

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

May 07, 2020

Heather Shideman

Extraction Oil&Gas

370 17th Street Suite 5300

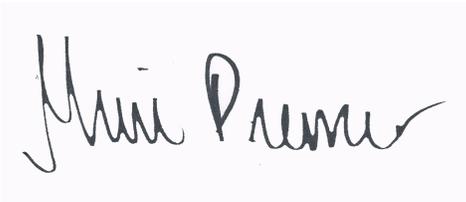
Denver, CO 80202

RE: Trip_Blank/GWA_United_Pad

Work Order #2004402

Enclosed are the results of analyses for samples received by Summit Scientific on 04/29/20 13:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Muri Premer". The signature is written in a cursive style with a large initial "M" and a long, sweeping underline.

Muri Premer For Paul Shrewsbury
President



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

Project: Trip_Blank/GWA_United_Pad

Project Number: ALLOC-733,962,87
Project Manager: Heather Shideman

Reported:
05/07/20 11:16

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BW_Ariniello_95726_Trip_Blank	2004402-01	Water	04/29/20 10:37	04/29/20 13:45

Summit Scientific

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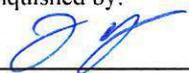
2004402

Summit Scientific

S₂

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

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:** bford@extractionog.com
Phone: (970) 576-3446 **Project Name:** Trip_Blank/GWA_United_Pad
Sampler Name: ~~Kate MacDougal~~ Jeff Grigg **Project No.:** ALLOC-733, 962, 87 **Facility ID:** 760251

ID	Field ID / Point of Collection	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested				Special Instructions		
					HCl	HNO3	None	Other (Specify)	Groundwater	Soil	Air-Canister Serial #	Other (Specify)	BTEX						
1	BW_Ariniello_95726_A_Trip_Blank	04/29/20	1037	2					X					X					Sample Frequency: IN
Relinquished by: 		Date/Time: 04/29/2020 13:45		Received by: 		Date/Time: 04-29-2020 13:45		Turn Around Time (Check)				Notes:							
Relinquished by:		Date/Time:		Received by:		Date/Time:		Same Day ___ 72 hours ___				24 hours ___ Standard <u>X</u>							
Relinquished by:		Date/Time:		Received by:		Date/Time:		48 hours ___				Sample Integrity:							
Relinquished by:		Date/Time:		Received by:		Date/Time:		Temperature Upon Receipt: <u>2.6</u>				Intact: <u>Yes</u> No							

Sample Receipt Checklist

S2 Work Order 2004402

Client: Apex/XOG Client Project ID: Trip_Blank/GWA_United_Pad

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

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

Temp (°C)	2.6
-----------	-----

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.	✓			
Were all samples received intact ⁽¹⁾ ?	✓			
Was adequate sample volume provided ⁽¹⁾ ?	✓			
If custody seals are present, are they intact ⁽¹⁾ ?	✓			
Are samples with holding times due within 48 hours sample due within 48 hours present?			✓	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	✓			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	✓			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	✓			
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	✓			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.		✓		
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? 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⁾ ? Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Additional Comments (if any):				

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

MP
Custodian Printed Name or Initials

Muri Premer
Signature of Custodian

4/29/20
Date/Time



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BW_Ariniello_95726_Trip_Blank
2004402-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/29/20 10:37**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	1.0	ug/l	1	2005003	05/01/20	05/02/20	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: **04/29/20 10:37**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		89.0 %		23-173	"	"	"	"	
Surrogate: Toluene-d8		103 %		20-170	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %		21-167	"	"	"	"	

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Reported:
05/07/20 11:16

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch 2005003 - EPA 5030 Water MS

Blank (2005003-BLK1)

Prepared: 05/01/20 Analyzed: 05/02/20

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	11.6		"	13.3		87.0		23-173		
Surrogate: Toluene-d8	13.5		"	13.3		101		20-170		
Surrogate: 4-Bromofluorobenzene	13.8		"	13.3		103		21-167		

LCS (2005003-BS1)

Prepared: 05/01/20 Analyzed: 05/02/20

Benzene	19.0	1.0	ug/l	33.3		56.9		51-132		
Toluene	27.0	1.0	"	33.3		81.0		51-138		
Ethylbenzene	23.1	1.0	"	33.3		69.3		58-146		
m,p-Xylene	44.6	2.0	"	66.7		66.9		57-144		
o-Xylene	23.3	1.0	"	33.3		70.0		53-146		
Surrogate: 1,2-Dichloroethane-d4	11.4		"	13.3		85.1		23-173		
Surrogate: Toluene-d8	13.8		"	13.3		104		20-170		
Surrogate: 4-Bromofluorobenzene	13.8		"	13.3		104		21-167		

Matrix Spike (2005003-MS1)

Source: 2004373-01

Prepared: 05/01/20 Analyzed: 05/02/20

Benzene	19.3	1.0	ug/l	33.3	ND	57.9		34-141		
Toluene	27.4	1.0	"	33.3	ND	82.4		27-151		
Ethylbenzene	23.5	1.0	"	33.3	ND	70.4		29-160		
m,p-Xylene	45.4	2.0	"	66.7	ND	68.2		20-166		
o-Xylene	23.9	1.0	"	33.3	ND	71.6		33-159		
Surrogate: 1,2-Dichloroethane-d4	11.9		"	13.3		89.2		23-173		
Surrogate: Toluene-d8	13.9		"	13.3		104		20-170		
Surrogate: 4-Bromofluorobenzene	13.8		"	13.3		104		21-167		

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Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch 2005003 - EPA 5030 Water MS

Matrix Spike Dup (2005003-MSD1)

Source: 2004373-01

Prepared: 05/01/20 Analyzed: 05/02/20

Benzene	18.5	1.0	ug/l	33.3	ND	55.6	34-141	4.02	32	
Toluene	26.7	1.0	"	33.3	ND	80.1	27-151	2.77	25	
Ethylbenzene	22.3	1.0	"	33.3	ND	67.0	29-160	4.94	50	
m,p-Xylene	43.8	2.0	"	66.7	ND	65.7	20-166	3.70	36	
o-Xylene	23.0	1.0	"	33.3	ND	69.1	33-159	3.54	26	
Surrogate: 1,2-Dichloroethane-d4	12.6		"	13.3		94.9	23-173			
Surrogate: Toluene-d8	13.8		"	13.3		103	20-170			
Surrogate: 4-Bromofluorobenzene	13.6		"	13.3		102	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