 (Water)**

**Summit Scientific**

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

Date Sampled: 12/11/17 13:00									
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	610	100	ug/l	100	1712124	12/12/17	12/12/17	EPA 8260B	
Toluene	52	1.0	"	1	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	460	2.0	"	"	"	"	"	"	

Date Sampled: 12/11/17 13:00									
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %		37-154	"	"	"	"	
Surrogate: Toluene-d8		100 %		45-149	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		110 %		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.*



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

Project: Meyring 13-27 FL  
Project Number: 062317002  
Project Manager: Andy Verbonitz

**Reported:**  
12/12/17 06:46

**MW02**  
**1712111-02 (Water)**

**Summit Scientific**

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

Date Sampled: **12/11/17 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>270</b>	1.0	ug/l	1	1712124	12/12/17	12/12/17	EPA 8260B	
<b>Toluene</b>	<b>7.9</b>	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>410</b>	2.0	"	"	"	"	"	"	

Date Sampled: **12/11/17 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		97.9 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	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.*



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

Project: Meyring 13-27 FL  
Project Number: 062317002  
Project Manager: Andy Verbonitz

**Reported:**  
12/12/17 06:46

**MW03**  
**1712111-03 (Water)**

**Summit Scientific**

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

Date Sampled: **12/11/17 13:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1712124	12/12/17	12/12/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **12/11/17 13:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		97.4 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.1 %	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.*



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

Project: Meyring 13-27 FL  
Project Number: 062317002  
Project Manager: Andy Verbonitz

**Reported:**  
12/12/17 06:46

**MW04**  
**1712111-04 (Water)**

**Summit Scientific**

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

Date Sampled: **12/11/17 13:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1712124	12/12/17	12/12/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **12/11/17 13:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		97.9 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	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.*



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

Project: Meyring 13-27 FL  
Project Number: 062317002  
Project Manager: Andy Verbonitz

**Reported:**  
12/12/17 06:46

**MW05**  
**1712111-05 (Water)**

**Summit Scientific**

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

Date Sampled: **12/11/17 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1712124	12/12/17	12/12/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **12/11/17 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		105 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		98.9 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	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.*



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

Project: Meyring 13-27 FL  
Project Number: 062317002  
Project Manager: Andy Verbonitz

**Reported:**  
12/12/17 06:46

**MW06**  
**1712111-06 (Water)**

**Summit Scientific**

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

Date Sampled: **12/11/17 13:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1712124	12/12/17	12/12/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **12/11/17 13:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		105 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		98.8 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.5 %	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.*





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

Project: Meyring 13-27 FL  
Project Number: 062317002  
Project Manager: Andy Verbonitz

**Reported:**  
12/12/17 06:46

**MW07**  
**1712111-07 (Water)**

**Summit Scientific**

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

Date Sampled: **12/11/17 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1712124	12/12/17	12/12/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **12/11/17 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		110 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		101 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.5 %	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.*



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

Project: Meyring 13-27 FL  
Project Number: 062317002  
Project Manager: Andy Verbonitz

Reported:  
12/12/17 06:46

**MW08**  
**1712111-08 (Water)**

**Summit Scientific**

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

Date Sampled: **12/11/17 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1712124	12/12/17	12/12/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **12/11/17 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		101 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	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.



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

Project: Meyring 13-27 FL  
Project Number: 062317002  
Project Manager: Andy Verbonitz

Reported:  
12/12/17 06:46

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

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

#### Batch 1712124 - EPA 5030 Water MS

##### Blank (1712124-BLK1)

Prepared & Analyzed: 12/12/17

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	15.4		"	13.3		115	37-154			
Surrogate: Toluene-d8	13.4		"	13.3		100	45-149			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		98.7	45-146			

##### LCS (1712124-BS1)

Prepared & Analyzed: 12/12/17

Benzene	35.0	1.0	ug/l	33.3		105	51-132			
Toluene	36.4	1.0	"	33.3		109	51-138			
Ethylbenzene	39.5	1.0	"	33.1		119	58-146			
m,p-Xylene	75.5	2.0	"	66.5		113	57-144			
o-Xylene	36.1	1.0	"	32.7		110	53-146			
Surrogate: 1,2-Dichloroethane-d4	14.2		"	13.3		107	37-154			
Surrogate: Toluene-d8	13.3		"	13.3		99.8	45-149			
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3		101	45-146			

