

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

January 27, 2017

Colby Sterling

Talon/LPE

1811 E Mulberry

Ft Collins, CO 80524

RE: CR 118 East Gathering Pipeline

Enclosed are the results of analyses for samples received by Summit Scientific on 12/22/16 15:20. 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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Uphill Perimeter East@0'	1612185-01	Soil	12/22/16 11:50	12/22/16 15:20
Uphill Perimeter North@0'	1612185-02	Soil	12/22/16 11:53	12/22/16 15:20
Uphill Perimeter West@0'	1612185-03	Soil	12/22/16 11:56	12/22/16 15:20
Uphill Perimeter South@0'	1612185-04	Soil	12/22/16 11:59	12/22/16 15:20
Uphill BH-1@6"	1612185-05	Soil	12/22/16 12:02	12/22/16 15:20
Uphill BH-2@6"	1612185-06	Soil	12/22/16 12:05	12/22/16 15:20
Downhill Perimeter North@0'	1612185-07	Soil	12/22/16 12:10	12/22/16 15:20
Downhill Perimeter East@0'	1612185-08	Soil	12/22/16 12:13	12/22/16 15:20
Downhill Perimeter South@0'	1612185-09	Soil	12/22/16 12:16	12/22/16 15:20
Downhill Perimeter West@0'	1612185-10	Soil	12/22/16 12:19	12/22/16 15:20
Downhill BH-3@1'	1612185-11	Soil	12/22/16 12:22	12/22/16 15:20

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

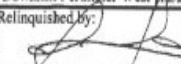

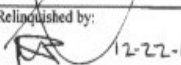

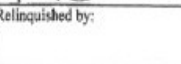

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1612185.1

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Page 1 of 2

Client: Talon/LPE - Bill Whiting Petroleum
Address: 1811 East Mulberry
City/State/Zip: Fort Collins, CO 80525
Phone: 970-818-5330 Fax:
Sampler Name: Colby Sterling / Jason Leverton
Project Manager: Colby Sterling
E-Mail: csterling@talonlpe.com
Project Name: Razor 10 CPB Pipeline
Project Number: 701530.096.01

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix				Analyze For:				Special Instructions	
				HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	BTEX	GRO/DRO				
Uphill Perimeter East @ 0'	12/22/2016	1150	1		x			x				x	x				
Uphill Perimeter North @ 0'	12/22/2016	1153	1		x			x				x	x				
Uphill Perimeter West @ 0'	12/22/2016	1156	1		x			x				x	x				
Uphill Perimeter South @ 0'	12/22/2016	1159	1		x			x				x	x				
Uphill BH-1 @ 6"	12/22/2016	1202	1		x			x				x	x				
Uphill BH-2 @ 6"	12/22/2016	1205	1		x			x				x	x				
Downhill Perimeter North	12/22/2016	1210	1		x			x				x	x				
Downhill Perimeter East	12/22/2016	1213	1		x			x				x	x				
Downhill Perimeter South	12/22/2016	1216	1		x			x				x	x				
Downhill Perimeter West	12/22/2016	1219	1		x			x				x	x				
Relinquished by: 	Date/Time: 12-22-16 15:20	Received by: 	Date/Time: 12-22-16 15:20	Turn Around Time (Check)				Notes:									
Relinquished by: 	Date/Time: 12-22-16 18:00	Received by: 	Date/Time: 12-22-16 18:00	Same Day	<input type="checkbox"/>	72 Hours	<input type="checkbox"/>	Sample Integrity:				Temperature Upon Receipt: 6.2					
Relinquished by: 	Date/Time: 12-22-16 18:00	Received in Lab by: 	Date/Time: 12-22-16 18:00	24 Hours	<input type="checkbox"/>	Standard	<input checked="" type="checkbox"/>									48 Hours	<input type="checkbox"/>

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline

Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

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1612185.2

741 Corporate Circle Suite 1 • Golden, Colorado 80401
303-277-9310 • 303-374-5933 Fax

Page 2 of 2

Client:	Talon/LPE - Bill Whiting Petroleum	
Address:	1811 East Mulberry	
City/State/Zip:	Fort Collins, CO 80525	
Phone:	970-818-5330	Fax:
Sampler Name:	Colby Sterling / Jason Leverton	

Project Manager:	Colby Sterling
E-Mail:	csterling@talonlpe.com
Project Name:	Razor 10 CPB Pipeline
Project Number:	701530.096.01

[illegible]

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline

Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

S2 Work Order: 1612185 **Sample Receipt Checklist**
Client: Talon Client Project ID: Raptor 10 CPB Pipeline
Shipped Via: P.O. Airbill #: _____
(UPS, FedEx, Hand Delivered, Pick-up, etc.)
Matrix (check all that apply): Air ☒ Soil/Solid Water Other: _____
(Describe)

Cooler ID					
Temp (°C)	<u>6.2</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 ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
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 ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
If custody seals are present, are they intact ⁽¹⁾ ?			<input checked="" type="checkbox"/>	
Are 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 ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ?			<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 ⁽¹⁾ ?			<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):				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				

Murphy
Custodian Printed Name

HA 12-22-16
Signature or Initials of Custodian

18:00
Date/Time



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

Uphill Perimeter East@0'
1612185-01 (Soil)

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Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/22/16 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1612254	12/23/16	12/25/16	8015M	

Date Sampled: **12/22/16 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		99.8 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/22/16 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612273	12/27/16	12/28/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **12/22/16 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		93.3 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	21-167		"	"	"	"	

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

Uphill Perimeter North@0'
1612185-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/22/16 11:53**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1612254	12/23/16	12/25/16	8015M	

Date Sampled: **12/22/16 11:53**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		54.3 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/22/16 11:53**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612273	12/27/16	12/28/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **12/22/16 11:53**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		83.6 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	21-167		"	"	"	"	

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1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

Uphill Perimeter West@0'
1612185-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/22/16 11:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	120	50	mg/kg	1	1612254	12/23/16	12/25/16	8015M	

Date Sampled: **12/22/16 11:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		101 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/22/16 11:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612273	12/27/16	12/28/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	1.9	0.50	"	"	"	"	"	"	

Date Sampled: **12/22/16 11:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		95.0 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		103 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		107 %	21-167		"	"	"	"	

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

Uphill Perimeter South@0'
1612185-04 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/22/16 11:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1612254	12/23/16	12/26/16	8015M	

Date Sampled: **12/22/16 11:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		97.7 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/22/16 11:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612273	12/27/16	12/28/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **12/22/16 11:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		94.4 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	21-167		"	"	"	"	

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

Uphill BH-1@6"
1612185-05 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/22/16 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	74	50	mg/kg	1	1612254	12/23/16	12/26/16	8015M	

Date Sampled: **12/22/16 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		101 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/22/16 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612273	12/27/16	12/28/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	1.0	0.50	"	"	"	"	"	"	

Date Sampled: **12/22/16 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.0 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		103 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		107 %	21-167		"	"	"	"	

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Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

Uphill BH-2@6"
1612185-06 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/22/16 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	68	50	mg/kg	1	1612254	12/23/16	12/26/16	8015M	

Date Sampled: **12/22/16 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		102 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/22/16 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612273	12/27/16	12/28/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	0.60	0.50	"	"	"	"	"	"	

Date Sampled: **12/22/16 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		96.9 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	21-167		"	"	"	"	

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1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

Downhill Perimeter North@0'
1612185-07 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/22/16 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	59	50	mg/kg	1	1612254	12/23/16	12/26/16	8015M	

Date Sampled: **12/22/16 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		99.8 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/22/16 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612273	12/27/16	12/28/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **12/22/16 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		96.6 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	21-167		"	"	"	"	

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

Downhill Perimeter East@0'
1612185-08 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/22/16 12:13**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1612254	12/23/16	12/26/16	8015M	

Date Sampled: **12/22/16 12:13**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		95.7 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/22/16 12:13**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612273	12/27/16	12/28/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **12/22/16 12:13**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		97.8 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		105 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	21-167		"	"	"	"	

