

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

August 07, 2020

Heather Shideman

Extraction Oil&Gas

370 17th Street Suite 5300

Denver, CO 80202

RE: Trip_Blank/GWA_Coyote_Trails

Work Order #2007311

Enclosed are the results of analyses for samples received by Summit Scientific on 07/30/20 14:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Muri Premer", is displayed on a light purple rectangular background.

Muri Premer For Paul Shrewsbury
President



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

Project: Trip_Blank/GWA_Coyote_Trails
Project Number: AFE#17031 Code 961.15 Fac ID 75391
Project Manager: Heather Shideman

Reported:
08/07/20 12:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BW_Waste_Connections_Landfill_1830_WCR_5_Tr	2007311-01	Water	07/30/20 13:22	07/30/20 14:40

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S₂

2007311

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310 ♦ 303-374-5933

Page 1 of 1

Client: Extraction Oil and Gas (XOG) **Report to:** Apex Companies, LLC **Project Manager:** Heather Shideman
Address: 2234 117th Ave, Ste 106 **E-Mail:** Rochelle.Carlisle@apexcos.com, Heather.Shideman@apexcos.com, Kolbi.Olson@apexcos.com
City/State/Zip: Greeley, CO 80634 **cc:** jcarlisle@extractionog.com
Phone: (970) 576-3446 **Project Name:** Trip_Blank/GWA_Coyote_Trails
Sampler Name: *Baker Madayall* **Project No.:** AFE # 17031; Code 961.15 **Facility ID** 753910

ID	Field ID / Point of Collection	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested				Special Instructions		
					HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air-Canister Serial #	Other (Specify)	BTEX						
1	BW_Waste_Connections_Landfill_1830_WCR_5_Trip_Blank	<i>20/07/30</i>	<i>1322</i>	2					X					X					Sample Frequency: 1SUB
Relinquished by: <i>[Signature]</i>		Date/Time: <i>20/07/30 / 1440</i>		Received by: <i>[Signature]</i>		Date/Time: <i>07-30-20 14:40</i>		Turn Around Time (Check)				Notes:							
Relinquished by:		Date/Time:		Received by:		Date/Time:		Same Day <input type="checkbox"/> 72 hours <input type="checkbox"/>				24 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/>							
Relinquished by:		Date/Time:		Received by:		Date/Time:		48 hours <input type="checkbox"/>				Sample Integrity:							
												Temperature Upon Receipt: <i>3.6</i>							
												Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No							

2007311

Sample Receipt Checklist

S2 Work Order _____

Client: Apex Companies, LLC Client Project ID: Trip Blank/GWA Coyote TRAILSShipped Via: H.D./P.U./FedEx/UPS/USPS/Other Airbill #: _____Matrix (check all that apply): ☒ Air ☐ Soil/Solid ☒ Water ☐ Other: _____
(Describe)

Temp (°C)

3.6

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"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect	<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.

Custodian Printed Name or Initials

Signature of Custodian

Date/Time

07/30/2020



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Reported:
08/07/20 12:49

BW_Waste_Connections_Landfill_1830_WCR_5_Trip_Blank
2007311-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/30/20 13:22**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	1.0	ug/l	1	2007345	07/31/20	08/04/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
m,p-Xylene	ND	2.0	"	"	"	"	"	"	
o-Xylene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **07/30/20 13:22**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		108 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		96.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.9 %	21-167		"	"	"	"	

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Reported:
08/07/20 12:49

Volatile Organic Compounds by EPA Method 8260B - Quality Control

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

Batch 2007345 - EPA 5030 Water MS

Blank (2007345-BLK1)

Prepared: 07/31/20 Analyzed: 08/03/20

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
m,p-Xylene	ND	2.0	"							
o-Xylene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	13.3		"	13.3		100	23-173			
Surrogate: Toluene-d8	13.4		"	13.3		101	20-170			
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3		100	21-167			

LCS (2007345-BS1)

Prepared: 07/31/20 Analyzed: 08/03/20

Benzene	48.6	1.0	ug/l	50.0		97.3	51-132			
Toluene	45.7	1.0	"	50.0		91.5	51-138			
Ethylbenzene	53.8	1.0	"	50.0		108	58-146			
m,p-Xylene	92.0	2.0	"	100		92.0	57-144			
o-Xylene	45.1	1.0	"	50.0		90.1	53-146			
Surrogate: 1,2-Dichloroethane-d4	13.4		"	13.3		100	23-173			
Surrogate: Toluene-d8	13.6		"	13.3		102	20-170			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		99.2	21-167			

Matrix Spike (2007345-MS1)

Source: 2007285-01

Prepared: 07/31/20 Analyzed: 08/03/20

Benzene	47.1	1.0	ug/l	50.0	ND	94.3	34-141			
Toluene	44.2	1.0	"	50.0	ND	88.3	27-151			
Ethylbenzene	53.4	1.0	"	50.0	ND	107	29-160			
m,p-Xylene	90.8	2.0	"	100	ND	90.8	20-166			
o-Xylene	43.7	1.0	"	50.0	ND	87.3	33-159			
Surrogate: 1,2-Dichloroethane-d4	12.0		"	13.3		90.1	23-173			
Surrogate: Toluene-d8	13.5		"	13.3		101	20-170			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		98.9	21-167			

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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 2007345 - EPA 5030 Water MS

Matrix Spike Dup (2007345-MSD1)	Source: 2007285-01			Prepared: 07/31/20 Analyzed: 08/03/20						
Benzene	49.1	1.0	ug/l	50.0	ND	98.1	34-141	4.01	32	
Toluene	45.9	1.0	"	50.0	ND	91.8	27-151	3.84	25	
Ethylbenzene	55.7	1.0	"	50.0	ND	111	29-160	4.07	50	
m,p-Xylene	95.5	2.0	"	100	ND	95.5	20-166	5.07	36	
o-Xylene	45.9	1.0	"	50.0	ND	91.8	33-159	4.98	26	
Surrogate: 1,2-Dichloroethane-d4	12.0		"	13.3		90.2	23-173			
Surrogate: Toluene-d8	13.5		"	13.3		102	20-170			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		99.2	21-167			

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Notes and Definitions

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