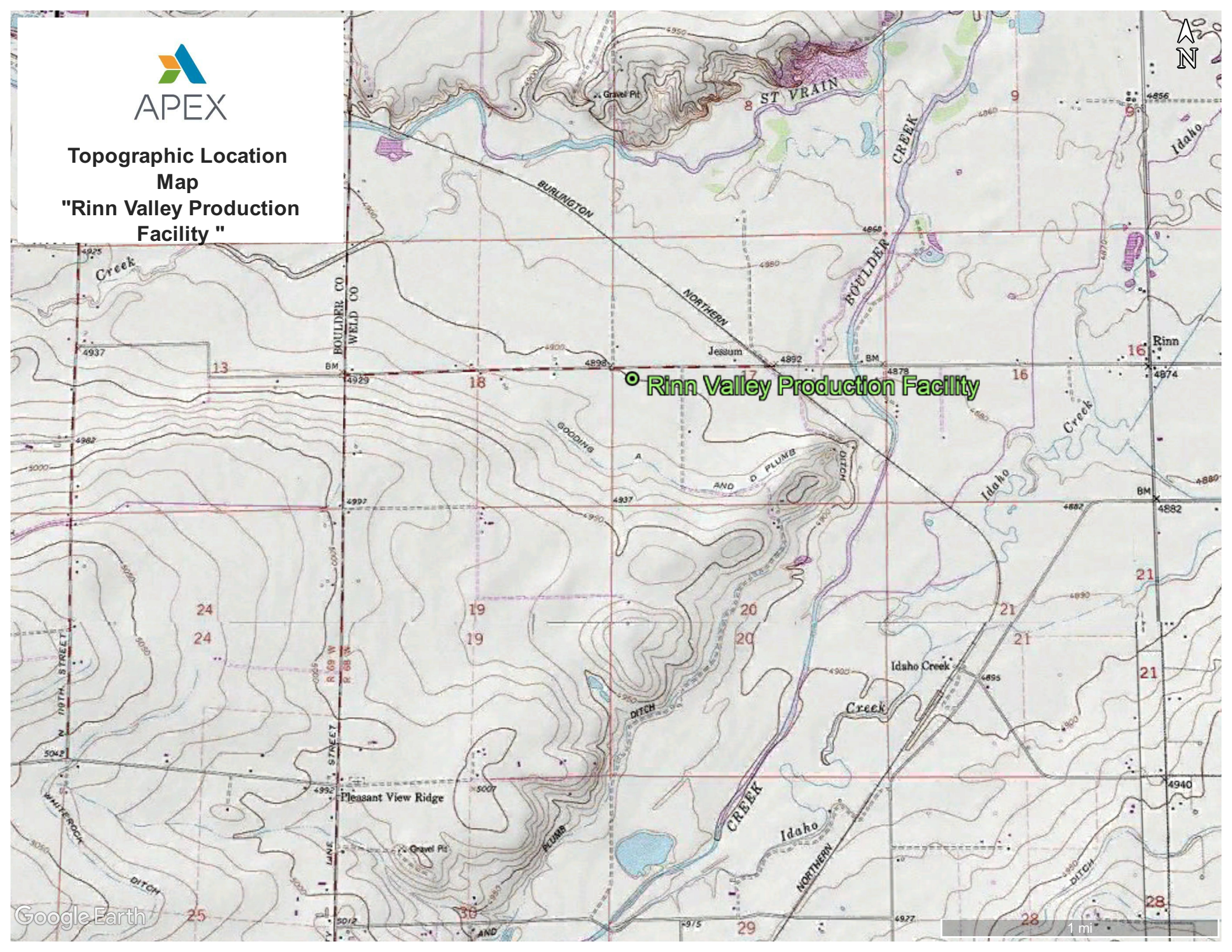




Topographic Location  
Map  
"Rinn Valley Production  
Facility"

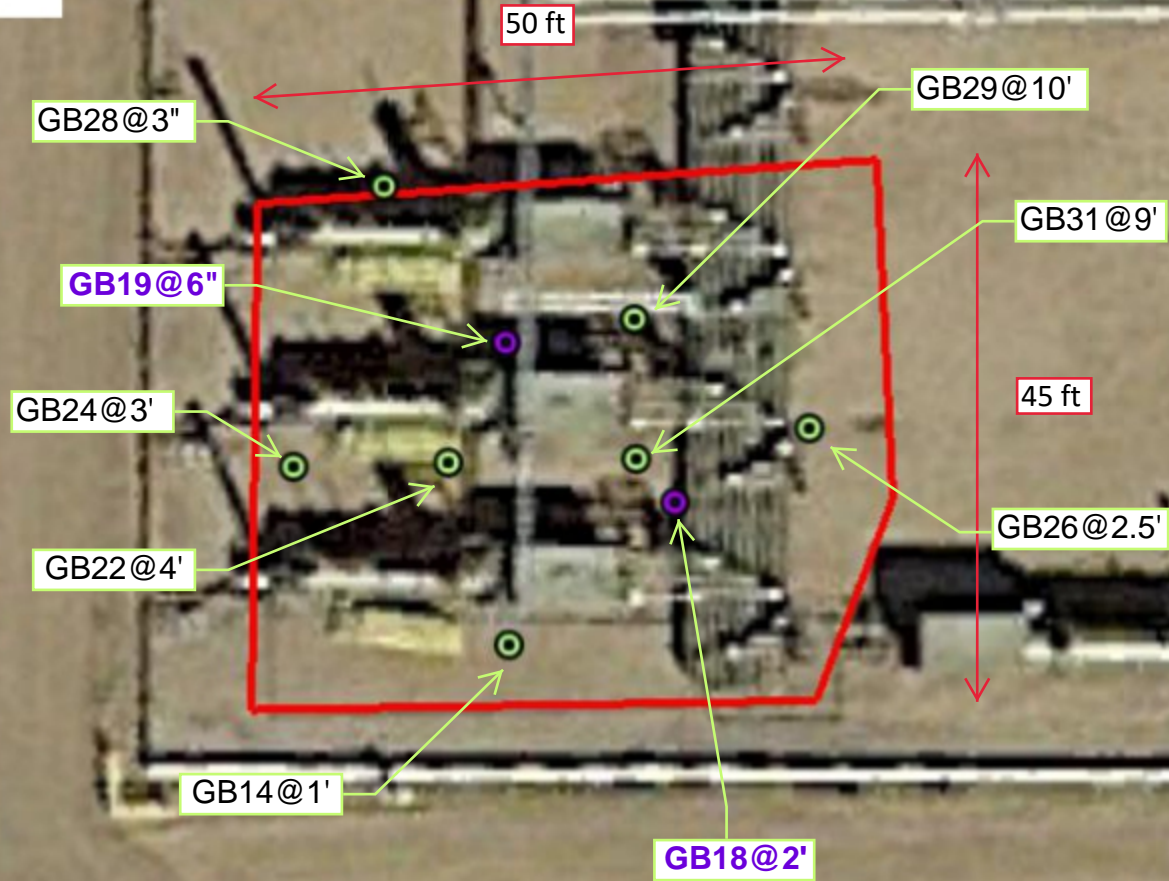


Rinn Valley Production Facility





Rinn Valley Production  
Facility  
(Location ID: 455353)