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

Downhill Perimeter South@0'
1612185-09 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/22/16 12:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	170	50	mg/kg	1	1612254	12/23/16	12/26/16	8015M	

Date Sampled: **12/22/16 12:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		102 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/22/16 12:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612273	12/27/16	12/28/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	3.3	0.50	"	"	"	"	"	"	

Date Sampled: **12/22/16 12:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		92.5 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		105 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		109 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

Downhill Perimeter West@0'
1612185-10 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/22/16 12:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	500	50	mg/kg	1	1612254	12/23/16	12/26/16	8015M	

Date Sampled: **12/22/16 12:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		103 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/22/16 12:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612273	12/27/16	12/28/16	EPA 8260B	
Toluene	0.11	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.27	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.92	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	30	0.50	"	"	"	"	"	"	

Date Sampled: **12/22/16 12:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		95.5 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.6 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		139 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

Downhill BH-3@1'
1612185-11 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/22/16 12:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1612254	12/23/16	12/26/16	8015M	

Date Sampled: **12/22/16 12:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		97.2 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/22/16 12:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612273	12/27/16	12/28/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	0.55	0.50	"	"	"	"	"	"	

Date Sampled: **12/22/16 12:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		94.7 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		105 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	21-167		"	"	"	"	

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1612254 - EPA 3550A

Blank (1612254-BLK1)

Prepared: 12/23/16 Analyzed: 12/25/16

C10-C28 (DRO) ND 50 mg/kg

Surrogate: o-Terphenyl 11.9 " 12.5 95.5 30-150

LCS (1612254-BS1)

Prepared: 12/23/16 Analyzed: 12/25/16

C10-C28 (DRO) 466 50 mg/kg 499 93.4 73-134

Surrogate: o-Terphenyl 12.4 " 12.5 99.4 30-150

Matrix Spike (1612254-MS1)

Source: 1612176-01

Prepared: 12/23/16 Analyzed: 12/25/16

C10-C28 (DRO) 444 50 mg/kg 499 11.2 86.8 50-148

Surrogate: o-Terphenyl 12.4 " 12.5 99.2 30-150

Matrix Spike Dup (1612254-MSD1)

Source: 1612176-01

Prepared: 12/23/16 Analyzed: 12/25/16

C10-C28 (DRO) 453 50 mg/kg 498 11.2 88.8 50-148 2.04 20

Surrogate: o-Terphenyl 12.8 " 12.5 102 30-150

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline

Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:14

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

March 01, 2017

Colby Sterling

Talon/LPE

1811 E Mulberry

Ft Collins, CO 80524

RE: CR 118 East Gathering Pipeline

Enclosed are the results of analyses for samples received by Summit Scientific on 02/22/17 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Paul Shrewsbury

President



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.057.03
Project Manager: Colby Sterling

Reported:
03/01/17 06:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP-1	1702163-01	Soil	02/22/17 14:30	02/22/17 16:30
SP-2	1702163-02	Soil	02/22/17 14:35	02/22/17 16:30
SP-3	1702163-03	Soil	02/22/17 14:40	02/22/17 16:30
SP-4	1702163-04	Soil	02/22/17 14:45	02/22/17 16:30

Summit Scientific

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

Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline

Project Number: 701530.057.03
Project Manager: Colby Sterling

Reported:
03/01/17 06:34

Summit Scientific

1702163

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

Page 1 of 1

Client:	Talon/LPE
Address:	1811 East Mulberry
City/State/Zip:	Fort Collins, CO 80525
Phone:	970-818-5330
Fax:	
Sampler Name:	C. Sterling

Project Manager:	Colby Sterling
E-Mail:	csterling@talonlpe.com
Project Name:	CR 118 Pipeline
Project Number:	701530.057.03

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative						Matrix			Analyze For:								Special Instructions		
				HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	BTEX	GRO/DRO										
SP-1	2/22/2017	1430	1		x			x			x	x											
SP-2	2/22/2017	1435	1		x			x			x	x											
SP-3	2/22/2017	1440	1		x			x			x	x											
SP-4	2/22/2017	1445	1		x			x			x	x											
Relinquished by: <i>[Signature]</i>	Date/Time: 2-22-17 16:30	Received by: <i>[Signature]</i>		Date/Time: 2-22-17 16:30		Turn Around Time (Check) Same Day 24 Hours 48 Hours		<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>		Notes: 72 Hours Standard <input checked="" type="checkbox"/>													
Relinquished by: <i>[Signature]</i>	Date/Time: 2-22-17 17:50	Received by: <i>[Signature]</i>		Date/Time: 2-22-17 17:50		Sample Integrity: Temperature Upon Receipt: Intact: Yes No		<input checked="" type="checkbox"/> <input type="checkbox"/>		18.8													

www.s2scientific.com

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.





Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.057.03
Project Manager: Colby Sterling

Reported:
03/01/17 06:34

Sample Receipt Checklist

S2 Work Order: 1702163

Client: Talon

Client Project ID: CR 118 Pipeline

Shipped Via: P.U.

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Airbill #:

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

Cooler ID					
Temp (°C)	<u>18.8</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 ⁽¹⁾ ?				
NOTE: If samples are delivered the same day of sampling, this requirement is waived provided that there is evidence that cooling has begun.	X			
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
If custody seals are present, are they intact ⁽¹⁾ ?			X	
Are short holding time analytes or samples with HTs due within 48 hours present?			X	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			X	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ?			X	
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect			X	
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ?			X	
Record the pH in Comments.			X	
If dissolved metals are requested, were samples field filtered?			X	
Additional Comments (if any):				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				

Mucip
Custodian Printed Name

MS 2-22-17
Signature or Initials of Custodian

17:50
Date/Time



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.057.03
Project Manager: Colby Sterling

Reported:
03/01/17 06:34

SP-1
1702163-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/22/17 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	410	50	mg/kg	1	1702246	02/23/17	02/24/17	8015M	

Date Sampled: **02/22/17 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		105 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/22/17 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1702245	"	02/23/17	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.046	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	0.63	0.50	"	"	"	"	"	"	

Date Sampled: **02/22/17 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		115 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		98.5 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		102 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.057.03
Project Manager: Colby Sterling

Reported:
03/01/17 06:34

SP-2
1702163-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/22/17 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	460	50	mg/kg	1	1702246	02/23/17	02/24/17	8015M	

Date Sampled: **02/22/17 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		104 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/22/17 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1702245	"	02/23/17	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.017	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/22/17 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.057.03
Project Manager: Colby Sterling

Reported:
03/01/17 06:34

SP-3
1702163-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/22/17 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	480	50	mg/kg	1	1702246	02/23/17	02/24/17	8015M	

Date Sampled: **02/22/17 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		98.3 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/22/17 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1702245	"	02/23/17	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.037	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/22/17 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		101 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		102 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.057.03
Project Manager: Colby Sterling

Reported:
03/01/17 06:34

SP-4
1702163-04 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/22/17 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	58	50	mg/kg	1	1702246	02/23/17	02/24/17	8015M	

Date Sampled: **02/22/17 14:45**

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

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/22/17 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1702245	"	02/23/17	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/22/17 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	21-167		"	"	"	"	

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.057.03
Project Manager: Colby Sterling

Reported:
03/01/17 06:34

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1702246 - EPA 3550A

Blank (1702246-BLK1)

Prepared & Analyzed: 02/23/17

C10-C28 (DRO) ND 50 mg/kg

Surrogate: o-Terphenyl 14.5 " 12.5 116 30-150

LCS (1702246-BS1)

Prepared & Analyzed: 02/23/17

C10-C28 (DRO) 515 50 mg/kg 499 103 73-134

Surrogate: o-Terphenyl 14.9 " 12.5 119 30-150

Matrix Spike (1702246-MS1)

Source: 1702164-21

Prepared: 02/23/17 Analyzed: 02/24/17

C10-C28 (DRO) 1350 50 mg/kg 499 730 124 50-148

Surrogate: o-Terphenyl 19.0 " 12.5 152 30-150

S-02

Matrix Spike Dup (1702246-MSD1)