##### Matrix Spike (1712124-MS1)

Source: 1712110-01

Prepared & Analyzed: 12/12/17

Benzene	34.9	1.0	ug/l	33.3	ND	105	34-141			
Toluene	36.0	1.0	"	33.3	ND	108	27-151			
Ethylbenzene	41.5	1.0	"	33.1	ND	125	29-160			
m,p-Xylene	102	2.0	"	66.5	22.0	120	20-166			
o-Xylene	42.0	1.0	"	32.7	4.39	115	33-159			
Surrogate: 1,2-Dichloroethane-d4	14.1		"	13.3		106	37-154			
Surrogate: Toluene-d8	13.4		"	13.3		101	45-149			
Surrogate: 4-Bromofluorobenzene	14.0		"	13.3		105	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.



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

Project: Meyring 13-27 FL  
Project Number: 062317002  
Project Manager: Andy Verbonitz

Reported:  
12/12/17 06:46

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

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

**Batch 1712124 - EPA 5030 Water MS**

Matrix Spike Dup (1712124-MSD1)	Source: 1712110-01			Prepared & Analyzed: 12/12/17						
Benzene	35.7	1.0	ug/l	33.3	ND	107	34-141	2.29	32	
Toluene	36.8	1.0	"	33.3	ND	110	27-151	2.15	25	
Ethylbenzene	39.6	1.0	"	33.1	ND	120	29-160	4.69	50	
m,p-Xylene	95.1	2.0	"	66.5	22.0	110	20-166	6.80	36	
o-Xylene	39.0	1.0	"	32.7	4.39	106	33-159	7.56	26	
Surrogate: 1,2-Dichloroethane-d4	14.3		"	13.3		107	37-154			
Surrogate: Toluene-d8	13.4		"	13.3		100	45-149			
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3		101	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.



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

Project: Meyring 13-27 FL

Project Number: 062317002  
Project Manager: Andy Verbonitz

**Reported:**  
12/12/17 06:46

### Notes and Definitions

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

# Summit Scientific

---

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

January 03, 2018

Andy Verbonitz  
LT Environmental, Inc.  
4600 West 60th Avenue  
Arvada, CO 80003  
RE: Meyring 13-27 FL

Enclosed are the results of analyses for samples received by Summit Scientific on 01/02/18 17:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Paul Shrewsbury  
President



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

Project: Meyring 13-27 FL

Project Number: [none]  
Project Manager: Andy Verbonitz

**Reported:**  
01/03/18 15:48

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW09	1801002-01	Water	01/02/18 12:00	01/02/18 17:10
MW10	1801002-02	Water	01/02/18 12:05	01/02/18 17:10
MW11	1801002-03	Water	01/02/18 12:10	01/02/18 17:10
MW12	1801002-04	Water	01/02/18 12:15	01/02/18 17:10

Summit Scientific

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



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

Project: Meyring 13-27 FL

Project Number: [none]  
Project Manager: Andy Verbonitz

Reported:  
01/03/18 15:48

#### Sample Receipt Checklist

S2 Work Order: 1801001

Client: XOG Client Project ID: Wenzel-1

Shipped Via: Hand (UPS, FedEx, Hand Delivered, Pick-up, etc.) Airbill #: \_\_\_\_\_

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

Cooler ID				
Temp (°C)	<u>5.7</u>			

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature just above 0°C to ≤ 6°C <sup>(1)</sup> ?				
NOTE: If samples are delivered the same day of sampling, this requirement is waived provided that there is evidence that cooling has begun.	✓			
Were all samples received intact <sup>(1)</sup> ?	✓			
Was adequate sample volume provided <sup>(1)</sup> ?	✓			
If custody seals are present, are they intact <sup>(1)</sup> ?			✓	
Are short holding time analytes or samples with HTs due within 48 hours present?			✓	
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	✓			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	✓			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	✓			
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	✓			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			✓	
Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ?			✓	
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect			✓	
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ?			✓	
Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Additional Comments (if any):				
<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.				