## Laboratory Results Summary Table - Soil Rinn Valley Production Facility

Location	Sample Date	Sample ID	Organics (mg/kg [ppm])					Inorganics		
			TPH (total volatile and extractable petroleum hydrocarbons) (TPH-GRO + TPH-DRO) (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes - total (mg/kg)	EC (Specific Conductance) (<4 mmhos/cm or 2x background) (mmhos/cm)	SAR (Sodium Adsorption Ratio) (calculation)	pH (pH Units)
COGCC Allowable Concentration (Soil) -->			500	0.17	85	100	175	4	12	(6-9)
Rinn Valley Production Facility	7/24/2020	GB14@1'	88.88	<0.0020	<0.0050	<0.0050	<0.010	0.599	0.873	7.72
Rinn Valley Production Facility	7/28/2020	GB18@2'	859	<0.0020	<0.0050	<0.0050	<0.010	NA	NA	NA
Rinn Valley Production Facility	7/28/2020	GB19@6"	595	<0.0020	<0.0050	<0.0050	<0.010	NA	NA	NA
Rinn Valley Production Facility	7/29/2020	GB22@4'	3.0	<0.0020	0.012	<0.0050	0.11	NA	NA	NA
Rinn Valley Production Facility	7/29/2020	GB24@3'	<50	<0.0020	<0.0050	<0.0050	<0.010	NA	NA	NA
Rinn Valley Production Facility	7/29/2020	GB26@2.5'	<50	<0.0020	<0.0050	<0.0050	<0.010	NA	NA	NA
Rinn Valley Production Facility	7/29/2020	GB28@3"	<50	<0.0020	<0.0050	<0.0050	<0.010	NA	NA	NA
Rinn Valley Production Facility	7/30/2020	GB29@10	<50	<0.0020	<0.0050	<0.0050	<0.010	NA	NA	NA
Rinn Valley Production Facility	7/30/2020	GB31@9	<50	<0.0020	<0.0050	<0.0050	<0.010	NA	NA	NA

NA - Not Analyzed

Orange Highlight - Exceedance

Yellow Highlight - TPH Detection

Grey Highlight - Below Detection Limit

Apex Companies, LLC  
1746 Cole Blvd., Suite 250  
Lakewood, CO 80401

mg/kg - milligrams per kilogram  
mmhos/cm - millimhos per centimeter

**Attachment A**

**Laboratory Analytical Report**

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

July 27, 2020

Maggie Graham

Extraction Oil&Gas

370 17th Street Suite 5300

Denver, CO 80202

RE: Rinn Valley Production Facility

Work Order #2007239

Enclosed are the results of analyses for samples received by Summit Scientific on 07/24/20 16:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury

President



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]

Project Manager: Maggie Graham

**Reported:**  
07/27/20 15:52

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GB14@1'	2007239-04	Soil	07/24/20 15:10	07/24/20 16:50

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.*

# Summit Scientific

2007239

4653 Table Mountain Drive ♦ Golden, Colorado 80403  
303-277-9310 ♦ 303-374-5933 Fax

Page 1 of 1

Client: APEX Companies, LLC  
Address: 176 Cole Blvd. Suite 250  
City/State/Zip: Lakewood, Colorado 80101  
Phone: 720-501-5065 Fax:  
Sampler Name: Ryan Finley

Project Manager: Maggie Graham 720-501-5065; 907-538-7699c  
E-Mail: DenverRemediation@ApexCos.onmicrosoft.com  
Project Name: Rinn Valley Production Facility  
Project Number:

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix			Analyze For:							Special Instructions		
				HCl	HNO <sub>3</sub>	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	TPH	BTEX	EC	SAR	pH	Rush			
GB08 @ 8"	7/24/20	1430	1			X			X			X	X							Call Maggie Graham with questions  Remaining results by Thurs 7/30/20
GB09 @ 8"	↓	1435	↓																	
GB10 @ 8"	↓	1440	↓																	
GB14 @ 1"	↓	1510	↓										X	X	X				X	
GB15 @ 1"	↓	1515	↓																	
Relinquished by: <u>Ryan Finley</u> Date/Time: <u>7/24/20 1650</u>				Received by:				Date/Time:				Turn Around Time (Check)							Notes	
Relinquished by:				Date/Time:				Received by:				Date/Time:				Same Day <input checked="" type="checkbox"/> 72 Hours <input type="checkbox"/>			Circle applicable regulatory agency: <u>COGCC/CDPHE</u>	
Relinquished by:				Date/Time:				Received by:				Date/Time:				24 Hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/>				
Relinquished by:				Date/Time:				Received in Lab by: <u>[Signature]</u>				Date/Time: <u>7-24-20 1650</u>				48 Hours <input type="checkbox"/>			Client Name: <u>XOG</u>	
Relinquished by:				Date/Time:				Received in Lab by:				Date/Time:				Sample Integrity: Temperature Upon Receipt: <u>20.1</u> Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				

**Sample Receipt Checklist**

S2 Work Order # 2007239

Client: Apex / X09

Client Project ID: Rim Valley Production Fac

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other Airbill #: \_\_\_\_\_

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

Temp (°C)	<u>20.1</u>
-----------	-------------

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ? NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.	<input checked="" type="checkbox"/>			<u>on ice</u>
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 samples with holding times due within 48 hours sample due within 48 hours present?	<input checked="" type="checkbox"/>			<u>Rush</u>
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? <b>If yes, contact client and note in narrative.</b>			<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect			<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ? Record the pH in Comments.			<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?			<input checked="" type="checkbox"/>	

Additional Comments (if any):

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

\_\_\_\_\_  
Custodian Printed Name or Initials

\_\_\_\_\_  
Signature of Custodian

7-24-20 1650  
Date/Time



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/27/20 15:52

**GB14@1'**  
**2007239-04 (Soil)**

**Summit Scientific**

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

Date Sampled: **07/24/20 15:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	2007270	07/24/20	07/24/20	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>0.88</b>	<b>0.50</b>	"	"	"	"	"	"	

Date Sampled: **07/24/20 15:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		121 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		111 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/24/20 15:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>C10-C28 (DRO)</b>	<b>88</b>	<b>50</b>	<b>mg/kg</b>	<b>1</b>	<b>2007271</b>	<b>07/24/20</b>	<b>07/24/20</b>	<b>EPA 8015M</b>	

