

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 12, 2020

Max Knop

K.P. Kauffman

1675 Broadway

Denver, CO 80202

RE: UPRR 43 PAN AM G Groundwater

Work Order #2010052

Enclosed are the results of analyses for samples received by Summit Scientific on 10/05/20 16:30. 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



K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: UPRR 43 PAN AM G Groundwater

Project Number: [none]  
Project Manager: Max Knop

**Reported:**  
10/12/20 18:34

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW	2010052-01	Water	10/02/20 09:45	10/05/20 16:30

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.*

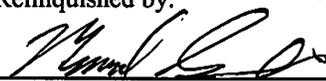
2010052

# Summit Scientific

741 Corporate Circle Suite I ♦ Golden, Colorado 80401  
 303-277-9310 ♦ 303-374-5933 Fax

Client: KP Kauffman  
 Address: 1675 Broadway, Suite 2800  
 City/State/Zip: Denver, CO 80202  
 Phone: 303-825-4822 Fax: 303-825-4825  
 Sampler Name: Max Knop

Project Manager: Max Knop  
 E-Mail: mknop@kpk.com  
 Project Name: UPRR 43 PAN AM G Groundwater  
 Project Number: \_\_\_\_\_

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix			Analyze For:						Special Instructions								
				HCl	HNO <sub>3</sub>	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	BTEX													
GW	10/2/2020	9:45	2	X				X					X												
Relinquished by: 				Date/Time: 10-2-20 16:30				Received by: 				Date/Time: 10-2-20 16:30				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"/>	48 Hours <input type="checkbox"/>
Relinquished by:				Date/Time:				Received in Lab by:				Date/Time:				Sample Integrity:						Temperature Upon Receipt: 3.4	Intact: Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

**Sample Receipt Checklist**

S2 Work Order 2010052

Client: KP Kauffman Client Project ID: UPRR 43 Pan Am G Grndwater

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

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

Temp (°C)	3.4
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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.	✓			
Were all samples received intact <sup>(1)</sup> ?	✓			
Was adequate sample volume provided <sup>(1)</sup> ?	✓			
If custody seals are present, are they intact <sup>(1)</sup> ?			✓	
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 <sup>(1)</sup> ?	✓			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	✓			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	✓			
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	✓			
For volatiles in water – is there headspace present? <b>If yes, contact client and note in narrative.</b>		✓		
Are samples preserved that require preservation <b>(excluding cooling)</b> <sup>(1)</sup> ? 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 <sup>(1)</sup> ? Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	

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

  
Signature of Custodian

10/2/20  
Date/Time



K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: UPRR 43 PAN AM G Groundwater

Project Number: [none]  
Project Manager: Max Knop

**Reported:**  
10/12/20 18:34

**GW**  
**2010052-01 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **10/02/20 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BDJ0058	10/07/20	10/09/20	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **10/02/20 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		59.7 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		102 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.1 %		21-167		"	"	"	"	

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### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Summit Scientific

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

#### Batch BDJ0058 - EPA 5030 Water MS

##### LCS (BDJ0058-BS1)

Prepared & Analyzed: 10/07/20

Benzene	38.3	1.0	ug/l	33.3		115	51-132			
Toluene	39.9	1.0	"	33.3		120	51-138			
Ethylbenzene	38.9	1.0	"	33.3		117	58-146			
m,p-Xylene	76.2	2.0	"	66.7		114	57-144			
o-Xylene	37.1	1.0	"	33.3		111	53-146			
Surrogate: 1,2-Dichloroethane-d4	19.2		"	13.3		144	23-173			
Surrogate: Toluene-d8	20.5		"	13.3		154	20-170			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		98.9	21-167			

##### Matrix Spike (BDJ0058-MS1)

Source: 2010020-01

Prepared & Analyzed: 10/07/20

Benzene	34.4	1.0	ug/l	33.3	ND	103	34-141			
Toluene	28.6	1.0	"	33.3	ND	85.9	27-151			
Ethylbenzene	39.7	1.0	"	33.3	ND	119	29-160			
m,p-Xylene	78.1	2.0	"	66.7	1.51	115	20-166			
o-Xylene	38.7	1.0	"	33.3	ND	116	33-159			
Surrogate: 1,2-Dichloroethane-d4	15.7		"	13.3		118	23-173			
Surrogate: Toluene-d8	11.5		"	13.3		86.4	20-170			
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3		100	21-167			

##### Matrix Spike Dup (BDJ0058-MSD1)

Source: 2010020-01

Prepared & Analyzed: 10/07/20

Benzene	34.7	1.0	ug/l	33.3	ND	104	34-141	0.811	30	
Toluene	32.3	1.0	"	33.3	ND	97.0	27-151	12.1	30	
Ethylbenzene	41.3	1.0	"	33.3	ND	124	29-160	3.95	30	
m,p-Xylene	84.3	2.0	"	66.7	1.51	124	20-166	7.69	30	
o-Xylene	36.4	1.0	"	33.3	ND	109	33-159	6.29	30	
Surrogate: 1,2-Dichloroethane-d4	18.6		"	13.3		140	23-173			
Surrogate: Toluene-d8	12.8		"	13.3		95.9	20-170			
Surrogate: 4-Bromofluorobenzene	19.2		"	13.3		144	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