Source: 1702164-21

Prepared: 02/23/17 Analyzed: 02/24/17

C10-C28 (DRO) 1250 50 mg/kg 499 730 105 50-148 7.19 20

Surrogate: o-Terphenyl 17.8 " 12.5 142 30-150

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.057.03
Project Manager: Colby Sterling

Reported:
03/01/17 06:34

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 1702245 - EPA 5030 Soil MS

Blank (1702245-BLK1)

Prepared & Analyzed: 02/23/17

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0406		"	0.0400		101	23-173			
Surrogate: Toluene-d8	0.0402		"	0.0400		100	20-170			
Surrogate: 4-Bromofluorobenzene	0.0400		"	0.0400		100	21-167			

LCS (1702245-BS1)

Prepared & Analyzed: 02/23/17

Benzene	0.106	0.0020	mg/kg	0.100		106	58-130			
Toluene	0.109	0.0050	"	0.100		109	61-134			
Ethylbenzene	0.104	0.0050	"	0.0992		105	74-139			
m,p-Xylene	0.205	0.010	"	0.200		103	73-137			
o-Xylene	0.101	0.0050	"	0.0980		104	73-141			
Xylenes (total)	0.306	0.0050	"				30-150			
Gasoline Range Hydrocarbons	0.800	0.50	"				30-150			
Surrogate: 1,2-Dichloroethane-d4	0.0399		"	0.0400		99.8	23-173			
Surrogate: Toluene-d8	0.0410		"	0.0400		102	20-170			
Surrogate: 4-Bromofluorobenzene	0.0393		"	0.0400		98.2	21-167			

Matrix Spike (1702245-MS1)

Source: 1702164-21

Prepared & Analyzed: 02/23/17

Benzene	0.0913	0.0020	mg/kg	0.100	ND	91.3	30-131			
Toluene	0.0880	0.0050	"	0.100	ND	88.0	30-134			
Ethylbenzene	0.0742	0.0050	"	0.0992	ND	74.8	22-153			
m,p-Xylene	0.144	0.010	"	0.200	ND	72.1	10-159			
o-Xylene	0.0744	0.0050	"	0.0980	ND	75.9	31-151			
Xylenes (total)	0.218	0.0050	"		ND		30-150			
Gasoline Range Hydrocarbons	0.584	0.50	"		ND		30-150			
Surrogate: 1,2-Dichloroethane-d4	0.0467		"	0.0400		117	23-173			
Surrogate: Toluene-d8	0.0404		"	0.0400		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0410		"	0.0400		102	21-167			

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.057.03
Project Manager: Colby Sterling

Reported:
03/01/17 06:34

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 1702245 - EPA 5030 Soil MS

Matrix Spike Dup (1702245-MSD1)		Source: 1702164-21			Prepared & Analyzed: 02/23/17						
Benzene	0.0856	0.0020	mg/kg	0.100	ND	85.6	30-131	6.41	34		
Toluene	0.0736	0.0050	"	0.100	ND	73.6	30-134	17.9	30		
Ethylbenzene	0.0556	0.0050	"	0.0992	ND	56.0	22-153	28.7	24		QM-07
m,p-Xylene	0.108	0.010	"	0.200	ND	54.0	10-159	28.7	68		
o-Xylene	0.0572	0.0050	"	0.0980	ND	58.3	31-151	26.2	38		
Xylenes (total)	0.165	0.0050	"		ND		30-150	27.9	20		QM-07
Gasoline Range Hydrocarbons	0.422	0.50	"		ND		30-150	32.2	20		QM-07
Surrogate: 1,2-Dichloroethane-d4	0.0440		"	0.0400		110	23-173				
Surrogate: Toluene-d8	0.0405		"	0.0400		101	20-170				
Surrogate: 4-Bromofluorobenzene	0.0397		"	0.0400		99.2	21-167				

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline

Project Number: 701530.057.03
Project Manager: Colby Sterling

Reported:
03/01/17 06:34

Notes and Definitions

S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
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 27, 2017

Colby Sterling

Talon/LPE

1811 E Mulberry

Ft Collins, CO 80524

RE: CR 118 East Gathering Pipeline

Enclosed are the results of analyses for samples received by Summit Scientific on 12/21/16 15:50. 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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP-1 @6"	1612162-01	Soil	12/21/16 12:05	12/21/16 15:50
SP-2 @6"	1612162-02	Soil	12/21/16 12:07	12/21/16 15:50
SP-3 @6"	1612162-03	Soil	12/21/16 12:09	12/21/16 15:50
SP-4 @6"	1612162-04	Soil	12/21/16 12:11	12/21/16 15:50
SP-5 @6"	1612162-05	Soil	12/21/16 12:13	12/21/16 15:50
SP-6 @6"	1612162-06	Soil	12/21/16 12:15	12/21/16 15:50
SP-7 @6"	1612162-07	Soil	12/21/16 12:17	12/21/16 15:50
SP-8 @6"	1612162-08	Soil	12/21/16 12:19	12/21/16 15:50
SP-9 @6"	1612162-09	Soil	12/21/16 12:21	12/21/16 15:50
SP-10 @6"	1612162-10	Soil	12/21/16 12:23	12/21/16 15:50
SP-11 @6"	1612162-11	Soil	12/21/16 12:25	12/21/16 15:50
SP-12 @6"	1612162-12	Soil	12/21/16 12:27	12/21/16 15:50
SP-13 @6"	1612162-13	Soil	12/21/16 12:29	12/21/16 15:50
SP-14 @6"	1612162-14	Soil	12/21/16 12:31	12/21/16 15:50
SP-15 @6"	1612162-15	Soil	12/21/16 12:33	12/21/16 15:50
SP-16 @6"	1612162-16	Soil	12/21/16 12:35	12/21/16 15:50
SP-17 @6"	1612162-17	Soil	12/21/16 12:37	12/21/16 15:50

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline

Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

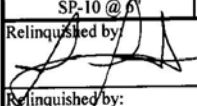

Summit Scientific

1612162.1

741 Corporate Circle Suite 1 ♦ Golden, Colorado 80401
303-277-9310 ♦ 303-374-5933 Fax

Page 1 of 2

Client: Talon/LPE - Bill Whiting Petroleum	Project Manager: Colby Sterling
Address: 1811 East Mulberry	E-Mail: csterling@talonlpe.com
City/State/Zip: Fort Collins, CO 80525	Project Name: Razor 10 CPB Pipeline
Phone: 970-818-5330 Fax:	Project Number: 701530.096.01
Sampler Name: Colby Sterling / Jason Leverton	

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix			Analyze For:										Special Instructions			
				HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	BTEX	GRO/DRO											
SP-1 @ 6"	12/21/2016	1205	1		x			x				x	x											
SP-2 @ 6"	12/21/2016	1207	1		x			x				x	x											
SP-3 @ 6"	12/21/2016	1209	1		x			x				x	x											
SP-4 @ 6"	12/21/2016	1211	1		x			x				x	x											
SP-5 @ 6"	12/21/2016	1213	1		x			x				x	x											
SP-6 @ 6"	12/21/2016	1215	1		x			x				x	x											
SP-7 @ 6"	12/21/2016	1217	1		x			x				x	x											
SP-8 @ 6"	12/21/2016	1219	1		x			x				x	x											
SP-9 @ 6"	12/21/2016	1221	1		x			x				x	x											
SP-10 @ 6"	12/21/2016	1223	1		x			x				x	x											
Relinquished by: 	Date/Time: 12-21-16 6:50	Received by: 	Date/Time: 12-21-16 15:50	Turn Around Time (Check)										Notes:										
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day <input type="checkbox"/> 72 Hours <input type="checkbox"/>										on 12										
				24 Hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/>																				
Relinquished by: 12-21-16 17:30	Date/Time:	Received in Lab by:	Date/Time:	Sample Integrity:																				
				Temperature Upon Receipt: 8.8°C																				
				Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																				

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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.





Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline

Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

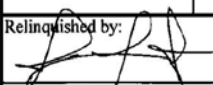

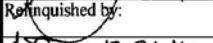
Summit Scientific

1612167.2

741 Corporate Circle Suite 1 ♦ Golden, Colorado 80401
303-277-9310 ♦ 303-374-5933 Fax

Page 2 of 2

Client:	Talon/LPE - Bill Whiting Petroleum	Project Manager:	Colby Sterling
Address:	1811 East Mulberry	E-Mail:	esterling@talonlpe.com
City/State/Zip:	Fort Collins, CO 80525	Project Name:	Razor 10 CPB Pipeline
Phone:	970-818-5330 Fax:	Project Number:	701530.096.01
Sampler Name:	Colby Sterling / Jason Leverton		

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix			Analyze For:										Special Instructions		
				HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	BTX	GRO/DRO										
SP-11 @ 6"	12/21/2016	1225	1		x			x			x	x											
SP-12 @ 6"	12/21/2016	1227	1		x			x			x	x											
SP-13 @ 6"	12/21/2016	1229	1		x			x			x	x											
SP-14 @ 6"	12/21/2016	1231	1		x			x			x	x											
SP-15 @ 6"	12/21/2016	1233	1		x			x			x	x											
SP-16 @ 6"	12/21/2016	1235	1		x			x			x	x											
SP-17 @ 6"	12/21/2016	1237	1		x			x			x	x											
Relinquished by:	Date/Time:	Received by:	Date/Time:	Turn Around Time (Check)		Notes:																	
	12-21-16 15:50		12-21-16 15:50	Same Day	<input type="checkbox"/>	72 Hours	<input type="checkbox"/>	8119															
Relinquished by:	Date/Time:	Received by:	Date/Time:	24 Hours	<input type="checkbox"/>	Standard	<input checked="" type="checkbox"/>																
	12-21-16 17:50			48 Hours	<input type="checkbox"/>																		
Relinquished by:	Date/Time:	Received in Lab by:	Date/Time:	Sample Integrity:																			
				Temperature Upon Receipt: 8.8																			
				Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																			

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

Sample Receipt Checklist
S2 Work Order: 1612162
Client: Talon Client Project ID: Razor 10 CPB Pipeline
Shipped Via: P.O. Airbill #: _____
(UPS, FedEx, Hand Delivered, Pick-up, etc.)
Matrix (check all that apply): Air Soil/Solid Water Other: _____
(Describe)

Cooler ID					
Temp (°C)	<u>8.8</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 ⁽¹⁾ ?	<u>X</u>	<u>gs</u>		
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 ⁽¹⁾ ?	<u>X</u>			
Was adequate sample volume provided ⁽¹⁾ ?	<u>X</u>			
If custody seals are present, are they intact ⁽¹⁾ ?			<u>X</u>	
Are short holding time analytes or samples with HTs due within 48 hours present?			<u>X</u>	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	<u>X</u>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<u>X</u>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<u>X</u>			
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<u>X</u>			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.		<u>X</u>		
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ?			<u>X</u>	
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect				
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ?			<u>X</u>	
Record the pH in Comments.				
If dissolved metals are requested, were samples field filtered?			<u>X</u>	
Additional Comments (if any):				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				

Muri P.
Custodian Printed Name

MS 12-21-16
Signature or Initials of Custodian

17:30
Date/Time



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-1 @6"
1612162-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	140	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		99.9 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/25/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.022	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	7.5	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		102 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		103 %	21-167		"	"	"	"	

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-2 @6"
1612162-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:07**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	220	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:07**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		99.9 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:07**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.0071	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.046	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	12	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:07**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		108 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-3 @6"
1612162-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	400	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		67.3 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	0.021	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.11	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.46	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	34	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		100 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		112 %	21-167		"	"	"	"	

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-4 @6"
1612162-04 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	150	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		103 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.029	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.15	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	15	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	21-167		"	"	"	"	

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-5 @6"
1612162-05 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:13**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	190	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:13**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		101 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:13**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.0095	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.061	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	15	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:13**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.0 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-6 @6"
1612162-06 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		95.7 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	2.7	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.1 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-7 @6"
1612162-07 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:17**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	700	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:17**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		118 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:17**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	0.19	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.49	0.0050	"	"	"	"	"	"	
Xylenes (total)	1.5	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	64	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:17**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		130 %	21-167		"	"	"	"	

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-8 @6"
1612162-08 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		95.0 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	5.1	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		105 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		100 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.6 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-9 @6"
1612162-09 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		95.8 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	0.0059	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.014	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	1.0	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		100 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-10 @6"
1612162-10 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		97.0 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	0.57	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		108 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.0 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-11 @6"
1612162-11 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	440	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:25**

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

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	0.0051	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.1 %	21-167		"	"	"	"	

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-12 @6"
1612162-12 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	270	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		102 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	0.048	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.21	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.78	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	35	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		126 %	21-167		"	"	"	"	

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-13 @6"
1612162-13 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	1600	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		131 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	0.17	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.45	0.0050	"	"	"	"	"	"	
Xylenes (total)	1.5	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	77	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		108 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		126 %	21-167		"	"	"	"	

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Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-14 @6"
1612162-14 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:31**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	77	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:31**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		99.3 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:31**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.020	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	6.9	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:31**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	21-167		"	"	"	"	

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-15 @6"
1612162-15 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		98.4 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	1.8	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.1 %	21-167		"	"	"	"	

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-16 @6"
1612162-16 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		99.7 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	1.4	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.0 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

SP-17 @6"
1612162-17 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/21/16 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1612267	12/23/16	12/26/16	8015M	

Date Sampled: **12/21/16 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		101 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/21/16 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612270	12/25/16	12/26/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.026	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	6.4	0.50	"	"	"	"	"	"	

Date Sampled: **12/21/16 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	21-167		"	"	"	"	

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1612267 - EPA 3550A

Blank (1612267-BLK1)

Prepared: 12/23/16 Analyzed: 12/26/16

C10-C28 (DRO) ND 50 mg/kg

Surrogate: o-Terphenyl 12.2 " 12.5 98.0 30-150

LCS (1612267-BS1)

Prepared: 12/23/16 Analyzed: 12/26/16

C10-C28 (DRO) 431 50 mg/kg 499 86.4 73-134

Surrogate: o-Terphenyl 12.6 " 12.5 101 30-150

Matrix Spike (1612267-MS1)

Source: 1612162-01

Prepared: 12/23/16 Analyzed: 12/26/16

C10-C28 (DRO) 625 50 mg/kg 495 140 98.0 50-148

Surrogate: o-Terphenyl 13.1 " 12.4 106 30-150

Matrix Spike Dup (1612267-MSD1)

Source: 1612162-01

Prepared: 12/23/16 Analyzed: 12/26/16

C10-C28 (DRO) 623 50 mg/kg 499 140 96.8 50-148 0.333 20

Surrogate: o-Terphenyl 12.6 " 12.5 101 30-150

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

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 1612270 - EPA 5030 Soil MS

Blank (1612270-BLK1)

Prepared & Analyzed: 12/25/16

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0413		"	0.0400		103	23-173			
Surrogate: Toluene-d8	0.0408		"	0.0400		102	20-170			
Surrogate: 4-Bromofluorobenzene	0.0411		"	0.0400		103	21-167			

LCS (1612270-BS1)

Prepared & Analyzed: 12/25/16

Benzene	0.0954	0.0020	mg/kg	0.100		95.4	58-130			
Toluene	0.104	0.0050	"	0.100		104	61-134			
Ethylbenzene	0.115	0.0050	"	0.0992		116	74-139			
m,p-Xylene	0.215	0.010	"	0.200		108	73-137			
o-Xylene	0.111	0.0050	"	0.0980		113	73-141			
Xylenes (total)	0.326	0.0050	"				30-150			
Gasoline Range Hydrocarbons	2.96	0.50	"				30-150			
Surrogate: 1,2-Dichloroethane-d4	0.0406		"	0.0400		101	23-173			
Surrogate: Toluene-d8	0.0392		"	0.0400		98.1	20-170			
Surrogate: 4-Bromofluorobenzene	0.0385		"	0.0400		96.2	21-167			