Nakitz  
Custodian Printed Name

[Signature]  
Signature or Initials of Custodian

1/2/18 1400  
Date/Time





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

Project: Meyring 13-27 FL

Project Number: [none]  
Project Manager: Andy Verbonitz

Reported:  
01/03/18 15:48

# Sample Receipt Checklist

S2 Work Order: 1801002  
Client: LT Client Project ID: Meyring 13-27  
Shipped Via: P/U Airbill #: \_\_\_\_\_  
(UPS, FedEx, Hand Delivered, Pick-up, etc.)  
Matrix (check all that apply): ☐ Air ☐ Soil/Solid ☒ Water ☐ Other: \_\_\_\_\_  
(Describe)

Cooler ID					
Temp (°C)	<u>5.7</u>				

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.				
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
If custody seals are present, are they intact <sup>(1)</sup> ?			<input checked="" type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present?			<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.		<input checked="" type="checkbox"/>		
Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ?			<input checked="" type="checkbox"/>	
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect				
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ?			<input checked="" type="checkbox"/>	
Record the pH in Comments.				
If dissolved metals are requested, were samples field filtered?			<input checked="" type="checkbox"/>	
Additional Comments (if any):				
<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.				

Nakita  
Custodian Printed Name

[Signature]  
Signature or Initials of Custodian

1/2/18 1730  
Date/Time

[Signature]



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

Project: Meyring 13-27 FL  
Project Number: [none]  
Project Manager: Andy Verbonitz

**Reported:**  
01/03/18 15:48

**MW09**  
**1801002-01 (Water)**

**Summit Scientific**

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

Date Sampled: **01/02/18 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1801003	01/03/18	01/03/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **01/02/18 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		91.0 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		99.2 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.5 %	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.*



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

Project: Meyring 13-27 FL  
Project Number: [none]  
Project Manager: Andy Verbonitz

**Reported:**  
01/03/18 15:48

**MW10**  
**1801002-02 (Water)**

**Summit Scientific**

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

Date Sampled: **01/02/18 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1801003	01/03/18	01/03/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **01/02/18 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		94.2 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		101 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		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.*



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

Project: Meyring 13-27 FL  
Project Number: [none]  
Project Manager: Andy Verbonitz

**Reported:**  
01/03/18 15:48

**MW11**  
**1801002-03 (Water)**

**Summit Scientific**

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

Date Sampled: **01/02/18 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1801003	01/03/18	01/03/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **01/02/18 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		92.4 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		98.2 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.4 %	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.*



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

Project: Meyring 13-27 FL  
Project Number: [none]  
Project Manager: Andy Verbonitz

**Reported:**  
01/03/18 15:48

**MW12**  
**1801002-04 (Water)**

**Summit Scientific**

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

Date Sampled: **01/02/18 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1801003	01/03/18	01/03/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **01/02/18 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		92.0 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		100 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.9 %	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.*



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

Project: Meyring 13-27 FL  
Project Number: [none]  
Project Manager: Andy Verbonitz

Reported:  
01/03/18 15:48

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

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

#### Batch 1801003 - EPA 5030 Water MS

##### Blank (1801003-BLK1)

Prepared & Analyzed: 01/03/18

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	11.9		"	13.3		89.2	37-154			
Surrogate: Toluene-d8	13.2		"	13.3		99.3	45-149			
Surrogate: 4-Bromofluorobenzene	13.3		"	13.3		100	45-146			

##### LCS (1801003-BS1)

Prepared & Analyzed: 01/03/18

Benzene	31.5	1.0	ug/l	33.3		94.6	51-132			
Toluene	32.3	1.0	"	33.3		96.9	51-138			
Ethylbenzene	33.8	1.0	"	33.1		102	58-146			
m,p-Xylene	62.6	2.0	"	66.5		94.1	57-144			
o-Xylene	32.5	1.0	"	32.7		99.6	53-146			
Surrogate: 1,2-Dichloroethane-d4	12.0		"	13.3		90.4	37-154			
Surrogate: Toluene-d8	14.6		"	13.3		110	45-149			
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3		97.7	45-146			

##### Matrix Spike (1801003-MS1)

Source: 1712322-01

Prepared & Analyzed: 01/03/18

Benzene	34.8	1.0	ug/l	33.3	ND	104	34-141			
Toluene	35.5	1.0	"	33.3	ND	106	27-151			
Ethylbenzene	38.0	1.0	"	33.1	ND	115	29-160			
m,p-Xylene	70.9	2.0	"	66.5	ND	107	20-166			
o-Xylene	36.7	1.0	"	32.7	ND	112	33-159			
Surrogate: 1,2-Dichloroethane-d4	12.5		"	13.3		93.7	37-154			
Surrogate: Toluene-d8	14.2		"	13.3		106	45-149			
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3		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.



