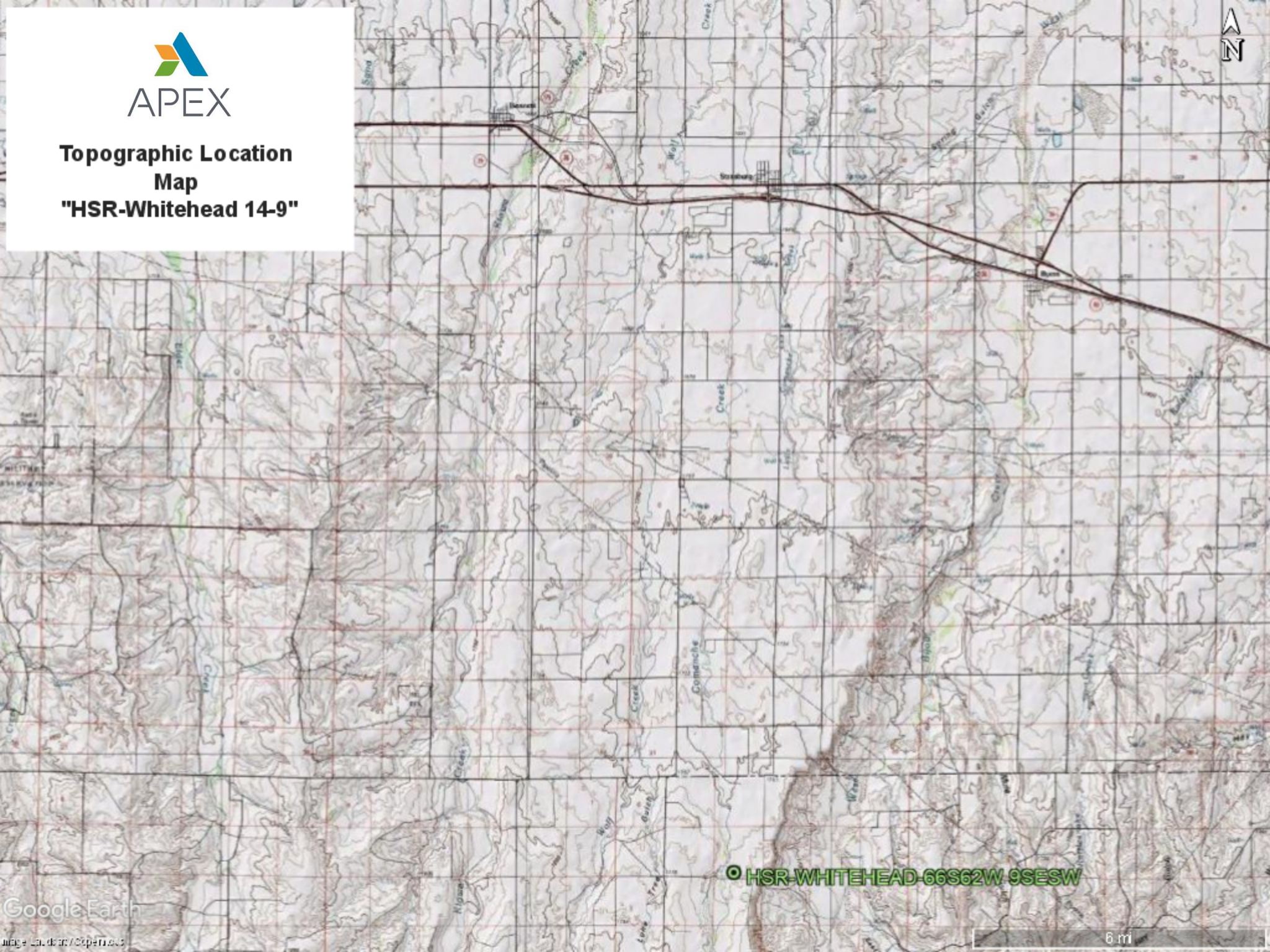




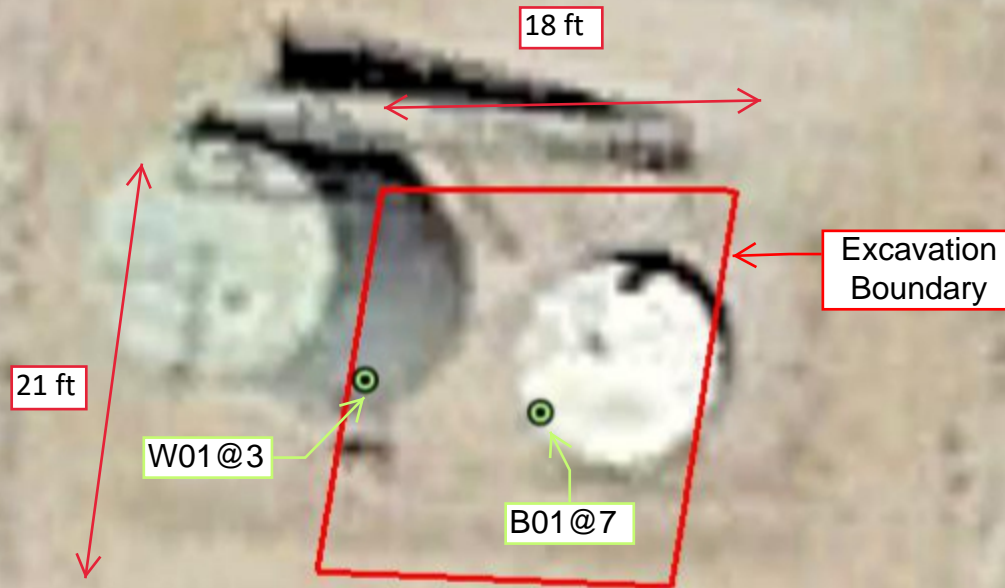
**Topographic Location
Map
"HSR-Whitehead 14-9"**



● HSR-WHITEHEAD-66S62W 9SESW



HSR-WHITEHEAD-66S62W
9SESW
(Location ID: 470318)
"HSR-Whitehead 14-9"





Laboratory Results Summary Table - Soil HSR-Whitehead 14-9

			Organics (mg/kg [ppm])				
COGCC Allowable Concentration (Soil) -->			500	0.17	85	100	175
Location	Sample Date	Sample ID	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)
HSR-Whitehead 14-9	4/9/2020	B01@7	<50	<0.0020	<0.0050	<0.0050	<0.010
HSR-Whitehead 14-9	4/9/2020	W01@3	975.1	<0.0020	<0.0050	0.012	0.30

Orange Highlight - Exceedance

Grey Highlight - Below Detection Limit

Attachment A

Laboratory Analytical Report

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

April 09, 2020

Maggie Graham

Extraction Oil&Gas

370 17th Street Suite 5300

Denver, CO 80202

RE: HSR - Whitehead 14-9

Work Order #2004128

Enclosed are the results of analyses for samples received by Summit Scientific on 04/09/20 16:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Paul Shrewsbury

President



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

Project: HSR - Whitehead 14-9

Project Number: 2000046

Project Manager: Maggie Graham

Reported:
04/09/20 23:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B01@7	2004128-01	Soil	04/09/20 12:14	04/09/20 16:10
W01@3	2004128-03	Soil	04/09/20 12:17	04/09/20 16:10

Summit Scientific

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

Summit Scientific

Client: APEX Companies, LLC

Page 1 of 1

Address: 1746 Cole Blvd. Suite 250

Project Manager: Maggie Graham 720-501-5065; 907-538-7699c MaggieGraham@ApexCos.com

City/State/Zip: Lakewood, Colorado 80101

E-Mail: DenverRemediation@ApexCos.com bahson@Extraction.com

Phone: 720-501-5065

Project Name: HSR-Whitehead 14-9 bford@extractions.org

Sampler Name: Sage Maher

Project Number: 2000429 SM 200004u

www.s2scientific.com

Sample Receipt Checklist

S2 Work Order 2004128

Client: Apex/Axis/KOA Client Project ID: HSR-Whitehead 14-9

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>11.6</u>
-----------	-------------

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ?				
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 ⁽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 samples with holding times due within 48 hours sample due within 48 hours present?	<input checked="" type="checkbox"/>			<u>Same Day</u>
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.

AT
Custodian Printed Name or Initials

[Signature]
Signature of Custodian

4-9-2020
Date/Time



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

Project: HSR - Whitehead 14-9
Project Number: 2000046
Project Manager: Maggie Graham

Reported:
04/09/20 23:30

B01@7
2004128-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/09/20 12:14**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	2004120	04/09/20	04/09/20	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **04/09/20 12:14**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		118 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		110 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/09/20 12:14**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	2004121	04/09/20	04/09/20	EPA 8015M	

Date Sampled: **04/09/20 12:14**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		115 %	30-150		"	"	"	"	

Summit Scientific

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

Project: HSR - Whitehead 14-9
Project Number: 2000046
Project Manager: Maggie Graham