Matrix Spike (1612270-MS1)

Source: 1612162-01

Prepared & Analyzed: 12/25/16

Benzene	0.0999	0.0020	mg/kg	0.100	ND	99.9	30-131			
Toluene	0.110	0.0050	"	0.100	0.00411	106	30-134			
Ethylbenzene	0.121	0.0050	"	0.0992	0.00426	118	22-153			
m,p-Xylene	0.226	0.010	"	0.200	0.0107	108	10-159			
o-Xylene	0.124	0.0050	"	0.0980	0.0108	115	31-151			
Xylenes (total)	0.350	0.0050	"		0.0215		30-150			
Gasoline Range Hydrocarbons	9.73	0.50	"		7.54		30-150			
Surrogate: 1,2-Dichloroethane-d4	0.0417		"	0.0400		104	23-173			
Surrogate: Toluene-d8	0.0401		"	0.0400		100	20-170			
Surrogate: 4-Bromofluorobenzene	0.0411		"	0.0400		103	21-167			

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

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 1612270 - EPA 5030 Soil MS

Matrix Spike Dup (1612270-MSD1)		Source: 1612162-01			Prepared & Analyzed: 12/25/16					
Benzene	0.0962	0.0020	mg/kg	0.100	ND	96.2	30-131	3.79	34	
Toluene	0.106	0.0050	"	0.100	0.00411	102	30-134	3.47	30	
Ethylbenzene	0.120	0.0050	"	0.0992	0.00426	117	22-153	1.09	24	
m,p-Xylene	0.224	0.010	"	0.200	0.0107	107	10-159	0.840	68	
o-Xylene	0.124	0.0050	"	0.0980	0.0108	116	31-151	0.532	38	
Xylenes (total)	0.348	0.0050	"		0.0215		30-150	0.352	20	
Gasoline Range Hydrocarbons	12.0	0.50	"		7.54		30-150	21.0	20	QM-07
Surrogate: 1,2-Dichloroethane-d4	0.0406		"	0.0400		102	23-173			
Surrogate: Toluene-d8	0.0395		"	0.0400		98.7	20-170			
Surrogate: 4-Bromofluorobenzene	0.0408		"	0.0400		102	21-167			

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline

Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:13

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

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

January 27, 2017

Colby Sterling

Talon/LPE

1811 E Mulberry

Ft Collins, CO 80524

RE: CR 118 East Gathering Pipeline

Enclosed are the results of analyses for samples received by Summit Scientific on 01/03/17 17:30. 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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: [none]
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP 13.5	1701006-01	Soil	01/02/17 11:20	01/03/17 17:30
DHPS 2 @ 0"	1701006-02	Soil	01/02/17 11:25	01/03/17 17:30
DHPW @ 12"	1701006-03	Soil	01/02/17 11:23	01/03/17 17:30

Summit Scientific

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

Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline

Project Number: [none]
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

Summit Scientific

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

1701006

Page 1 of 1

Client: Talon/LPE - Bill Whiting Petroleum

Address: 1811 East Mulberry

City/State/Zip: Fort Collins, CO 80524

Phone: 970-818-5330 Fax:

Sampler Name: Jason Leverton / Jennifer Galles

Project Manager: Colby Sterling

E-Mail: csterling@talonlpe.com

Project Name: Razor 10 CPB Pipeline

Project Number:	701530.096.01
-----------------	---------------

[illegible]

www.s2scientific.com

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.





Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline

Project Number: [none]
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

Sample Receipt Checklist

S2 Work Order: 701006
Client: Talon Client Project ID: Razor 10CPB Pipeline
Shipped Via: H.D. onice Airbill #: _____
(UPS, FedEx, Hand Delivered, Pick-up, etc.)
Matrix (check all that apply): Air X Soil/Solid Water Other: _____
(Describe)

Cooler ID					
Temp (°C)	<u>16.6</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 ⁽¹⁾ ?		X		
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 ⁽¹⁾ ?	✓			
Was adequate sample volume provided ⁽¹⁾ ?	✓			
If custody seals are present, are they intact ⁽¹⁾ ?			✓	
Are short holding time analytes or samples with HTs due within 48 hours present?			X	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			X	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ?			X	
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect			X	
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ?			X	
Record the pH in Comments.			X	
If dissolved metals are requested, were samples field filtered?			X	
Additional Comments (if any):				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				

Murp
Custodian Printed Name

MD 1-3-17
Signature or Initials of Custodian

16:15
Date/Time



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: [none]
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

SP 13.5
1701006-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/02/17 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	1300	50	mg/kg	1	1701024	01/04/17	01/04/17	8015M	

Date Sampled: **01/02/17 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		122 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/02/17 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	1.6	0.20	mg/kg	100	1701025	01/04/17	01/05/17	EPA 8260B	
Toluene	35	0.50	"	"	"	"	"	"	
Ethylbenzene	24	0.50	"	"	"	"	"	"	
Xylenes (total)	62	0.50	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	5000	50	"	"	"	"	"	"	

Date Sampled: **01/02/17 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		98.6 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		125 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: [none]
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

DHPS 2 @ 0"
1701006-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/02/17 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1701024	01/04/17	01/04/17	8015M	

Date Sampled: **01/02/17 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		102 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/02/17 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1701025	01/04/17	01/04/17	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **01/02/17 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		105 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		95.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.7 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: [none]
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

DHPW @ 12"
1701006-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/02/17 11:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1701024	01/04/17	01/04/17	8015M	

Date Sampled: **01/02/17 11:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		102 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/02/17 11:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1701025	01/04/17	01/04/17	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	1.4	0.50	"	"	"	"	"	"	

Date Sampled: **01/02/17 11:23**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		104 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		95.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	21-167		"	"	"	"	

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: [none]
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1701024 - EPA 3550A

Blank (1701024-BLK1)

Prepared & Analyzed: 01/04/17

C10-C28 (DRO) ND 50 mg/kg

Surrogate: o-Terphenyl 12.6 " 12.5 101 30-150

LCS (1701024-BS1)

Prepared & Analyzed: 01/04/17

C10-C28 (DRO) 456 50 mg/kg 499 91.3 73-134

Surrogate: o-Terphenyl 13.0 " 12.5 104 30-150

Matrix Spike (1701024-MS1)

Source: 1701006-01

Prepared & Analyzed: 01/04/17

C10-C28 (DRO) 1220 50 mg/kg 495 1260 NR 50-148 QM-07

Surrogate: o-Terphenyl 14.7 " 12.4 119 30-150

Matrix Spike Dup (1701024-MSD1)

Source: 1701006-01

Prepared & Analyzed: 01/04/17

C10-C28 (DRO) 1600 50 mg/kg 492 1260 69.8 50-148 27.4 20 QM-07

Surrogate: o-Terphenyl 15.9 " 12.3 129 30-150

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: [none]
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

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 1701025 - EPA 5030 Soil MS

Blank (1701025-BLK1)

Prepared & Analyzed: 01/04/17

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0420		"	0.0400		105	23-173			
Surrogate: Toluene-d8	0.0390		"	0.0400		97.4	20-170			
Surrogate: 4-Bromofluorobenzene	0.0407		"	0.0400		102	21-167			

LCS (1701025-BS1)

Prepared & Analyzed: 01/04/17

Benzene	0.0884	0.0020	mg/kg	0.100		88.4	58-130			
Toluene	0.0894	0.0050	"	0.100		89.4	61-134			
Ethylbenzene	0.0832	0.0050	"	0.0992		83.9	74-139			
m,p-Xylene	0.156	0.010	"	0.200		78.4	73-137			
o-Xylene	0.0801	0.0050	"	0.0980		81.8	73-141			
Xylenes (total)	0.237	0.0050	"				30-150			
Gasoline Range Hydrocarbons	1.54	0.50	"				30-150			
Surrogate: 1,2-Dichloroethane-d4	0.0372		"	0.0400		93.1	23-173			
Surrogate: Toluene-d8	0.0474		"	0.0400		118	20-170			
Surrogate: 4-Bromofluorobenzene	0.0408		"	0.0400		102	21-167			