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

Project: Meyring 13-27 FL  
Project Number: [none]  
Project Manager: Andy Verbonitz

Reported:  
01/03/18 15:48

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

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

**Batch 1801003 - EPA 5030 Water MS**

Matrix Spike Dup (1801003-MSD1)	Source: 1712322-01			Prepared & Analyzed: 01/03/18						
Benzene	35.5	1.0	ug/l	33.3	ND	106	34-141	1.85	32	
Toluene	36.4	1.0	"	33.3	ND	109	27-151	2.64	25	
Ethylbenzene	39.9	1.0	"	33.1	ND	121	29-160	5.11	50	
m,p-Xylene	75.1	2.0	"	66.5	ND	113	20-166	5.64	36	
o-Xylene	38.6	1.0	"	32.7	ND	118	33-159	5.10	26	
Surrogate: 1,2-Dichloroethane-d4	13.0		"	13.3		97.1	37-154			
Surrogate: Toluene-d8	13.5		"	13.3		101	45-149			
Surrogate: 4-Bromofluorobenzene	13.1		"	13.3		98.0	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.



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

Project: Meyring 13-27 FL

Project Number: [none]  
Project Manager: Andy Verbonitz

**Reported:**  
01/03/18 15:48

### Notes and Definitions

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



# Summit Scientific

---

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

February 13, 2018

Mark Longhurst  
PDC Energy  
1775 Sherman St. STE. 3000  
Denver, CO 80203  
RE: Meyring 13-27 Flowline

Enclosed are the results of analyses for samples received by Summit Scientific on 02/07/18 15:11. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Paul Shrewsbury For Ben Shrewsbury  
Laboratory Manager



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

Project: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01	1802048-01	Water	02/07/18 12:14	02/07/18 15:11
MW02	1802048-02	Water	02/07/18 12:27	02/07/18 15:11
MW03	1802048-03	Water	02/07/18 12:16	02/07/18 15:11
MW04	1802048-04	Water	02/07/18 12:32	02/07/18 15:11
MW05	1802048-05	Water	02/07/18 10:50	02/07/18 15:11
MW06	1802048-06	Water	02/07/18 10:54	02/07/18 15:11
MW07	1802048-07	Water	02/07/18 11:11	02/07/18 15:11
MW08	1802048-08	Water	02/07/18 11:09	02/07/18 15:11
MW09	1802048-09	Water	02/07/18 12:38	02/07/18 15:11
MW10	1802048-10	Water	02/07/18 12:46	02/07/18 15:11
MW11	1802048-11	Water	02/07/18 12:05	02/07/18 15:11
MW12	1802048-12	Water	02/07/18 12:01	02/07/18 15:11

Summit Scientific

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

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

Page 1 of 2

Client: PDC  
Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Sampler Name: Tyler Blessing

Project Manager: Mark Longhurst  
E-Mail: Mark.Longhurst@pdce.com  
Project Name: Meyring 13-27 Flowline  
Project Number: \_\_\_\_\_

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix				Analyze For:								Special Instructions		
				HCl	HNO <sub>3</sub>	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	BTEX (8260)										
MW01	2/7/2018	12:14	3			X		X					X									
MW02	2/7/2018	12:27	3			X		X					X									
MW03	2/7/2018	12:16	3			X		X					X									
MW04	2/7/2018	12:32	3			X		X					X									
MW05	2/7/2018	10:50	3			X		X					X									
MW06	2/7/2018	10:54	3			X		X					X									
MW07	2/7/2018	11:11	3			X		X					X									
MW08	2/7/2018	11:09	3			X		X					X									
MW09	2/7/2018	12:38	3			X		X					X									
MW10	2/7/2018	12:46	3			X		X					X									
Relinquished by: <u>[Signature]</u> Date/Time: <u>2/7/18 15:11</u>				Received by: <u>[Signature]</u> Date/Time: <u>2-7-18 15:11</u>				Turn Around Time (Check)														
Relinquished by: _____ Date/Time: _____				Received by: _____ Date/Time: _____				Same Day <input type="checkbox"/> 72 Hours <input type="checkbox"/> 24 Hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 Hours <input type="checkbox"/>														
Relinquished by: _____ Date/Time: _____				Received in Lab by: _____ Date/Time: _____				Sample Integrity: Temperature Upon Receipt: <u>2.7</u> Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>														