Date Sampled: **07/24/20 15:10**

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

**Soluble Nutrients by EPA 6020/USDA60 6(2, 3A) - Dry Weight Basis**

Date Sampled: **07/24/20 15:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Calcium</b>	<b>742</b>	<b>11.4</b>	<b>mg/kg dry</b>	<b>1</b>	<b>2007277</b>	<b>07/27/20</b>	<b>07/27/20</b>	<b>EPA 6020B</b>	
<b>Magnesium</b>	<b>1000</b>	<b>5.69</b>	<b>"</b>	<b>"</b>	<b>"</b>	<b>"</b>	<b>"</b>	<b>"</b>	

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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/27/20 15:52

**GB14@1'**  
**2007239-04 (Soil)**

**Summit Scientific**

**Soluble Nutrients by EPA 6020/USDA60 6(2, 3A) - Dry Weight Basis**

<b>Sodium</b>	<b>155</b>	5.69	mg/kg dry	1	2007277	07/27/20	07/27/20	EPA 6020B
---------------	------------	------	-----------	---	---------	----------	----------	-----------

**Calculated Analysis**

Date Sampled: **07/24/20 15:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Sodium Adsorption Ratio</b>	<b>0.873</b>	0.100	units	1	2007284	07/27/20	07/27/20	Calculation	

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

Date Sampled: **07/24/20 15:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>% Solids</b>	<b>87.8</b>		%	1	2007282	07/27/20	07/27/20	Calculation	
<b>pH</b>	<b>7.72</b>		pH Units	"	2007263	07/24/20	07/24/20	EPA 9045D	

**Specific Conductance by EPA Method 120.1**

Date Sampled: **07/24/20 15:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Specific Conductance (EC)</b>	<b>0.599</b>	0.0100	mmhos/cm	1	2007264	"	07/24/20	EPA 120.1	

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.*



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/27/20 15:52

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

#### Summit Scientific

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

#### Batch 2007270 - EPA 5030 Soil MS

##### Blank (2007270-BLK1)

Prepared & Analyzed: 07/24/20

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0456		"	0.0400		114	23-173			
Surrogate: Toluene-d8	0.0442		"	0.0400		110	20-170			
Surrogate: 4-Bromofluorobenzene	0.0438		"	0.0400		109	21-167			

##### LCS (2007270-BS1)

Prepared & Analyzed: 07/24/20

Benzene	0.0816	0.0020	mg/kg	0.0750		109	70-130			
Toluene	0.0722	0.0050	"	0.0750		96.2	70-130			
Ethylbenzene	0.0895	0.0050	"	0.0750		119	70-130			
m,p-Xylene	0.162	0.010	"	0.150		108	70-130			
o-Xylene	0.0787	0.0050	"	0.0750		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0464		"	0.0400		116	23-173			
Surrogate: Toluene-d8	0.0440		"	0.0400		110	20-170			
Surrogate: 4-Bromofluorobenzene	0.0423		"	0.0400		106	21-167			

##### Matrix Spike (2007270-MS1)

Source: 2007239-04

Prepared & Analyzed: 07/24/20

Benzene	0.0810	0.0020	mg/kg	0.0750	ND	108	70-130			
Toluene	0.0730	0.0050	"	0.0750	ND	97.3	70-130			
Ethylbenzene	0.0904	0.0050	"	0.0750	ND	121	70-130			
m,p-Xylene	0.165	0.010	"	0.150	ND	110	70-130			
o-Xylene	0.0809	0.0050	"	0.0750	ND	108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0480		"	0.0400		120	23-173			
Surrogate: Toluene-d8	0.0444		"	0.0400		111	20-170			
Surrogate: 4-Bromofluorobenzene	0.0436		"	0.0400		109	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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/27/20 15:52

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

**Summit Scientific**

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

**Batch 2007270 - EPA 5030 Soil MS**

<b>Matrix Spike Dup (2007270-MSD1)</b>	<b>Source: 2007239-04</b>			<b>Prepared &amp; Analyzed: 07/24/20</b>						
Benzene	0.0798	0.0020	mg/kg	0.0750	ND	106	70-130	1.53	30	
Toluene	0.0721	0.0050	"	0.0750	ND	96.2	70-130	1.20	30	
Ethylbenzene	0.0899	0.0050	"	0.0750	ND	120	70-130	0.566	30	
m,p-Xylene	0.163	0.010	"	0.150	ND	108	70-130	1.41	30	
o-Xylene	0.0797	0.0050	"	0.0750	ND	106	70-130	1.49	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0466</i>		<i>"</i>	<i>0.0400</i>		<i>117</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0444</i>		<i>"</i>	<i>0.0400</i>		<i>111</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0428</i>		<i>"</i>	<i>0.0400</i>		<i>107</i>	<i>21-167</i>			

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.*



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/27/20 15:52

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch 2007271 - EPA 3550A**

**Blank (2007271-BLK1)**

Prepared & Analyzed: 07/24/20

C10-C28 (DRO) ND 50 mg/kg

**LCS (2007271-BS1)**

Prepared & Analyzed: 07/24/20

C10-C28 (DRO) 445 50 mg/kg 500 89.1 70-130

**Matrix Spike (2007271-MS1)**

Source: 2007239-04

Prepared & Analyzed: 07/24/20

C10-C28 (DRO) 490 50 mg/kg 500 88.4 80.3 70-130

**Matrix Spike Dup (2007271-MSD1)**

Source: 2007239-04

Prepared & Analyzed: 07/24/20

C10-C28 (DRO) 498 50 mg/kg 500 88.4 82.0 70-130 1.69 20

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.*



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/27/20 15:52

**Soluble Nutrients by EPA 6020/USDA60 6(2, 3A) - Dry Weight Basis - Quality Control**

**Summit Scientific**

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

**Batch 2007277 - General Preparation**

**Blank (2007277-BLK1)**

Prepared & Analyzed: 07/27/20

Calcium	ND	10.0	mg/kg wet						
Magnesium	ND	5.00	"						
Sodium	ND	5.00	"						

**LCS (2007277-BS1)**

Prepared & Analyzed: 07/27/20

Calcium	547	10.0	mg/kg wet	500		109	70-130		
Magnesium	542	5.00	"	500		108	70-130		
Sodium	507	5.00	"	500		101	70-130		

**Duplicate (2007277-DUP1)**

Source: 2007239-04

Prepared & Analyzed: 07/27/20

Calcium	761	11.4	mg/kg dry		742			2.56	20
Magnesium	945	5.69	"		1000			5.75	20
Sodium	153	5.69	"		155			1.27	20