Matrix Spike (1701025-MS1)

Source: 1701006-02

Prepared & Analyzed: 01/04/17

Benzene	0.0984	0.0020	mg/kg	0.100	ND	98.4	30-131			
Toluene	0.0994	0.0050	"	0.100	ND	99.4	30-134			
Ethylbenzene	0.0983	0.0050	"	0.0992	ND	99.1	22-153			
m,p-Xylene	0.185	0.010	"	0.200	ND	92.6	10-159			
o-Xylene	0.0935	0.0050	"	0.0980	ND	95.4	31-151			
Xylenes (total)	0.278	0.0050	"		ND		30-150			
Gasoline Range Hydrocarbons	1.89	0.50	"		ND		30-150			
Surrogate: 1,2-Dichloroethane-d4	0.0393		"	0.0400		98.3	23-173			
Surrogate: Toluene-d8	0.0446		"	0.0400		112	20-170			
Surrogate: 4-Bromofluorobenzene	0.0410		"	0.0400		102	21-167			

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: [none]
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

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 1701025 - EPA 5030 Soil MS

Matrix Spike Dup (1701025-MSD1)		Source: 1701006-02			Prepared & Analyzed: 01/04/17					
Benzene	0.106	0.0020	mg/kg	0.0994	ND	106	30-131	7.08	34	
Toluene	0.107	0.0050	"	0.0994	ND	108	30-134	7.70	30	
Ethylbenzene	0.114	0.0050	"	0.0986	ND	116	22-153	14.9	24	
m,p-Xylene	0.214	0.010	"	0.198	ND	108	10-159	14.6	68	
o-Xylene	0.109	0.0050	"	0.0974	ND	112	31-151	15.7	38	
Xylenes (total)	0.323	0.0050	"		ND		30-150	14.9	20	
Gasoline Range Hydrocarbons	2.30	0.50	"		ND		30-150	19.9	20	
Surrogate: 1,2-Dichloroethane-d4	0.0409		"	0.0398		103	23-173			
Surrogate: Toluene-d8	0.0405		"	0.0398		102	20-170			
Surrogate: 4-Bromofluorobenzene	0.0393		"	0.0398		98.8	21-167			

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline

Project Number: [none]
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

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

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

January 27, 2017

Colby Sterling

Talon/LPE

1811 E Mulberry

Ft Collins, CO 80524

RE: CR 118 East Gathering Pipeline

Enclosed are the results of analyses for samples received by Summit Scientific on 01/11/17 15:40. 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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:16

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP-7.5@2'	1701061-01	Soil	01/11/17 11:50	01/11/17 15:40
SP-13@2'	1701061-02	Soil	01/11/17 11:55	01/11/17 15:40
SP-13.5@2'	1701061-03	Soil	01/11/17 12:00	01/11/17 15:40
SW-1@2'	1701061-04	Soil	01/11/17 12:30	01/11/17 15:40
SW-2@2'	1701061-05	Soil	01/11/17 12:35	01/11/17 15:40
SW-3@2'	1701061-06	Soil	01/11/17 12:40	01/11/17 15:40

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline

Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:16

Summit Scientific

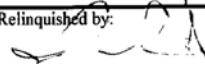

1701061

741 Corporate Circle Suite 1 ♦ Golden, Colorado 80401
303-277-9310 ♦ 303-374-5933 Fax

Page 1 of 1

Client: Talon/LPE - Bill Whiting Petroleum
Address: 1811 East Mulberry
City/State/Zip: Fort Collins, CO 80525
Phone: 970-818-5330 Fax:
Sampler Name: Jennifer Galles / Jason Leverton

Project Manager: Colby Sterling
E-Mail: csterling@talonlpe.com
Project Name: Razor 10 CPB Pipeline
Project Number: 701530.096.01

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix			Analyze For:										Special Instructions			
				HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	BTEX	GRO/DRO											
SP-7.5 @ 2'	1/11/2017	1150	1		x			x				x	x											
SP-13 @ 2'	1/11/2017	1155	1		x			x				x	x											
SP-13.5 @ 2'	1/11/2017	1200	1		x			x				x	x											
SW-1 @ 2'	1/11/2017	1230	1		x			x				x	x											
SW-2 @ 2'	1/11/2017	1235	1		x			x				x	x											
SW-3 @ 2'	1/11/2017	1240	1		x			x				x	x											
Relinquished by: 	Date/Time: 1-11-17 15:40	Received by: 	Date/Time: 1-11-17 15:40	Turn Around Time (Check)										Notes:										
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day	<input type="checkbox"/>	72 Hours	<input type="checkbox"/>																	
Relinquished by:	Date/Time:	Received by:	Date/Time:	24 Hours	<input type="checkbox"/>	Standard	<input type="checkbox"/>																	
Relinquished by:	Date/Time:	Received in Lab by:	Date/Time:	Sample Integrity:																				
				Temperature Upon Receipt: 4.7																				
				Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																				

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:16

Sample Receipt Checklist

S2 Work Order: 1701061

Client: Talon

Client Project ID: Razor 10 CPB Pipeline

Shipped Via: P.O.

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Airbill #: _____

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

Cooler ID					(Describe)
Temp (°C)	<u>4.7</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 ⁽¹⁾ ?	<u> X </u>			
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 ⁽¹⁾ ?	<u> X </u>			
Was adequate sample volume provided ⁽¹⁾ ?	<u> X </u>			
If custody seals are present, are they intact ⁽¹⁾ ?			<u> X </u>	
Are short holding time analytes or samples with HTs due within 48 hours present?			<u> X </u>	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	<u> X </u>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<u> X </u>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<u> X </u>			
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<u> X </u>			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			<u> X </u>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ?			<u> X </u>	
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 ⁽¹⁾ ?			<u> X </u>	
Record the pH in Comments.			<u> X </u>	
If dissolved metals are requested, were samples field filtered?			<u> X </u>	
Additional Comments (if any):				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				

Muri P.
Custodian Printed Name

MS 1-11-17
Signature or Initials of Custodian

17:50
Date/Time



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:16

SP-7.5@2'
1701061-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/11/17 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	140	50	mg/kg	1	1701088	01/12/17	01/13/17	8015M	

Date Sampled: **01/11/17 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		117 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/11/17 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	0.0032	0.0020	mg/kg	1	1701091	01/12/17	01/12/17	EPA 8260B	
Toluene	0.090	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.10	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.35	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	9.3	0.50	"	"	"	"	"	"	

Date Sampled: **01/11/17 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		105 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		113 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:16

SP-13@2'
1701061-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/11/17 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1701088	01/12/17	01/13/17	8015M	

Date Sampled: **01/11/17 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		99.6 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/11/17 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1701091	01/12/17	01/12/17	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **01/11/17 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	21-167		"	"	"	"	

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Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:16

SP-13.5@2'
1701061-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/11/17 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1701088	01/12/17	01/13/17	8015M	

Date Sampled: **01/11/17 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		99.9 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/11/17 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	0.036	0.0020	mg/kg	1	1701091	01/12/17	01/12/17	EPA 8260B	
Toluene	0.42	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.25	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.71	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	18	0.50	"	"	"	"	"	"	

Date Sampled: **01/11/17 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		104 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.6 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		109 %	21-167		"	"	"	"	

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Reported:
01/27/17 08:16

SW-1@2'
1701061-04 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/11/17 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1701088	01/12/17	01/13/17	8015M	

Date Sampled: **01/11/17 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		122 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/11/17 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1701091	01/12/17	01/12/17	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	1.0	0.50	"	"	"	"	"	"	

Date Sampled: **01/11/17 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		105 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.1 %	21-167		"	"	"	"	

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Project Manager: Colby Sterling

Reported:
01/27/17 08:16

SW-2@2'
1701061-05 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 01/11/17 12:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	250	50	mg/kg	1	1701088	01/12/17	01/13/17	8015M	

Date Sampled: 01/11/17 12:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		125 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 01/11/17 12:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1701091	01/12/17	01/13/17	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.019	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	2.1	0.50	"	"	"	"	"	"	