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

Page 2 of 2

Client: PDC  
Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Sampler Name: Tyler Blessing

Project Manager: Mark Longhurst  
E-Mail: Mark.Longhurst@pdce.com  
Project Name: Meyring 13-27 Flowline  
Project Number: \_\_\_\_\_

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix				Analyze For:										Special Instructions			
				HCl	HNO <sub>3</sub>	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	BTEX (8260)													
MW11	2/7/2018	12:05	3			X		X					X												
MW12	2/7/2018	12:01	3			X		X					X												
Relinquished by: <u>[Signature]</u> Date/Time: <u>2/7/18 15:11</u>				Received by: <u>[Signature]</u> Date/Time: <u>2-7-18 15:11</u>				Turn Around Time (Check)																	
Relinquished by: _____ Date/Time: _____				Received by: _____ Date/Time: _____				Same Day <input type="checkbox"/> 72 Hours <input type="checkbox"/> 24 Hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 Hours <input type="checkbox"/>																	
Relinquished by: _____ Date/Time: _____				Received in Lab by: _____ Date/Time: _____				Sample Integrity: Temperature Upon Receipt: <u>2.7</u> Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																	

# Sample Receipt Checklist

S2 Work Order: 1802048

Client: PDC Client Project ID: Meyring 13-27 Flowline

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

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

Cooler ID					
Temp (°C)	<u>2.7</u>				

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ? NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.	<u>X</u>			
Were all samples received intact <sup>(1)</sup> ?	<u>X</u>			
Was adequate sample volume provided <sup>(1)</sup> ?	<u>X</u>			
If custody seals are present, are they intact <sup>(1)</sup> ?			<u>X</u>	
Are short holding time analytes or samples with HTs due within 48 hours present?			<u>Y</u>	
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	<u>X</u>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<u>X</u>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<u>X</u>			
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	<u>X</u>			
For volatiles in water – is there headspace present? <b>If yes, contact client and note in narrative.</b>		<u>X</u>		
Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect			<u>X</u>	
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ? Record the pH in Comments.			<u>X</u>	
If dissolved metals are requested, were samples field filtered?			<u>X</u>	
Additional Comments (if any):				

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

Murip.  
Custodian Printed Name

MA 2-7-18  
Signature or Initials of Custodian

19:00  
Date/Time



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

Project: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

**MW01**  
**1802048-01 (Water)**

**Summit Scientific**

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

Date Sampled: **02/07/18 12:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>240</b>	1.0	ug/l	1	1802086	02/08/18	02/08/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>4.7</b>	1.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>32</b>	2.0	"	"	"	"	"	"	

Date Sampled: **02/07/18 12:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		90.3 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		95.0 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		90.9 %	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: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

**MW02**  
**1802048-02 (Water)**

**Summit Scientific**

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

Date Sampled: **02/07/18 12:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>27</b>	1.0	ug/l	1	1802086	02/09/18	02/09/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **02/07/18 12:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		86.6 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		96.2 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.7 %	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: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

**MW03**  
**1802048-03 (Water)**

**Summit Scientific**

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

Date Sampled: **02/07/18 12:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>5.8</b>	1.0	ug/l	1	1802086	02/09/18	02/09/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **02/07/18 12:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		89.0 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		96.7 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		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: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

**MW04**  
**1802048-04 (Water)**

**Summit Scientific**

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

Date Sampled: **02/07/18 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1802086	02/09/18	02/09/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **02/07/18 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		90.3 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		92.6 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.1 %	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: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

**MW05**  
**1802048-05 (Water)**

**Summit Scientific**

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

Date Sampled: **02/07/18 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>42</b>	1.0	ug/l	1	1802086	02/09/18	02/09/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>8.0</b>	2.0	"	"	"	"	"	"	

Date Sampled: **02/07/18 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		87.8 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		93.8 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.5 %	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: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

**MW06**  
**1802048-06 (Water)**

**Summit Scientific**

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

Date Sampled: **02/07/18 10:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1802086	02/09/18	02/09/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **02/07/18 10:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		92.7 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		78.0 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.8 %	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: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