Reported:
04/09/20 23:30

W01@3
2004128-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/09/20 12:17**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	2004120	04/09/20	04/09/20	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.012	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.30	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	5.1	0.50	"	"	"	"	"	"	

Date Sampled: **04/09/20 12:17**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		119 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		106 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		131 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/09/20 12:17**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	970	50	mg/kg	1	2004121	04/09/20	04/09/20	EPA 8015M	

Date Sampled: **04/09/20 12:17**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		133 %	30-150		"	"	"	"	

Summit Scientific

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

Project: HSR - Whitehead 14-9
Project Number: 2000046
Project Manager: Maggie Graham

Reported:
04/09/20 23:30

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 2004120 - EPA 5030 Soil MS

Blank (2004120-BLK1)

Prepared & Analyzed: 04/09/20

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	0.0455		"	0.0400		114	23-173			
Surrogate: Toluene-d8	0.0434		"	0.0400		109	20-170			
Surrogate: 4-Bromofluorobenzene	0.0405		"	0.0400		101	21-167			

LCS (2004120-BS1)

Prepared & Analyzed: 04/09/20

Benzene	0.0949	0.0020	mg/kg	0.100		94.9	70-130			
Toluene	0.0994	0.0050	"	0.100		99.4	70-130			
Ethylbenzene	0.0816	0.0050	"	0.100		81.6	70-130			
m,p-Xylene	0.157	0.010	"	0.200		78.3	70-130			
o-Xylene	0.0819	0.0050	"	0.100		81.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0359		"	0.0400		89.7	23-173			
Surrogate: Toluene-d8	0.0404		"	0.0400		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0381		"	0.0400		95.3	21-167			

Matrix Spike (2004120-MS1)

Source: 2004111-01

Prepared & Analyzed: 04/09/20

Benzene	0.0712	0.0020	mg/kg	0.100	ND	71.2	70-130			
Toluene	0.0770	0.0050	"	0.100	ND	77.0	70-130			
Ethylbenzene	0.0883	0.0050	"	0.100	ND	88.3	70-130			
m,p-Xylene	0.168	0.010	"	0.200	ND	84.2	70-130			
o-Xylene	0.0876	0.0050	"	0.100	ND	87.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0387		"	0.0400		96.8	23-173			
Surrogate: Toluene-d8	0.0398		"	0.0400		99.4	20-170			
Surrogate: 4-Bromofluorobenzene	0.0392		"	0.0400		98.0	21-167			

Summit Scientific

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

Project: HSR - Whitehead 14-9
Project Number: 2000046
Project Manager: Maggie Graham

Reported:
04/09/20 23:30

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 2004120 - EPA 5030 Soil MS

Matrix Spike Dup (2004120-MSD1)		Source: 2004111-01			Prepared & Analyzed: 04/09/20					
Benzene	0.0739	0.0020	mg/kg	0.100	ND	73.9	70-130	3.64	30	
Toluene	0.0792	0.0050	"	0.100	ND	79.2	70-130	2.80	30	
Ethylbenzene	0.0895	0.0050	"	0.100	ND	89.5	70-130	1.35	30	
m,p-Xylene	0.171	0.010	"	0.200	ND	85.7	70-130	1.76	30	
o-Xylene	0.0902	0.0050	"	0.100	ND	90.2	70-130	2.87	30	
Surrogate: 1,2-Dichloroethane-d4	0.0410		"	0.0400		103	23-173			
Surrogate: Toluene-d8	0.0403		"	0.0400		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0409		"	0.0400		102	21-167			

Summit Scientific

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

Project: HSR - Whitehead 14-9
Project Number: 2000046
Project Manager: Maggie Graham

Reported:
04/09/20 23:30

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 2004121 - EPA 3550A

Blank (2004121-BLK1)

Prepared & Analyzed: 04/09/20

C10-C28 (DRO) ND 50 mg/kg

LCS (2004121-BS1)

Prepared & Analyzed: 04/09/20

C10-C28 (DRO) 511 50 mg/kg 500 102 70-130

Matrix Spike (2004121-MS1)

Source: 2004111-01

Prepared & Analyzed: 04/09/20

C10-C28 (DRO) 449 50 mg/kg 500 27.9 84.3 70-130

Matrix Spike Dup (2004121-MSD1)

Source: 2004111-01

Prepared & Analyzed: 04/09/20

C10-C28 (DRO) 525 50 mg/kg 500 27.9 99.5 70-130 15.5 20

Summit Scientific

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

Project: HSR - Whitehead 14-9

Project Number: 2000046

Project Manager: Maggie Graham

Reported:
04/09/20 23:30

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