Date Sampled: 01/11/17 12:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		105 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	21-167		"	"	"	"	

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Project: CR 118 East Gathering Pipeline
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Reported:
01/27/17 08:16

SW-3@2'
1701061-06 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/11/17 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1701088	01/12/17	01/13/17	8015M	

Date Sampled: **01/11/17 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		112 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/11/17 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	0.0036	0.0020	mg/kg	1	1701091	01/12/17	01/13/17	EPA 8260B	
Toluene	0.069	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.081	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.29	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	7.7	0.50	"	"	"	"	"	"	

Date Sampled: **01/11/17 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		103 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	21-167		"	"	"	"	

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1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:16

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1701088 - EPA 3550A

Blank (1701088-BLK1)

Prepared & Analyzed: 01/12/17

C10-C28 (DRO) ND 50 mg/kg

Surrogate: o-Terphenyl 12.5 " 12.5 100 30-150

LCS (1701088-BS1)

Prepared & Analyzed: 01/12/17

C10-C28 (DRO) 451 50 mg/kg 499 90.3 73-134

Surrogate: o-Terphenyl 12.9 " 12.5 103 30-150

Matrix Spike (1701088-MS1)

Source: 1701054-03

Prepared & Analyzed: 01/12/17

C10-C28 (DRO) 471 50 mg/kg 492 11.2 93.4 50-148

Surrogate: o-Terphenyl 13.2 " 12.3 107 30-150

Matrix Spike Dup (1701088-MSD1)

Source: 1701054-03

Prepared & Analyzed: 01/12/17

C10-C28 (DRO) 457 50 mg/kg 496 11.2 90.0 50-148 2.93 20

Surrogate: o-Terphenyl 12.4 " 12.4 99.5 30-150

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01/27/17 08:16

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 1701091 - EPA 5030 Soil MS

Blank (1701091-BLK1)

Prepared & Analyzed: 01/12/17

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0404		"	0.0400		101	23-173			
Surrogate: Toluene-d8	0.0399		"	0.0400		99.8	20-170			
Surrogate: 4-Bromofluorobenzene	0.0379		"	0.0400		94.6	21-167			

LCS (1701091-BS1)

Prepared & Analyzed: 01/12/17

Benzene	0.0935	0.0020	mg/kg	0.100		93.5	58-130			
Toluene	0.105	0.0050	"	0.100		105	61-134			
Ethylbenzene	0.116	0.0050	"	0.0992		117	74-139			
m,p-Xylene	0.221	0.010	"	0.200		111	73-137			
o-Xylene	0.115	0.0050	"	0.0980		117	73-141			
Xylenes (total)	0.336	0.0050	"				30-150			
Gasoline Range Hydrocarbons	2.86	0.50	"				30-150			
Surrogate: 1,2-Dichloroethane-d4	0.0402		"	0.0400		100	23-173			
Surrogate: Toluene-d8	0.0386		"	0.0400		96.4	20-170			
Surrogate: 4-Bromofluorobenzene	0.0380		"	0.0400		95.0	21-167			

Matrix Spike (1701091-MS1)

Source: 1701054-03

Prepared & Analyzed: 01/12/17

Benzene	0.0946	0.0020	mg/kg	0.100	ND	94.6	30-131			
Toluene	0.105	0.0050	"	0.100	ND	105	30-134			
Ethylbenzene	0.119	0.0050	"	0.0992	ND	120	22-153			
m,p-Xylene	0.225	0.010	"	0.200	ND	113	10-159			
o-Xylene	0.118	0.0050	"	0.0980	ND	121	31-151			
Xylenes (total)	0.344	0.0050	"		ND		30-150			
Gasoline Range Hydrocarbons	2.87	0.50	"		ND		30-150			
Surrogate: 1,2-Dichloroethane-d4	0.0416		"	0.0400		104	23-173			
Surrogate: Toluene-d8	0.0393		"	0.0400		98.2	20-170			
Surrogate: 4-Bromofluorobenzene	0.0399		"	0.0400		99.8	21-167			

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1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:16

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 1701091 - EPA 5030 Soil MS

Matrix Spike Dup (1701091-MSD1)		Source: 1701054-03			Prepared & Analyzed: 01/12/17					
Benzene	0.0967	0.0020	mg/kg	0.0992	ND	97.5	30-131	2.20	34	
Toluene	0.109	0.0050	"	0.0992	ND	110	30-134	3.06	30	
Ethylbenzene	0.117	0.0050	"	0.0984	ND	119	22-153	1.76	24	
m,p-Xylene	0.224	0.010	"	0.198	ND	113	10-159	0.757	68	
o-Xylene	0.116	0.0050	"	0.0972	ND	120	31-151	1.76	38	
Xylenes (total)	0.340	0.0050	"		ND		30-150	1.10	20	
Gasoline Range Hydrocarbons	2.84	0.50	"		ND		30-150	1.12	20	
Surrogate: 1,2-Dichloroethane-d4	0.0418		"	0.0397		105	23-173			
Surrogate: Toluene-d8	0.0396		"	0.0397		99.7	20-170			
Surrogate: 4-Bromofluorobenzene	0.0388		"	0.0397		97.9	21-167			

Summit Scientific

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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline

Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:16

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 27, 2017

Colby Sterling

Talon/LPE

1811 E Mulberry

Ft Collins, CO 80524

RE: CR 118 East Gathering Pipeline

Enclosed are the results of analyses for samples received by Summit Scientific on 12/29/16 16:15. 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



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Downhill Perimeter West 2@0'	1612224-01	Soil	12/29/16 13:50	12/29/16 16:15
SP-6.5@12"	1612224-02	Soil	12/29/16 14:16	12/29/16 16:15
SP-7@12"	1612224-03	Soil	12/29/16 14:18	12/29/16 16:15
SP-7.5@12"	1612224-04	Soil	12/29/16 14:20	12/29/16 16:15
SP-12.5@12"	1612224-05	Soil	12/29/16 14:32	12/29/16 16:15
SP-13@12"	1612224-06	Soil	12/29/16 14:34	12/29/16 16:15

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

Sample Receipt Checklist

S2 Mark G. 161224
Client: Talon Client Project ID: Razor 10CPB Pipeline
Ship: P.O. Airbill #: _____
(JP, EX, Hand Delivered, Pick-up, etc.)
Method (check all that apply): Air ☒ Soil/Solid Water Other: _____
(Describe)

Col ID	Te (°C)
	<u>8.7</u>

Th om: 1612155-K

	Yes	No	N/A	Comments (if any)
cooling, was the temperature just above		<input checked="" type="checkbox"/>		
be delivered the same day of sampling, waived provided that there is evidence		<input checked="" type="checkbox"/>		
given intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
present, are they intact ⁽¹⁾ ?			<input checked="" type="checkbox"/>	
analytes or samples with HTs due			<input checked="" type="checkbox"/>	
(COC) form present and filled out	<input checked="" type="checkbox"/>			
with the number and type of sample	<input checked="" type="checkbox"/>			
the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
disinquired by the client w/ date and	<input checked="" type="checkbox"/>			
is there headspace present? if yes, state in narrative.			<input checked="" type="checkbox"/>	
that require preservation			<input checked="" type="checkbox"/>	
ervative in the Comments column – NO3, ect			<input checked="" type="checkbox"/>	
served for metals, is the pH ≤ 2 ⁽¹⁾ ?			<input checked="" type="checkbox"/>	
ments.			<input checked="" type="checkbox"/>	
requested, were samples field			<input checked="" type="checkbox"/>	
(if any):				

the client before proceeding with analysis and note in case narrative.