**MW07**  
**1802048-07 (Water)**

**Summit Scientific**

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

Date Sampled: **02/07/18 11:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1802086	02/09/18	02/09/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **02/07/18 11:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		96.5 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		93.2 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.4 %	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: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

**MW08**  
**1802048-08 (Water)**

**Summit Scientific**

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

Date Sampled: **02/07/18 11:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1802086	02/09/18	02/09/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **02/07/18 11:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		89.9 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		92.9 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.4 %	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: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

**MW09**  
**1802048-09 (Water)**

**Summit Scientific**

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

Date Sampled: **02/07/18 12:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1802086	02/10/18	02/10/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **02/07/18 12:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		98.7 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	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: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

**MW10**  
**1802048-10 (Water)**

**Summit Scientific**

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

Date Sampled: **02/07/18 12:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1802086	02/10/18	02/10/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **02/07/18 12:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		104 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		98.9 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	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: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

**MW11**  
**1802048-11 (Water)**

**Summit Scientific**

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

Date Sampled: **02/07/18 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1802086	02/10/18	02/10/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **02/07/18 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		108 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		99.3 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	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: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

**MW12**  
**1802048-12 (Water)**

**Summit Scientific**

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

Date Sampled: **02/07/18 12:01**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1802086	02/10/18	02/10/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **02/07/18 12:01**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		109 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		98.6 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	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: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

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

#### Batch 1802086 - EPA 5030 Water MS

##### Blank (1802086-BLK1)

Prepared & Analyzed: 02/08/18

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	11.4		"	13.3		85.7	37-154			
Surrogate: Toluene-d8	12.6		"	13.3		94.4	45-149			
Surrogate: 4-Bromofluorobenzene	11.6		"	13.3		87.1	45-146			

##### LCS (1802086-BS1)

Prepared & Analyzed: 02/08/18

Benzene	30.7	1.0	ug/l	33.3		92.1	51-132			
Toluene	32.6	1.0	"	33.3		97.7	51-138			
Ethylbenzene	34.7	1.0	"	33.1		105	58-146			
m,p-Xylene	67.9	2.0	"	66.5		102	57-144			
o-Xylene	32.8	1.0	"	32.7		100	53-146			
Surrogate: 1,2-Dichloroethane-d4	12.0		"	13.3		89.9	37-154			
Surrogate: Toluene-d8	12.7		"	13.3		95.3	45-149			
Surrogate: 4-Bromofluorobenzene	12.0		"	13.3		90.1	45-146			

##### Matrix Spike (1802086-MS1)

Source: 1802048-01

Prepared & Analyzed: 02/08/18

Benzene	295	1.0	ug/l	33.3	245	150	34-141			QM-4X
Toluene	32.7	1.0	"	33.3	ND	98.2	27-151			
Ethylbenzene	41.0	1.0	"	33.1	4.74	110	29-160			
m,p-Xylene	85.0	2.0	"	66.5	13.4	108	20-166			
o-Xylene	58.5	1.0	"	32.7	18.2	123	33-159			
Surrogate: 1,2-Dichloroethane-d4	12.4		"	13.3		93.4	37-154			
Surrogate: Toluene-d8	12.5		"	13.3		93.9	45-149			
Surrogate: 4-Bromofluorobenzene	12.6		"	13.3		94.2	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: Meyring 13-27 Flowline  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

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

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

**Batch 1802086 - EPA 5030 Water MS**

Matrix Spike Dup (1802086-MSD1)	Source: 1802048-01			Prepared & Analyzed: 02/08/18						
Benzene	273	1.0	ug/l	33.3	245	86.2	34-141	7.49	32	
Toluene	32.8	1.0	"	33.3	ND	98.4	27-151	0.183	25	
Ethylbenzene	40.4	1.0	"	33.1	4.74	108	29-160	1.30	50	
m,p-Xylene	83.9	2.0	"	66.5	13.4	106	20-166	1.30	36	
o-Xylene	56.1	1.0	"	32.7	18.2	116	33-159	4.19	26	
Surrogate: 1,2-Dichloroethane-d4	12.8		"	13.3		95.7	37-154			
Surrogate: Toluene-d8	12.6		"	13.3		94.1	45-149			
Surrogate: 4-Bromofluorobenzene	12.6		"	13.3		94.8	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: Meyring 13-27 Flowline

Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
02/13/18 08:27

### Notes and Definitions

QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
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