

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 15, 2021

Chris Roy

WSP

4600 West 60th Avenue

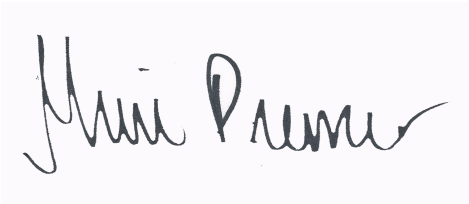
Arvada, CO 80003

RE: Critter Creek 9-15H

Work Order #2110130

Enclosed are the results of analyses for samples received by Summit Scientific on 10/08/21 11:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, reading "Muri Premier", is displayed on a light purple rectangular background.

Muri Premier For Paul Shrewsbury
President



WSP
4600 West 60th Avenue
Arvada CO, 80003

Project: Critter Creek 9-15H
Project Number: TE027318130
Project Manager: Chris Roy

Reported:
10/15/21 09:14

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS04@0-6"	2110130-01	Soil	10/05/21 00:00	10/08/21 11:10
SS04@18-24"	2110130-02	Soil	10/05/21 00:00	10/08/21 11:10
SS05@0-6"	2110130-03	Soil	10/05/21 00:00	10/08/21 11:10
SS05@18-24"	2110130-04	Soil	10/05/21 00:00	10/08/21 11:10
SS07@0-6"	2110130-05	Soil	10/05/21 00:00	10/08/21 11:10

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Summit Scientific
S₂

2110130

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

Page 1 of 1

Client: WSP USA

Project Manager: CH's boy @wsp.com

Address: 4600 W 50th Ave

E-Mail: Drew.Bullinger@wsp.com

City/State/Zip: abra da co 80003

Phone:

Project Name: Chittrel Creek 9-154

Sampler Name: Phan Sam

Project Number: TE 6273 4130

[illegible]

S₂

2110130

Sample Receipt Checklist

S2 Work Order# _____

Client: WSP Client Project ID: Critter Creek 9-ISHShipped Via: H.D./P.U./FedEx/UPS/USPS/Other Airbill #: _____
☒ ☐ ☐ ☐ ☐
Matrix (check all that apply): ☐ Air ☒ Soil/Solid ☐ Water ☐ Other: _____
(Describe)

Temp (°C)	<u>13.6</u>
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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 if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>an ice</u>
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact ⁽¹⁾ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? Note the type of preservative in the Comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<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

10.8.21
Date/Time



WSP
4600 West 60th Avenue
Arvada CO, 80003

Project: Critter Creek 9-15H

Project Number: TE027318130
Project Manager: Chris Roy

Reported:
10/15/21 09:14

SS04@0-6"
2110130-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BEJ0215	10/12/21	10/13/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		130 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		150 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		112 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	190	50	mg/kg	1	BEJ0214	10/12/21	10/13/21	EPA 8015M	
C28-C36 (ORO)	72	50	"	"	"	"	"	"	

Date Sampled: **10/05/21 00:00**

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

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Project: Critter Creek 9-15H
Project Number: TE027318130
Project Manager: Chris Roy

Reported:
10/15/21 09:14

SS04@18-24"
2110130-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEJ0215	10/12/21	10/13/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		121 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		142 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		114 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	260	50	mg/kg	1	BEJ0214	10/12/21	10/13/21	EPA 8015M	
C28-C36 (ORO)	120	50	"	"	"	"	"	"	

Date Sampled: **10/05/21 00:00**

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

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Project: Critter Creek 9-15H
Project Number: TE027318130
Project Manager: Chris Roy

Reported:
10/15/21 09:14

SS05@0-6"
2110130-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEJ0215	10/12/21	10/13/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	2.1	0.50	"	"	"	"	"	"	

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		135 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		154 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		117 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	820	50	mg/kg	1	BEJ0214	10/12/21	10/13/21	EPA 8015M	
C28-C36 (ORO)	310	50	"	"	"	"	"	"	

Date Sampled: **10/05/21 00:00**

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

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Project: Critter Creek 9-15H
Project Number: TE027318130
Project Manager: Chris Roy

Reported:
10/15/21 09:14

SS05@18-24"
2110130-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEJ0215	10/12/21	10/13/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		131 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		136 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		115 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	350	50	mg/kg	1	BEJ0214	10/12/21	10/13/21	EPA 8015M	
C28-C36 (ORO)	150	50	"	"	"	"	"	"	

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		111 %	30-150		"	"	"	"	

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Project: Critter Creek 9-15H
Project Number: TE027318130
Project Manager: Chris Roy

Reported:
10/15/21 09:14

SS07@0-6"
2110130-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEJ0215	10/12/21	10/13/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	630	5.0	"	10	"	"	"	"	

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		81.4 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		114 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		316 %	21-167		"	"	"	"	S-02

