

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

January 13, 2025

Bryce Goldade

Tasman Geosciences

6855 W. 119th Ave.

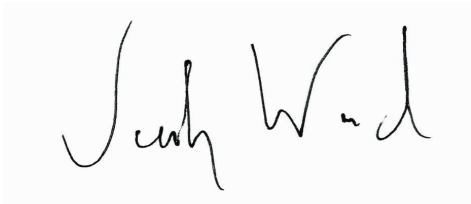
Broomfield, CO 80020

RE: Noble - Johnston 22-4

Work Order #2412278

Enclosed are the results of analyses for samples received by Summit Scientific on 12/12/24 18:12. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Jacob Wood". The signature is written in a cursive style with a large initial "J" and a long, sweeping underline.

Jacob Wood For Paul Shrewsbury

President



Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Johnston 22-4  
Project Number: UWRWE-A2312-ABN  
Project Manager: Bryce Goldade

**Reported:**  
01/13/25 14:48

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW01	2412278-01	Water	12/11/24 12:27	12/12/24 18:12

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.*

Client: Noble/Tasman		Project Manager: <i>Bryce Goldcode</i>		Send Invoice To:	
Address: 6855 W. 119th Ave.		E-Mail: tas-chevron-4@tasman-geo.com		Company: Noble	
City/State/Zip: Broomfield/CO/ 80020		E-Mail: RBUEUF27@chevron.com		Project Name/Location: Johnston 22-4	
Phone: <i>720 481 5299</i>		Project Name: Johnston 22-4		AFE#:	
Sampler Name: <i>Deric Bell</i>		Project Number:		PO/Billing Codes:	
				Contact: Jason Davidson	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested				Special Instructions
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEXN	1,2,4 & 1,3,5-TMB	TDS,CL,S04	
1	<i>G1W01</i>	<i>12/11/24</i>	<i>1227</i>	<i>4</i>	<i>3</i>		<i>1</i>			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SAR, EC, pH by saturated paste
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																

Relinquished by: <i>[Signature]</i>	Date/Time: <i>12/11/24 1838</i>	Received by: <b>Tasman Lock Box</b>	Date/Time: <i>12/11/24 1838</i>	TAT Business Days		Field DO	Notes:
				Same Day		Field EC	
Relinquished by: <i>Tasman Lock Box</i>	Date/Time: <i>12/22/24 1812</i>	Received by: <i>[Signature]</i>	Date/Time: <i>12/22/24 1812</i>	1 Day		Field ORP	
				2 Days		Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days		Field Temp.	
				Standard	<input checked="" type="checkbox"/>	Field Turb.	
Temperature Upon Receipt: <i>6.4</i>	Corrected Temperature: <i>6</i>	IR gun #:		HNO3 lot #:			

S<sub>2</sub>

Sample Receipt Checklist

S2 Work Order# 2412078

Client: Nidlet Casman Client Project ID: Johnston 22-4

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

-

Matrix (Check all that apply) Air  Soil/Solid  Water  Other

Temp (°C) 6.1 Thermometer # 1

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? <sup>(1)</sup> 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"/>	
If custody seals are present, are they intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe <sup>2+</sup> ), Hexavalent Chromium (Cr <sup>6+</sup> , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>	
Is the COC properly relinquished by the client w/ date and time recorded? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Relinquish time is off
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"/>	
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"/>	
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, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HCl
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.				

AS

Custodian Printed Name

12/12/24  
Date/Time

01/20/25



Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Johnston 22-4  
Project Number: UWRWE-A2312-ABN  
Project Manager: Bryce Goldade

**Reported:**  
01/13/25 14:48

**GW01**  
**2412278-01 (Water)**

**Summit Scientific**

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

Date Sampled: **12/11/24 12:27**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BHL0766	12/17/24	12/18/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **12/11/24 12:27**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	13.7	103 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	12.9	96.8 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.0	97.7 %		21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **12/11/24 12:27**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	<b>905</b>	0.0600		mg/L	50	BIA0115	01/05/25	01/10/25	EPA 300.0	
Sulfate	<b>1510</b>	0.300		"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **12/11/24 12:27**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Total Dissolved Solids</b>	<b>4000</b>	10.0		mg/L	1	BHL0713	12/17/24	12/18/24	SM2540C	

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Project Manager: Bryce Goldade

**Reported:**  
01/13/25 14:48

### 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 BHL0766 - EPA 5030 Water MS

##### Blank (BHL0766-BLK1)

Prepared & Analyzed: 12/17/24

Benzene	ND	1.0	ug/l								
Toluene	ND	1.0	"								
Ethylbenzene	ND	1.0	"								
Xylenes (total)	ND	2.0	"								
Naphthalene	ND	1.0	"								
1,2,4-Trimethylbenzene	ND	1.0	"								
1,3,5-Trimethylbenzene	ND	1.0	"								
<i>Surrogate: 1,2-Dichloroethane-d4</i>	13.3		"	13.3	100	23-173					
<i>Surrogate: Toluene-d8</i>	13.0		"	13.3	97.1	20-170					
<i>Surrogate: 4-Bromofluorobenzene</i>	13.1		"	13.3	98.5	21-167					