Signature or Initials of Custodian: Muri P. Date/Time: 12-29-16 17:30



Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

Downhill Perimeter West 2@0'
1612224-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/29/16 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	54	50	mg/kg	1	1612310	12/30/16	12/30/16	8015M	

Date Sampled: **12/29/16 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		97.5 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/29/16 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612311	12/30/16	12/30/16	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	3.7	0.50	"	"	"	"	"	"	

Date Sampled: **12/29/16 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		100 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		94.3 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

SP-6.5@12"
1612224-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/29/16 14:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	160	50	mg/kg	1	1612310	12/30/16	12/30/16	8015M	

Date Sampled: **12/29/16 14:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		102 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/29/16 14:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612311	12/30/16	12/30/16	EPA 8260B	
Toluene	0.037	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.067	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.24	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	17	0.50	"	"	"	"	"	"	

Date Sampled: **12/29/16 14:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		98.7 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

SP-7@12"
1612224-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/29/16 14:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	170	50	mg/kg	1	1612310	12/30/16	12/30/16	8015M	

Date Sampled: **12/29/16 14:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		110 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/29/16 14:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	0.0035	0.0020	mg/kg	1	1612311	12/30/16	12/30/16	EPA 8260B	
Toluene	0.052	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.055	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.19	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	17	0.50	"	"	"	"	"	"	

Date Sampled: **12/29/16 14:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

SP-7.5@12"
1612224-04 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/29/16 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	3000	50	mg/kg	1	1612310	12/30/16	12/30/16	8015M	

Date Sampled: **12/29/16 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	163 %	30-150			"	"	"	"	S-02

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/29/16 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	0.051	0.0020	mg/kg	1	1612311	12/30/16	12/30/16	EPA 8260B	
Toluene	5.6	0.50	"	100	"	"	12/30/16	"	
Ethylbenzene	5.9	0.50	"	"	"	"	"	"	
Xylenes (total)	4.3	0.0050	"	1	"	"	12/30/16	"	
Gasoline Range Hydrocarbons	760	5.0	"	10	"	"	12/30/16	"	

Date Sampled: **12/29/16 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	108 %	23-173			"	"	12/30/16	"	
Surrogate: Toluene-d8	96.4 %	20-170			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	169 %	21-167			"	"	"	"	S-02

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

SP-12.5@12"
1612224-05 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/29/16 14:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	150	50	mg/kg	1	1612310	12/30/16	12/30/16	8015M	

Date Sampled: **12/29/16 14:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		107 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/29/16 14:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1612311	12/30/16	01/03/17	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.013	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	1.2	0.50	"	"	"	"	"	"	

Date Sampled: **12/29/16 14:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		97.2 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.4 %	21-167		"	"	"	"	

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

SP-13@12"
1612224-06 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **12/29/16 14:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	1500	50	mg/kg	1	1612310	12/30/16	12/30/16	8015M	

Date Sampled: **12/29/16 14:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		116 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **12/29/16 14:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	0.066	0.0020	mg/kg	1	1612311	12/30/16	12/30/16	EPA 8260B	
Toluene	1.9	0.050	"	10	"	"	12/30/16	"	
Ethylbenzene	2.1	0.050	"	"	"	"	"	"	
Xylenes (total)	2.6	0.0050	"	1	"	"	12/30/16	"	
Gasoline Range Hydrocarbons	270	5.0	"	10	"	"	12/30/16	"	

Date Sampled: **12/29/16 14:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		109 %	23-173		"	"	12/30/16	"	
<i>Surrogate: Toluene-d8</i>		98.4 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		133 %	21-167		"	"	"	"	

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1612310 - EPA 3550A

Blank (1612310-BLK1)

Prepared & Analyzed: 12/30/16

C10-C28 (DRO)	ND	50	mg/kg							
Surrogate: o-Terphenyl	12.3		"	12.5		98.0	30-150			

LCS (1612310-BS1)

Prepared & Analyzed: 12/30/16

C10-C28 (DRO)	523	50	mg/kg	499		105	73-134			
Surrogate: o-Terphenyl	13.0		"	12.5		104	30-150			

Matrix Spike (1612310-MS1)

Source: 1612224-01

Prepared & Analyzed: 12/30/16

C10-C28 (DRO)	494	50	mg/kg	499	53.5	88.4	50-148			
Surrogate: o-Terphenyl	12.6		"	12.5		101	30-150			

Matrix Spike Dup (1612310-MSD1)

Source: 1612224-01

Prepared & Analyzed: 12/30/16

C10-C28 (DRO)	534	50	mg/kg	499	53.5	96.2	50-148	7.64	20	
Surrogate: o-Terphenyl	13.3		"	12.5		107	30-150			

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

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 1612311 - EPA 5030 Soil MS

Blank (1612311-BLK1)

Prepared & Analyzed: 12/30/16

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0411		"	0.0400		103	23-173			
Surrogate: Toluene-d8	0.0393		"	0.0400		98.2	20-170			
Surrogate: 4-Bromofluorobenzene	0.0378		"	0.0400		94.4	21-167			

LCS (1612311-BS1)

Prepared: 12/30/16 Analyzed: 01/03/17

Benzene	0.0946	0.0020	mg/kg	0.100		94.6	58-130			
Toluene	0.105	0.0050	"	0.100		105	61-134			
Ethylbenzene	0.117	0.0050	"	0.0992		118	74-139			
m,p-Xylene	0.219	0.010	"	0.200		110	73-137			
o-Xylene	0.112	0.0050	"	0.0980		114	73-141			
Xylenes (total)	0.331	0.0050	"				30-150			
Gasoline Range Hydrocarbons	2.82	0.50	"				30-150			
Surrogate: 1,2-Dichloroethane-d4	0.0399		"	0.0400		99.7	23-173			
Surrogate: Toluene-d8	0.0395		"	0.0400		98.8	20-170			
Surrogate: 4-Bromofluorobenzene	0.0390		"	0.0400		97.5	21-167			

Matrix Spike (1612311-MS1)

Source: 1612224-01

Prepared: 12/30/16 Analyzed: 01/03/17

Benzene	0.0982	0.0020	mg/kg	0.0998	ND	98.4	30-131			
Toluene	0.109	0.0050	"	0.0998	ND	109	30-134			
Ethylbenzene	0.119	0.0050	"	0.0990	ND	120	22-153			
m,p-Xylene	0.222	0.010	"	0.199	ND	111	10-159			
o-Xylene	0.114	0.0050	"	0.0978	ND	117	31-151			
Xylenes (total)	0.336	0.0050	"		ND		30-150			
Gasoline Range Hydrocarbons	4.50	0.50	"		3.72		30-150			
Surrogate: 1,2-Dichloroethane-d4	0.0396		"	0.0399		99.2	23-173			
Surrogate: Toluene-d8	0.0399		"	0.0399		99.8	20-170			
Surrogate: 4-Bromofluorobenzene	0.0380		"	0.0399		95.2	21-167			

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline
Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

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 1612311 - EPA 5030 Soil MS

Matrix Spike Dup (1612311-MSD1)		Source: 1612224-01			Prepared: 12/30/16		Analyzed: 01/03/17			
Benzene	0.0983	0.0020	mg/kg	0.0996	ND	98.7	30-131	0.166	34	
Toluene	0.108	0.0050	"	0.0996	ND	109	30-134	0.832	30	
Ethylbenzene	0.120	0.0050	"	0.0988	ND	121	22-153	1.03	24	
m,p-Xylene	0.222	0.010	"	0.199	ND	112	10-159	0.124	68	
o-Xylene	0.116	0.0050	"	0.0976	ND	118	31-151	1.28	38	
Xylenes (total)	0.338	0.0050	"		ND		30-150	0.520	20	
Gasoline Range Hydrocarbons	4.71	0.50	"		3.72		30-150	4.60	20	
Surrogate: 1,2-Dichloroethane-d4	0.0391		"	0.0398		98.1	23-173			
Surrogate: Toluene-d8	0.0397		"	0.0398		99.6	20-170			
Surrogate: 4-Bromofluorobenzene	0.0385		"	0.0398		96.5	21-167			

Summit Scientific

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Talon/LPE
1811 E Mulberry
Ft Collins CO, 80524

Project: CR 118 East Gathering Pipeline

Project Number: 701530.096.01
Project Manager: Colby Sterling

Reported:
01/27/17 08:15

Notes and Definitions

S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
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