**Matrix Spike (2007277-MS1)**

Source: 2007239-04

Prepared & Analyzed: 07/27/20

Calcium	1240	11.4	mg/kg dry	569	742	87.4	70-130		
Magnesium	1430	5.69	"	569	1000	75.2	70-130		
Sodium	659	5.69	"	569	155	88.7	70-130		

**Matrix Spike Dup (2007277-MSD1)**

Source: 2007239-04

Prepared & Analyzed: 07/27/20

Calcium	1160	11.4	mg/kg dry	569	742	73.2	70-130	6.79	25
Magnesium	1650	5.69	"	569	1000	113	70-130	14.0	25
Sodium	681	5.69	"	569	155	92.5	70-130	3.19	25

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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/27/20 15:52

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

**Summit Scientific**

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

**Batch 2007263 - General Preparation**

**LCS (2007263-BS1)**

Prepared & Analyzed: 07/24/20

pH 9.22 pH Units 9.18 100 95-105

**Duplicate (2007263-DUP1)**

Source: 2007229-04

Prepared & Analyzed: 07/24/20

pH 8.43 pH Units 8.42 0.119 20

**Batch 2007282 - General Preparation**

**Duplicate (2007282-DUP1)**

Source: 2007239-04

Prepared & Analyzed: 07/27/20

% Solids 88.1 % 87.8 0.330 20

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.*



Extraction Oil&Gas  
 370 17th Street Suite 5300  
 Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
 Project Manager: Maggie Graham

**Reported:**  
 07/27/20 15:52

**Specific Conductance by EPA Method 120.1 - Quality Control**  
**Summit Scientific**

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

**Batch 2007264 - General Preparation**

**Blank (2007264-BLK1)**

Prepared & Analyzed: 07/24/20

Specific Conductance (EC)      ND      0.0100    mmhos/cm

**LCS (2007264-BS1)**

Prepared & Analyzed: 07/24/20

Specific Conductance (EC)      0.802      0.0100    mmhos/cm      0.750      107      90-110

**Duplicate (2007264-DUP1)**

**Source: 2007229-04**

Prepared & Analyzed: 07/24/20

Specific Conductance (EC)      3.94      0.0100    mmhos/cm      3.95      0.165      20

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.*



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/27/20 15:52

### 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

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

July 29, 2020

Maggie Graham

Extraction Oil&Gas

370 17th Street Suite 5300

Denver, CO 80202

RE: Rinn Valley Production Facility

Work Order #2007255

Enclosed are the results of analyses for samples received by Summit Scientific on 07/28/20 12:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury

President



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]

Project Manager: Maggie Graham

**Reported:**  
07/29/20 22:07

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GB18@2'	2007255-01	Soil	07/28/20 10:55	07/28/20 12:40
GB19@6"	2007255-02	Soil	07/28/20 11:15	07/28/20 12:40

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.*

2007255

# Summit Scientific

4653 Table Mountain Drive ♦ Golden, Colorado 80403  
303-277-9310 ♦ 303-374-5933 Fax

Page 1 of 1

Client: APEX Companies, LLC  
Address: 176 Cole Blvd. Suite 250  
City/State/Zip: Lakewood, Colorado 80101  
Phone: 720-501-5065 Fax: \_\_\_\_\_  
Sampler Name: Ryan Finley

Project Manager: Maggie Graham 720-501-5065; 907-538-7699c  
E-Mail: DenverRemediation@ApexCos.onmicrosoft.com  
Project Name: Runn Valley production Facility  
Project Number: TBD

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix			Analyze For:						Special Instructions			
				HCl	HNO <sub>3</sub>	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	TPH	BTEX						Rush	Standard
GB18@2'	7/28/20	1055	1			X			X				X	X				X	X	Call Maggie Graham with questions
GB19@6"	7/28/20	1115	1			X			X				X	X				X	X	
Relinquished by: <u>Ryan Finley</u>		Date/Time: <u>7/28/20 12:40</u>		Received by: <u>E. Smith</u>		Date/Time: <u>7-28-20 12:40</u>		Turn Around Time (Check)			Notes									
								Same Day <input checked="" type="checkbox"/>			72 Hours <input type="checkbox"/>									
								24 Hours <input type="checkbox"/>			Standard <input checked="" type="checkbox"/>									
								48 Hours <input type="checkbox"/>			Circle applicable regulatory agency:									
								Sample Integrity:			COGCC/ CDPHE									
								Temperature Upon Receipt: <u>17°C</u>			Client Name: <u>onice</u>									
								Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			<u>XOG</u>									

**Sample Receipt Checklist**

S2 Work Order 2007255

Client: Apex Co

Client Project ID: Rinn Valley Production Facility

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other Airbill #: \_\_\_\_\_

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

Temp (°C)	<u>17°C</u>
-----------	-------------

Thermometer ID: 61857155-K

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

Eric H.  
Custodian Printed Name or Initials

[Signature]  
Signature of Custodian

7-28-2020 12:40  
Date/Time



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/29/20 22:07

**GB18@2'**  
**2007255-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **07/28/20 10:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	2007295	07/28/20	07/28/20	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>29</b>	<b>0.50</b>		"	"	"	07/28/20	"	"	

Date Sampled: **07/28/20 10:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		51.2 %		23-173		"	07/28/20	"	"	
Surrogate: Toluene-d8		146 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		132 %		21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/28/20 10:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>C10-C28 (DRO)</b>	<b>830</b>	<b>50</b>		mg/kg	1	2007296	07/28/20	07/28/20	EPA 8015M	

Date Sampled: **07/28/20 10:55**

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



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/29/20 22:07

**GB19@6"**  
**2007255-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **07/28/20 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	2007313	07/29/20	07/29/20	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>15</b>	<b>0.50</b>	"	"	"	"	"	"	

Date Sampled: **07/28/20 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		51.8 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		88.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		111 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/28/20 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>C10-C28 (DRO)</b>	<b>580</b>	<b>50</b>	<b>mg/kg</b>	<b>1</b>	<b>2007314</b>	<b>07/29/20</b>	<b>07/29/20</b>	<b>EPA 8015M</b>	

Date Sampled: **07/28/20 11:15**

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



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/29/20 22:07

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

#### Summit Scientific

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

#### Batch 2007295 - EPA 5030 Soil MS

##### Blank (2007295-BLK1)

Prepared & Analyzed: 07/28/20

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0154		"	0.0400		38.6	23-173			
Surrogate: 1,2-Dichloroethane-d4	0.0154		"	0.0400		38.6	23-173			
Surrogate: Toluene-d8	0.0470		"	0.0400		118	20-170			
Surrogate: Toluene-d8	0.0470		"	0.0400		118	20-170			
Surrogate: 4-Bromofluorobenzene	0.0424		"	0.0400		106	21-167			
Surrogate: 4-Bromofluorobenzene	0.0424		"	0.0400		106	21-167			