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	4400	50	mg/kg	1	BEJ0214	10/12/21	10/13/21	EPA 8015M	
C28-C36 (ORO)	460	50	"	"	"	"	"	"	

Date Sampled: **10/05/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		224 %	30-150		"	"	"	"	S-02

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Project: Critter Creek 9-15H
Project Number: TE027318130
Project Manager: Chris Roy

Reported:
10/15/21 09:14

Volatile Organic Compounds by EPA Method 8260B - Quality Control

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

Batch BEJ0215 - EPA 5030 Soil MS

Blank (BEJ0215-BLK1)

Prepared: 10/12/21 Analyzed: 10/14/21

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	0.0225		"	0.0400		56.2	23-173			
Surrogate: Toluene-d8	0.0378		"	0.0400		94.5	20-170			
Surrogate: 4-Bromofluorobenzene	0.0440		"	0.0400		110	21-167			

LCS (BEJ0215-BS1)

Prepared: 10/12/21 Analyzed: 10/14/21

Benzene	0.0775	0.0020	mg/kg	0.100		77.5	70-130			
Toluene	0.0807	0.0050	"	0.100		80.7	70-130			
Ethylbenzene	0.0785	0.0050	"	0.100		78.5	70-130			
m,p-Xylene	0.155	0.010	"	0.200		77.3	70-130			
o-Xylene	0.0752	0.0050	"	0.100		75.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0419		"	0.0400		105	23-173			
Surrogate: Toluene-d8	0.0431		"	0.0400		108	20-170			
Surrogate: 4-Bromofluorobenzene	0.0399		"	0.0400		99.8	21-167			

Matrix Spike (BEJ0215-MS1)

Source: 2110129-01

Prepared: 10/12/21 Analyzed: 10/14/21

Benzene	0.0754	0.0020	mg/kg	0.100	ND	75.4	70-130			
Toluene	0.0819	0.0050	"	0.100	ND	81.9	70-130			
Ethylbenzene	0.0811	0.0050	"	0.100	ND	81.1	70-130			
m,p-Xylene	0.161	0.010	"	0.200	ND	80.7	70-130			
o-Xylene	0.0775	0.0050	"	0.100	ND	77.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0397		"	0.0400		99.2	23-173			
Surrogate: Toluene-d8	0.0436		"	0.0400		109	20-170			
Surrogate: 4-Bromofluorobenzene	0.0399		"	0.0400		99.7	21-167			

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Project: Critter Creek 9-15H
Project Number: TE027318130
Project Manager: Chris Roy

Reported:
10/15/21 09:14

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 BEJ0215 - EPA 5030 Soil MS

Matrix Spike Dup (BEJ0215-MSD1)	Source: 2110129-01			Prepared: 10/12/21 Analyzed: 10/14/21						
Benzene	0.0748	0.0020	mg/kg	0.100	ND	74.8	70-130	0.719	30	
Toluene	0.0793	0.0050	"	0.100	ND	79.3	70-130	3.16	30	
Ethylbenzene	0.0807	0.0050	"	0.100	ND	80.7	70-130	0.445	30	
m,p-Xylene	0.159	0.010	"	0.200	ND	79.6	70-130	1.31	30	
o-Xylene	0.0771	0.0050	"	0.100	ND	77.1	70-130	0.504	30	
Surrogate: 1,2-Dichloroethane-d4	0.0404		"	0.0400		101	23-173			
Surrogate: Toluene-d8	0.0418		"	0.0400		105	20-170			
Surrogate: 4-Bromofluorobenzene	0.0403		"	0.0400		101	21-167			

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Project: Critter Creek 9-15H
Project Number: TE027318130
Project Manager: Chris Roy

Reported:
10/15/21 09:14

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BEJ0214 - EPA 3550A

Blank (BEJ0214-BLK1)

Prepared: 10/12/21 Analyzed: 10/13/21

C10-C28 (DRO)	ND	50	mg/kg
C28-C36 (ORO)	ND	50	"

LCS (BEJ0214-BS1)

Prepared: 10/12/21 Analyzed: 10/13/21

C10-C28 (DRO)	597	50	mg/kg	500	119	70-130
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Matrix Spike (BEJ0214-MS1)

Source: 2110129-01

Prepared: 10/12/21 Analyzed: 10/13/21

C10-C28 (DRO)	632	50	mg/kg	500	13.6	124	70-130
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Matrix Spike Dup (BEJ0214-MSD1)

Source: 2110129-01

Prepared: 10/12/21 Analyzed: 10/13/21

C10-C28 (DRO)	569	50	mg/kg	500	13.6	111	70-130	10.5	20
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4600 West 60th Avenue
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Project: Critter Creek 9-15H
Project Number: TE027318130
Project Manager: Chris Roy

Reported:
10/15/21 09:14

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