##### LCS (BHL0766-BS1)

Prepared & Analyzed: 12/17/24

Benzene	33.5	1.0	ug/l	33.3	101	51-132					
Toluene	32.6	1.0	"	33.3	97.8	51-138					
Ethylbenzene	34.0	1.0	"	33.3	102	58-146					
m,p-Xylene	67.1	2.0	"	66.7	101	57-144					
o-Xylene	33.9	1.0	"	33.3	102	53-146					
Naphthalene	38.3	1.0	"	33.3	115	70-130					
1,2,4-Trimethylbenzene	33.1	1.0	"	33.3	99.2	70-130					
1,3,5-Trimethylbenzene	33.0	1.0	"	33.3	99.2	70-130					
<i>Surrogate: 1,2-Dichloroethane-d4</i>	13.6		"	13.3	102	23-173					
<i>Surrogate: Toluene-d8</i>	13.1		"	13.3	98.0	20-170					
<i>Surrogate: 4-Bromofluorobenzene</i>	13.1		"	13.3	98.2	21-167					

##### LCS Dup (BHL0766-BS1)

Prepared & Analyzed: 12/17/24

Benzene	33.4	1.0	ug/l	33.3	100	51-132	0.359	20			
Toluene	32.3	1.0	"	33.3	96.9	51-138	0.894	20			
Ethylbenzene	33.9	1.0	"	33.3	102	58-146	0.324	20			
m,p-Xylene	65.8	2.0	"	66.7	98.6	57-144	2.08	20			
o-Xylene	33.3	1.0	"	33.3	99.8	53-146	1.99	20			
Naphthalene	37.8	1.0	"	33.3	113	70-130	1.23	20			
1,2,4-Trimethylbenzene	32.8	1.0	"	33.3	98.4	70-130	0.820	20			
1,3,5-Trimethylbenzene	32.8	1.0	"	33.3	98.3	70-130	0.820	20			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	13.5		"	13.3	101	23-173					
<i>Surrogate: Toluene-d8</i>	13.2		"	13.3	99.2	20-170					
<i>Surrogate: 4-Bromofluorobenzene</i>	13.2		"	13.3	98.9	21-167					

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**Reported:**  
01/13/25 14:48

**Anions by EPA Method 300.0 - Quality Control**  
**Summit Scientific**

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

**Batch BIA0115 - General Preparation**

**Blank (BIA0115-BLK1)**

Prepared: 01/05/25 Analyzed: 01/10/25

Chloride	ND	0.0600	mg/L						
Sulfate	ND	0.300	"						

**LCS (BIA0115-BS1)**

Prepared: 01/05/25 Analyzed: 01/10/25

Chloride	2.95	0.0600	mg/L	3.00		98.5	90-110		
Sulfate	15.0	0.300	"	15.0		100	90-110		

**Duplicate (BIA0115-DUP1)**

Source: 2412223-01

Prepared: 01/05/25 Analyzed: 01/10/25

Chloride	1170	0.0600	mg/L		1160			1.37	20
Sulfate	2810	0.300	"		2770			1.26	20

**Matrix Spike (BIA0115-MS1)**

Source: 2412223-01

Prepared: 01/05/25 Analyzed: 01/10/25

Chloride	1320	0.0600	mg/L	150	1160	107	80-120		
Sulfate	3620	0.300	"	750	2770	113	80-120		

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Project Number: UWRWE-A2312-ABN  
Project Manager: Bryce Goldade

**Reported:**  
01/13/25 14:48

**Total Dissolved Solids by SM2540C - Quality Control**  
**Summit Scientific**

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

**Batch BHL0713 - General Preparation**

**Blank (BHL0713-BLK1)**

Prepared: 12/17/24 Analyzed: 12/18/24

Total Dissolved Solids      ND      10.0      mg/L

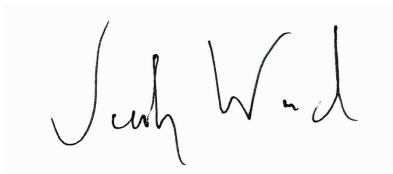
**Duplicate (BHL0713-DUP1)**

Source: 2412260-02

Prepared: 12/17/24 Analyzed: 12/18/24

Total Dissolved Solids      1660      10.0      mg/L      1770      6.19      20

Summit Scientific



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Project: Noble - Johnston 22-4  
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**Reported:**  
01/13/25 14:48

### 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