##### LCS (2007295-BS1)

Prepared & Analyzed: 07/28/20

Benzene	0.102	0.0020	mg/kg	0.100		102	70-130			
Toluene	0.0784	0.0050	"	0.100		78.4	70-130			
Ethylbenzene	0.0887	0.0050	"	0.100		88.7	70-130			
m,p-Xylene	0.151	0.010	"	0.200		75.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0126		"	0.0400		31.6	23-173			
Surrogate: 1,2-Dichloroethane-d4	0.0126		"	0.0400		31.6	23-173			
Surrogate: Toluene-d8	0.0496		"	0.0400		124	20-170			
Surrogate: Toluene-d8	0.0496		"	0.0400		124	20-170			
Surrogate: 4-Bromofluorobenzene	0.0456		"	0.0400		114	21-167			
Surrogate: 4-Bromofluorobenzene	0.0456		"	0.0400		114	21-167			

##### Matrix Spike (2007295-MS1)

Source: 2007255-01

Prepared & Analyzed: 07/28/20

Benzene	0.101	0.0020	mg/kg	0.100	ND	101	70-130			
Toluene	0.0989	0.0050	"	0.100	ND	98.9	70-130			
Ethylbenzene	0.0849	0.0050	"	0.100	ND	84.9	70-130			
m,p-Xylene	0.147	0.010	"	0.200	ND	73.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0148		"	0.0400		37.1	23-173			
Surrogate: 1,2-Dichloroethane-d4	0.0148		"	0.0400		37.1	23-173			
Surrogate: Toluene-d8	0.0585		"	0.0400		146	20-170			
Surrogate: Toluene-d8	0.0585		"	0.0400		146	20-170			
Surrogate: 4-Bromofluorobenzene	0.0581		"	0.0400		145	21-167			
Surrogate: 4-Bromofluorobenzene	0.0581		"	0.0400		145	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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/29/20 22:07

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

**Summit Scientific**

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

**Batch 2007295 - EPA 5030 Soil MS**

**Matrix Spike Dup (2007295-MSD1)**

Source: 2007255-01

Prepared & Analyzed: 07/28/20

Benzene	0.0997	0.0020	mg/kg	0.100	ND	99.7	70-130	1.17	30	
Toluene	0.0928	0.0050	"	0.100	ND	92.8	70-130	6.39	30	
Ethylbenzene	0.0859	0.0050	"	0.100	ND	85.9	70-130	1.19	30	
m,p-Xylene	0.166	0.010	"	0.200	ND	83.1	70-130	11.9	30	
Surrogate: 1,2-Dichloroethane-d4	0.0141		"	0.0400		35.2	23-173			
Surrogate: 1,2-Dichloroethane-d4	0.0141		"	0.0400		35.2	23-173			
Surrogate: Toluene-d8	0.0594		"	0.0400		148	20-170			
Surrogate: Toluene-d8	0.0594		"	0.0400		148	20-170			
Surrogate: 4-Bromofluorobenzene	0.0546		"	0.0400		136	21-167			
Surrogate: 4-Bromofluorobenzene	0.0546		"	0.0400		136	21-167			

**Batch 2007313 - EPA 5030 Soil MS**

**Blank (2007313-BLK1)**

Prepared & Analyzed: 07/29/20

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0218		"	0.0400		54.4	23-173			
Surrogate: Toluene-d8	0.0312		"	0.0400		78.1	20-170			
Surrogate: 4-Bromofluorobenzene	0.0403		"	0.0400		101	21-167			

**LCS (2007313-BS1)**

Prepared & Analyzed: 07/29/20

Benzene	0.0705	0.0020	mg/kg	0.0750		94.0	70-130			
Toluene	0.0810	0.0050	"	0.0750		108	70-130			
Ethylbenzene	0.0651	0.0050	"	0.0750		86.8	70-130			
m,p-Xylene	0.127	0.010	"	0.150		84.9	70-130			
o-Xylene	0.0663	0.0050	"	0.0750		88.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0175		"	0.0400		43.6	23-173			
Surrogate: Toluene-d8	0.0328		"	0.0400		81.9	20-170			
Surrogate: 4-Bromofluorobenzene	0.0401		"	0.0400		100	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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/29/20 22:07

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

**Summit Scientific**

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

**Batch 2007313 - EPA 5030 Soil MS**

<b>Matrix Spike (2007313-MS1)</b>	<b>Source: 2007255-02</b>			<b>Prepared &amp; Analyzed: 07/29/20</b>						
Benzene	0.0726	0.0020	mg/kg	0.0750	ND	96.8	70-130			
Toluene	0.0669	0.0050	"	0.0750	ND	89.2	70-130			
Ethylbenzene	0.0706	0.0050	"	0.0750	ND	94.1	70-130			
m,p-Xylene	0.140	0.010	"	0.150	ND	93.3	70-130			
o-Xylene	0.0745	0.0050	"	0.0750	ND	99.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0213		"	0.0400		53.2	23-173			
Surrogate: Toluene-d8	0.0383		"	0.0400		95.8	20-170			
Surrogate: 4-Bromofluorobenzene	0.0434		"	0.0400		109	21-167			

<b>Matrix Spike Dup (2007313-MSD1)</b>	<b>Source: 2007255-02</b>			<b>Prepared &amp; Analyzed: 07/29/20</b>						
Benzene	0.0722	0.0020	mg/kg	0.0750	ND	96.2	70-130	0.580	30	
Toluene	0.0658	0.0050	"	0.0750	ND	87.8	70-130	1.54	30	
Ethylbenzene	0.0712	0.0050	"	0.0750	ND	94.9	70-130	0.889	30	
m,p-Xylene	0.138	0.010	"	0.150	ND	92.0	70-130	1.49	30	
o-Xylene	0.0724	0.0050	"	0.0750	ND	96.6	70-130	2.82	30	
Surrogate: 1,2-Dichloroethane-d4	0.0218		"	0.0400		54.4	23-173			
Surrogate: Toluene-d8	0.0395		"	0.0400		98.7	20-170			
Surrogate: 4-Bromofluorobenzene	0.0456		"	0.0400		114	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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/29/20 22:07

