

# Summit Scientific

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303.277.9310 - laboratory ♦ 303.277.9531 - fax

March 28, 2017

Blake Ford  
Extraction Oil & Gas  
570 17th St. Suite 550  
Denver, CO 80202  
RE: Mickey Spill Response

Enclosed are the results of analyses for samples received by Summit Scientific on 03/27/17 17:45. 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



Extraction Oil & Gas  
570 17th St. Suite 550  
Denver CO, 80202

Project: Mickey Spill Response

Project Number: [none]  
Project Manager: Blake Ford

**Reported:**  
03/28/17 13:53

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Mickey Spill Area 2	1703243-01	Soil	03/27/17 10:50	03/27/17 17:45

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 'MSF'.

Page 2 of 6



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#### Sample Receipt Checklist

S2 Work Order: 1703243

Client: Extraction Oil & Gas Client Project ID: Mickey Spill Response

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

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

Cooler ID					
Temp (°C)	<u>9.6</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 <sup>(1)</sup> ?		<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 <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
If custody seals are present, are they intact <sup>(1)</sup> ?			<input checked="" type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present?			<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ?			<input checked="" type="checkbox"/>	
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect				
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ?			<input checked="" type="checkbox"/>	
Record the pH in Comments.				
If dissolved metals are requested, were samples field filtered?			<input checked="" type="checkbox"/>	
Additional Comments (if any):				
<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.				

Nakita  
Custodian Printed Name

[Signature]  
Signature or Initials of Custodian

3/27/17 1300  
Date/Time



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**Mickey Spill Area 2**  
**1703243-01 (Soil)**

**Summit Scientific**

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **03/27/17 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>C10-C28 (DRO)</b>	<b>330</b>	50	mg/kg	1	1703286	03/27/17	03/28/17	8015M	

Date Sampled: **03/27/17 10:50**

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

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**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 1703286 - EPA 3550A**

**Blank (1703286-BLK1)**

Prepared: 03/27/17 Analyzed: 03/28/17

C10-C28 (DRO) ND 50 mg/kg

Surrogate: o-Terphenyl 12.6 " 12.5 100 30-150

**LCS (1703286-BS1)**

Prepared: 03/27/17 Analyzed: 03/28/17

C10-C28 (DRO) 467 50 mg/kg 499 93.6 73-134

Surrogate: o-Terphenyl 12.1 " 12.5 97.0 30-150

**Matrix Spike (1703286-MS1)**

**Source: 1703242-01**

Prepared: 03/27/17 Analyzed: 03/28/17

C10-C28 (DRO) 451 50 mg/kg 499 27.4 84.9 50-148

Surrogate: o-Terphenyl 11.3 " 12.5 90.4 30-150

**Matrix Spike Dup (1703286-MSD1)**

**Source: 1703242-01**

Prepared: 03/27/17 Analyzed: 03/28/17

C10-C28 (DRO) 473 50 mg/kg 499 27.4 89.3 50-148 4.83 20

Surrogate: o-Terphenyl 12.2 " 12.5 97.2 30-150

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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