

# Summit Scientific

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741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

October 12, 2016

Colby Sterling  
Talon/LPE  
1811 E Mulberry  
Ft Collins, CO 80524  
RE: Razor 12F

Enclosed are the results of analyses for samples received by Summit Scientific on 10/11/16 18:00. 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: Razor 12F  
Project Number: [none701530.064.01]  
Project Manager: Colby Sterling

**Reported:**  
10/12/16 15:46

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
UL-10@4'	1610085-01	Soil	10/11/16 13:20	10/11/16 18:00
UL-11@4'	1610085-02	Soil	10/11/16 13:22	10/11/16 18:00

Summit Scientific

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

A handwritten signature in black ink, appearing to be 'MSM'.

Talon/LPE  
1811 E Mulberry  
Ft Collins CO, 80524

Project: Razor 12F

Project Number: [none701530.064.01]  
Project Manager: Colby Sterling

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10/12/16 15:46

## Summit Scientific 1610085

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 Gales / Jason Leverton

Project Manager:	Colby Sterling
E-Mail:	csterling@talonlpe.com
Project Name:	Razor 12F
Project Number:	701530.064.03

[illegible]

[www.s2scientific.com](http://www.s2scientific.com)

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1811 E Mulberry  
Ft Collins CO, 80524

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10/12/16 15:46

#### Sample Receipt Checklist

S2 Work Order: 1616085

Client: Talon

Client Project ID: Razor 12F

Shipped Via: P.V.

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

Airbill #: \_\_\_\_\_

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

Cooler ID					
Temp (°C)	<u>22.3</u>				

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature just above 0°C to ≤ 6°C <sup>(1)</sup> ?				
NOTE: If samples are delivered the same day of sampling, this requirement is waived provided that there is evidence that cooling has begun.			<	
Were all samples received intact <sup>(1)</sup> ?	x			
Was adequate sample volume provided <sup>(1)</sup> ?	x			
If custody seals are present, are they intact <sup>(1)</sup> ?			<	
Are short holding time analytes or samples with HTs due within 48 hours present?	x			
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	x			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	x			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	x			
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	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) <sup>(1)</sup> ?			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 <sup>(1)</sup> ?			x	
Record the pH in Comments.			x	
If dissolved metals are requested, were samples field filtered?			x	
Additional Comments (if any):				

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

Muri P.  
Custodian Printed Name

MS 10-11-16  
Signature or Initials of Custodian

18:00  
Date/Time



Talon/LPE  
1811 E Mulberry  
Ft Collins CO, 80524

Project: Razor 12F  
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**Reported:**  
10/12/16 15:46

**UL-10@4'**  
**1610085-01 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **10/11/16 13:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>pH</b>	<b>8.70</b>	0.100	pH Units	1	1610122	10/12/16	10/12/16	EPA 9045	

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**Reported:**  
10/12/16 15:46

**UL-11@4'**  
**1610085-02 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **10/11/16 13:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.43	0.100	pH Units	1	1610122	10/12/16	10/12/16	EPA 9045	

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**Reported:**  
10/12/16 15:46

**Physical Parameters by APHA/ASTM/EPA Methods - Quality Control**  
**Summit Scientific**

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

**Batch 1610122 - General Preparation**

**LCS (1610122-BS1)**

Prepared & Analyzed: 10/12/16

pH	8.03	0.100	pH Units	8.00	100	95-105
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**Duplicate (1610122-DUP1)**

**Source: 1610008-01**

Prepared & Analyzed: 10/12/16

pH	8.21	0.100	pH Units	8.22	0.122	20
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### Notes and Definitions

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