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch 2007296 - EPA 3550A**

**Blank (2007296-BLK1)**

Prepared & Analyzed: 07/28/20

C10-C28 (DRO) ND 50 mg/kg

**LCS (2007296-BS1)**

Prepared & Analyzed: 07/28/20

C10-C28 (DRO) 440 50 mg/kg 500 88.0 70-130

**Matrix Spike (2007296-MS1)**

Source: 2007255-01

Prepared & Analyzed: 07/28/20

C10-C28 (DRO) 1030 50 mg/kg 500 835 38.7 70-130 QM-07

**Matrix Spike Dup (2007296-MSD1)**

Source: 2007255-01

Prepared & Analyzed: 07/28/20

C10-C28 (DRO) 1020 50 mg/kg 500 835 36.3 70-130 1.17 20 QM-07

**Batch 2007314 - EPA 3550A**

**Blank (2007314-BLK1)**

Prepared & Analyzed: 07/29/20

C10-C28 (DRO) ND 50 mg/kg

**LCS (2007314-BS1)**

Prepared & Analyzed: 07/29/20

C10-C28 (DRO) 430 50 mg/kg 500 86.1 70-130

**Matrix Spike (2007314-MS1)**

Source: 2007255-02

Prepared & Analyzed: 07/29/20

C10-C28 (DRO) 764 50 mg/kg 500 579 36.9 70-130 QM-07

**Matrix Spike Dup (2007314-MSD1)**

Source: 2007255-02

Prepared & Analyzed: 07/29/20

C10-C28 (DRO) 729 50 mg/kg 500 579 30.0 70-130 4.66 20 QM-07

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.*



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]

Project Manager: Maggie Graham

**Reported:**  
07/29/20 22:07

### 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

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

July 30, 2020

Maggie Graham

Extraction Oil&Gas

370 17th Street Suite 5300

Denver, CO 80202

RE: Rinn Valley Production Facility

Work Order #2007269

Enclosed are the results of analyses for samples received by Summit Scientific on 07/29/20 16:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury

President



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]

Project Manager: Maggie Graham

**Reported:**  
07/30/20 20:51

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GB22@4'	2007269-01	Soil	07/29/20 11:30	07/29/20 16:25
GB24@3'	2007269-02	Soil	07/29/20 11:43	07/29/20 16:25
GB26@2.5'	2007269-03	Soil	07/29/20 11:57	07/29/20 16:25
GB28@3"	2007269-04	Soil	07/29/20 12:08	07/29/20 16:25

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.*



**Sample Receipt Checklist**

S2 Work Order 2007269

Client: Apex/XOG Client Project ID: Rinn Valley Production Facility

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other Airbill #: \_\_\_\_\_

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

Temp (°C)	18.5
-----------	------

Thermometer ID: 61857155-K

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

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

AT  
Custodian Printed Name or Initials

[Signature]  
Signature of Custodian

7-29-2020  
Date/Time



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/30/20 20:51

**GB22@4'**  
**2007269-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **07/29/20 11:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	2007313	07/29/20	07/29/20	EPA 8260B	
<b>Toluene</b>	<b>0.012</b>	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>0.11</b>	0.010		"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>3.0</b>	0.50		"	"	"	"	"	"	

Date Sampled: **07/29/20 11:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		67.5 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		92.5 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		137 %		21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/29/20 11:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	2007314	07/29/20	07/29/20	EPA 8015M	

Date Sampled: **07/29/20 11:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		94.5 %		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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/30/20 20:51

**GB24@3'**  
**2007269-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **07/29/20 11:43**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	2007329	07/30/20	07/30/20	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **07/29/20 11:43**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		104 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.8 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/29/20 11:43**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	2007328	07/30/20	07/30/20	EPA 8015M	

Date Sampled: **07/29/20 11:43**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		105 %	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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/30/20 20:51

**GB26@2.5'**  
**2007269-03 (Soil)**

**Summit Scientific**

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

Date Sampled: **07/29/20 11:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	2007329	07/30/20	07/30/20	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **07/29/20 11:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		105 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.6 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.4 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/29/20 11:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2007328	07/30/20	07/30/20	EPA 8015M	

Date Sampled: **07/29/20 11:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		114 %	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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/30/20 20:51

**GB28@3"**  
**2007269-04 (Soil)**

**Summit Scientific**

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

Date Sampled: **07/29/20 12:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	2007329	07/30/20	07/30/20	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **07/29/20 12:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		100 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.4 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/29/20 12:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	2007328	07/30/20	07/30/20	EPA 8015M	

Date Sampled: **07/29/20 12:08**

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



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/30/20 20:51

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

**Summit Scientific**

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

**Batch 2007313 - EPA 5030 Soil MS**

**Blank (2007313-BLK1)**

Prepared & Analyzed: 07/29/20

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0218		"	0.0400		54.4	23-173			
Surrogate: Toluene-d8	0.0312		"	0.0400		78.1	20-170			
Surrogate: 4-Bromofluorobenzene	0.0403		"	0.0400		101	21-167			

**LCS (2007313-BS1)**

Prepared & Analyzed: 07/29/20

Benzene	0.0705	0.0020	mg/kg	0.0750		94.0	70-130			
Toluene	0.0810	0.0050	"	0.0750		108	70-130			
Ethylbenzene	0.0651	0.0050	"	0.0750		86.8	70-130			
m,p-Xylene	0.127	0.010	"	0.150		84.9	70-130			
o-Xylene	0.0663	0.0050	"	0.0750		88.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0175		"	0.0400		43.6	23-173			
Surrogate: Toluene-d8	0.0328		"	0.0400		81.9	20-170			
Surrogate: 4-Bromofluorobenzene	0.0401		"	0.0400		100	21-167			

**Matrix Spike (2007313-MS1)**

Source: 2007255-02

Prepared & Analyzed: 07/29/20

Benzene	0.0726	0.0020	mg/kg	0.0750	ND	96.8	70-130			
Toluene	0.0669	0.0050	"	0.0750	ND	89.2	70-130			
Ethylbenzene	0.0706	0.0050	"	0.0750	ND	94.1	70-130			
m,p-Xylene	0.140	0.010	"	0.150	ND	93.3	70-130			
o-Xylene	0.0745	0.0050	"	0.0750	ND	99.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0213		"	0.0400		53.2	23-173			
Surrogate: Toluene-d8	0.0383		"	0.0400		95.8	20-170			
Surrogate: 4-Bromofluorobenzene	0.0434		"	0.0400		109	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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/30/20 20:51

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

**Summit Scientific**

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

**Batch 2007313 - EPA 5030 Soil MS**

**Matrix Spike Dup (2007313-MSD1)**

Source: 2007255-02

Prepared & Analyzed: 07/29/20

Benzene	0.0722	0.0020	mg/kg	0.0750	ND	96.2	70-130	0.580	30	
Toluene	0.0658	0.0050	"	0.0750	ND	87.8	70-130	1.54	30	
Ethylbenzene	0.0712	0.0050	"	0.0750	ND	94.9	70-130	0.889	30	
m,p-Xylene	0.138	0.010	"	0.150	ND	92.0	70-130	1.49	30	
o-Xylene	0.0724	0.0050	"	0.0750	ND	96.6	70-130	2.82	30	
Surrogate: 1,2-Dichloroethane-d4	0.0218		"	0.0400		54.4	23-173			
Surrogate: Toluene-d8	0.0395		"	0.0400		98.7	20-170			
Surrogate: 4-Bromofluorobenzene	0.0456		"	0.0400		114	21-167			

