

# Summit Scientific

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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, appearing to read "Muri Premier", is displayed on a light purple rectangular background.

Muri Premier 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

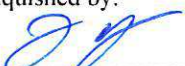

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				Preservative				Matrix				Analysis Requested								Special Instructions	
ID	Field ID / Point of Collection	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other (Specify)	Groundwater	Soil	Air-Canister Serial #	Other (Specify)	BTEX								
1	BW_Ariniello_95726_A_Trip_Blank	04/29/20	1037	2					X				X								Sample Frequency: IN
Relinquished by:		Date/Time:		Received by:		Date/Time:		Turn Around Time (Check)												Notes:	
		04/29/2020 13:45				04-29-2020 13:45		Same Day ____ 72 hours ____													
Relinquished by:		Date/Time:		Received by:		Date/Time:		24 hours ____ Standard <u>X</u>													
Relinquished by:		Date/Time:		Received by:		Date/Time:		48 hours ____													
Relinquished by:		Date/Time:		Received by:		Date/Time:		Sample Integrity:													
								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
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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 <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"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact <sup>(1)</sup> ?	<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 type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	<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) <sup>(1)</sup> ? 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 <sup>(1)</sup> ? 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):

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

MP

Custodian Printed Name or Initials

Muri Premier  
Signature of Custodian

4/29/20

Date/Time



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**Reported:**  
05/07/20 11:16

**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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05/07/20 11:16

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

**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