**Batch 2007329 - EPA 5030 Soil MS**

**Blank (2007329-BLK1)**

Prepared & Analyzed: 07/30/20

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0399		"	0.0400		99.7	23-173			
Surrogate: Toluene-d8	0.0399		"	0.0400		99.7	20-170			
Surrogate: 4-Bromofluorobenzene	0.0392		"	0.0400		98.0	21-167			

**LCS (2007329-BS1)**

Prepared & Analyzed: 07/30/20

Benzene	0.255	0.0020	mg/kg	0.200		127	70-130			
Toluene	0.253	0.0050	"	0.200		126	70-130			
Ethylbenzene	0.259	0.0050	"	0.200		129	70-130			
m,p-Xylene	0.508	0.010	"	0.400		127	70-130			
o-Xylene	0.258	0.0050	"	0.200		129	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0424		"	0.0400		106	23-173			
Surrogate: Toluene-d8	0.0405		"	0.0400		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0392		"	0.0400		98.0	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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/30/20 20:51

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

**Summit Scientific**

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

**Batch 2007329 - EPA 5030 Soil MS**

**Matrix Spike (2007329-MS1)**

Source: 2007269-02

Prepared & Analyzed: 07/30/20

Benzene	0.186	0.0020	mg/kg	0.200	ND	93.0	70-130			
Toluene	0.182	0.0050	"	0.200	ND	91.0	70-130			
Ethylbenzene	0.208	0.0050	"	0.200	ND	104	70-130			
m,p-Xylene	0.366	0.010	"	0.400	ND	91.6	70-130			
o-Xylene	0.186	0.0050	"	0.200	ND	93.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0427		"	0.0400		107	23-173			
Surrogate: Toluene-d8	0.0396		"	0.0400		98.9	20-170			
Surrogate: 4-Bromofluorobenzene	0.0396		"	0.0400		98.9	21-167			

**Matrix Spike Dup (2007329-MSD1)**

Source: 2007269-02

Prepared & Analyzed: 07/30/20

Benzene	0.189	0.0020	mg/kg	0.200	ND	94.6	70-130	1.77	30	
Toluene	0.185	0.0050	"	0.200	ND	92.4	70-130	1.55	30	
Ethylbenzene	0.197	0.0050	"	0.200	ND	98.3	70-130	5.82	30	
m,p-Xylene	0.494	0.010	"	0.400	ND	123	70-130	29.5	30	
o-Xylene	0.189	0.0050	"	0.200	ND	94.5	70-130	1.36	30	
Surrogate: 1,2-Dichloroethane-d4	0.0419		"	0.0400		105	23-173			
Surrogate: Toluene-d8	0.0398		"	0.0400		99.5	20-170			
Surrogate: 4-Bromofluorobenzene	0.0395		"	0.0400		98.8	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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/30/20 20:51

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch 2007314 - EPA 3550A**

<b>Blank (2007314-BLK1)</b>		Prepared & Analyzed: 07/29/20									
C10-C28 (DRO)	ND	50	mg/kg								
<b>LCS (2007314-BS1)</b>		Prepared & Analyzed: 07/29/20									
C10-C28 (DRO)	430	50	mg/kg	500	86.1	70-130					
<b>Matrix Spike (2007314-MS1)</b>		<b>Source: 2007255-02</b>		Prepared & Analyzed: 07/29/20							
C10-C28 (DRO)	764	50	mg/kg	500	579	36.9	70-130				QM-07
<b>Matrix Spike Dup (2007314-MSD1)</b>		<b>Source: 2007255-02</b>		Prepared & Analyzed: 07/29/20							
C10-C28 (DRO)	729	50	mg/kg	500	579	30.0	70-130	4.66	20		QM-07

**Batch 2007328 - EPA 3550A**

<b>Blank (2007328-BLK1)</b>		Prepared & Analyzed: 07/30/20									
C10-C28 (DRO)	ND	50	mg/kg								
<b>LCS (2007328-BS1)</b>		Prepared & Analyzed: 07/30/20									
C10-C28 (DRO)	433	50	mg/kg	500	86.6	70-130					
<b>Matrix Spike (2007328-MS1)</b>		<b>Source: 2007269-02</b>		Prepared & Analyzed: 07/30/20							
C10-C28 (DRO)	453	50	mg/kg	500	23.0	86.0	70-130				
<b>Matrix Spike Dup (2007328-MSD1)</b>		<b>Source: 2007269-02</b>		Prepared & Analyzed: 07/30/20							
C10-C28 (DRO)	460	50	mg/kg	500	23.0	87.3	70-130	1.40	20		

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.*



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]

Project Manager: Maggie Graham

**Reported:**  
07/30/20 20:51

### 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

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

July 30, 2020

Maggie Graham

Extraction Oil&Gas

370 17th Street Suite 5300

Denver, CO 80202

RE: Rinn Valley Production Facility

Work Order #2007280

Enclosed are the results of analyses for samples received by Summit Scientific on 07/30/20 16:16. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury

President



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]

Project Manager: Maggie Graham

**Reported:**  
07/30/20 21:28

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GB29@10	2007280-01	Soil	07/30/20 12:45	07/30/20 16:16
GB31@9	2007280-03	Soil	07/30/20 12:55	07/30/20 16:16

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.*

# Summit Scientific

S<sub>2</sub>

4653 Table Mountain Drive ♦ Golden, Colorado 80403  
303-277-9310

Client: Apex Companies LLC

Project Manager: Maggie Graham 907-538-7699

Address: ON File

E-Mail: Denver Remediation@Apexcos.onmicrosoft.com

City/State/Zip: ON File

Josh Carlisle

Phone: 720-501-5065

Project Name: Rinn Valley production facility

Sampler Name: Ryan Finley

Project Number: T80

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested				Special Instructions	
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	TPH	BTEX				
1	GB29@10	7/30/20	1245	1			X			X				X	X			X
2	GB30@6		1250															
3	GB31@9		1255															X
4	GB32@6		1320															
5	GB33@5		1400															
6	GB34@5		1403															
7	GB35@5		1405															
8	GB36@5		1407															
9	GB37@5		1415															
10	GB38@5		1418															

Relinquished by: <u>Ryan Finley</u>	Date/Time: <u>7/30/20 1615</u>	Received by: <u>[Signature]</u>	Date/Time: <u>7.30.2020 1615</u>	Turn Around Time (Check)	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day <input checked="" type="checkbox"/> 72 hours	XOG COGCC
Relinquished by:	Date/Time:	Received by:	Date/Time:	24 hours <input type="checkbox"/> Standard	
Relinquished by:	Date/Time:	Received by:	Date/Time:	48 hours <input checked="" type="checkbox"/>	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Sample Integrity:	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Temperature Upon Receipt: <u>19.2°</u>	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Samples Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

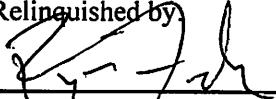
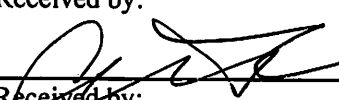
# Summit Scientific

S<sub>2</sub>

4653 Table Mountain Drive ♦ Golden, Colorado 80403  
303-277-9310

Client: Apey Companies LLC Project Manager: Maggie Graham  
 Address: ON FILE E-Mail: ON FILE  
 City/State/Zip: ON FILE  
 Phone: 720-561-5065 Project Name: Rinn Valley Production Facility  
 Sampler Name: Ryan Finley Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested						Special Instructions		
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	TPH	BTEX							
1	GB3905	7/30/20	1422	1			X			X				X	X						
2	GB4005	↓	1426	1			X			X				X	X						
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by: 	Date/Time: 7/30/20 1615	Received by: 	Date/Time: 7.30.200 1615	Turn Around Time (Check) Same Day <input type="checkbox"/> 72 hours <input type="checkbox"/> 24 hours <input type="checkbox"/> Standard <input type="checkbox"/> 48 hours <input checked="" type="checkbox"/> Sample Integrity: Temperature Upon Receipt: 19.2° Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:		
Relinquished by:	Date/Time:	Received by:	Date/Time:		

**Sample Receipt Checklist**

S2 Work Order 2007280

Client: Agex/COG Client Project ID: Kinn Valley Production Facility

Shipped Via (H.D.) P.U./FedEx/UPS/USPS/Other Airbill #: \_\_\_\_\_

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

Temp (°C)	19.2
-----------	------

Thermometer ID: 61857155-K

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

Additional Comments (if any):

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

AT  
Custodian Printed Name or Initials

[Signature]  
Signature of Custodian

7-30-2020  
Date/Time



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/30/20 21:28

**GB29@10**  
**2007280-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **07/30/20 12:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	2007329	07/30/20	07/30/20	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **07/30/20 12:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		62.0 %		23-173	"	"	"	"	
Surrogate: Toluene-d8		118 %		20-170	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		111 %		21-167	"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/30/20 12:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	2007328	07/30/20	07/30/20	EPA 8015M	

Date Sampled: **07/30/20 12:45**

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



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/30/20 21:28

**GB31@9**  
**2007280-03 (Soil)**

**Summit Scientific**

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

Date Sampled: **07/30/20 12:55**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	2007329	07/30/20	07/30/20	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **07/30/20 12:55**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		65.4 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		121 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		118 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/30/20 12:55**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	2007328	07/30/20	07/30/20	EPA 8015M	

Date Sampled: **07/30/20 12:55**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		105 %	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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/30/20 21:28

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

#### Summit Scientific

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

#### Batch 2007329 - EPA 5030 Soil MS

##### Blank (2007329-BLK1)

Prepared & Analyzed: 07/30/20

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0399		"	0.0400		99.7	23-173			
Surrogate: Toluene-d8	0.0399		"	0.0400		99.7	20-170			
Surrogate: 4-Bromofluorobenzene	0.0392		"	0.0400		98.0	21-167			

##### LCS (2007329-BS1)

Prepared & Analyzed: 07/30/20

Benzene	0.255	0.0020	mg/kg	0.200		127	70-130			
Toluene	0.253	0.0050	"	0.200		126	70-130			
Ethylbenzene	0.259	0.0050	"	0.200		129	70-130			
m,p-Xylene	0.508	0.010	"	0.400		127	70-130			
o-Xylene	0.258	0.0050	"	0.200		129	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0424		"	0.0400		106	23-173			
Surrogate: Toluene-d8	0.0405		"	0.0400		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0392		"	0.0400		98.0	21-167			

##### Matrix Spike (2007329-MS1)

Source: 2007269-02

Prepared & Analyzed: 07/30/20

Benzene	0.186	0.0020	mg/kg	0.200	ND	93.0	70-130			
Toluene	0.182	0.0050	"	0.200	ND	91.0	70-130			
Ethylbenzene	0.208	0.0050	"	0.200	ND	104	70-130			
m,p-Xylene	0.366	0.010	"	0.400	ND	91.6	70-130			
o-Xylene	0.186	0.0050	"	0.200	ND	93.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0427		"	0.0400		107	23-173			
Surrogate: Toluene-d8	0.0396		"	0.0400		98.9	20-170			
Surrogate: 4-Bromofluorobenzene	0.0396		"	0.0400		98.9	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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/30/20 21:28

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

**Summit Scientific**

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

**Batch 2007329 - EPA 5030 Soil MS**

Matrix Spike Dup (2007329-MSD1)	Source: 2007269-02			Prepared & Analyzed: 07/30/20						
Benzene	0.189	0.0020	mg/kg	0.200	ND	94.6	70-130	1.77	30	
Toluene	0.185	0.0050	"	0.200	ND	92.4	70-130	1.55	30	
Ethylbenzene	0.197	0.0050	"	0.200	ND	98.3	70-130	5.82	30	
m,p-Xylene	0.494	0.010	"	0.400	ND	123	70-130	29.5	30	
o-Xylene	0.189	0.0050	"	0.200	ND	94.5	70-130	1.36	30	
Surrogate: 1,2-Dichloroethane-d4	0.0419		"	0.0400		105	23-173			
Surrogate: Toluene-d8	0.0398		"	0.0400		99.5	20-170			
Surrogate: 4-Bromofluorobenzene	0.0395		"	0.0400		98.8	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.



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/30/20 21:28

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch 2007328 - EPA 3550A**

**Blank (2007328-BLK1)**

Prepared & Analyzed: 07/30/20

C10-C28 (DRO) ND 50 mg/kg

**LCS (2007328-BS1)**

Prepared & Analyzed: 07/30/20

C10-C28 (DRO) 433 50 mg/kg 500 86.6 70-130

**Matrix Spike (2007328-MS1)**

Source: 2007269-02

Prepared & Analyzed: 07/30/20

C10-C28 (DRO) 453 50 mg/kg 500 23.0 86.0 70-130

**Matrix Spike Dup (2007328-MSD1)**

Source: 2007269-02

Prepared & Analyzed: 07/30/20

C10-C28 (DRO) 460 50 mg/kg 500 23.0 87.3 70-130 1.40 20

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.*



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Rinn Valley Production Facility

Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
07/30/20 21:28

### 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