

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

August 06, 2024

Jacob Whritenour  
Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield, CO 80020  
RE: Noble - Johnson C29-28 FL  
Work Order #2408011

Enclosed are the results of analyses for samples received by Summit Scientific on 08/01/24 17:59. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Natalie Tessier". The signature is written in a cursive, flowing style.

Natalie Tessier For Paul Shrewsbury  
President



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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

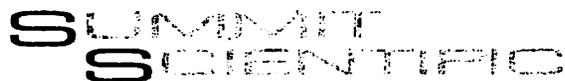
**Reported:**  
08/06/24 09:40

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FS01-FL01-03@4'	2408011-01	Soil	08/01/24 12:32	08/01/24 17:59
SS01-FL01-03@3'	2408011-02	Soil	08/01/24 12:35	08/01/24 17:59
SS02-FL01-03@3'	2408011-03	Soil	08/01/24 12:37	08/01/24 17:59
SS03-FL01-03@3'	2408011-04	Soil	08/01/24 12:42	08/01/24 17:59
SS04-FL01-03@3'	2408011-05	Soil	08/01/24 12:45	08/01/24 17:59
BKG02@3'	2408011-06	Soil	08/01/24 11:02	08/01/24 17:59
BKG02@4'	2408011-07	Soil	08/01/24 11:03	08/01/24 17:59
BKG03@3'	2408011-08	Soil	08/01/24 11:37	08/01/24 17:59
BKG03@4'	2408011-09	Soil	08/01/24 11:38	08/01/24 17:59
BKG04@3'	2408011-10	Soil	08/01/24 11:47	08/01/24 17:59
BKG04@4'	2408011-11	Soil	08/01/24 11:48	08/01/24 17:59
BKG05@3'	2408011-12	Soil	08/01/24 12:10	08/01/24 17:59
BKG05@4'	2408011-13	Soil	08/01/24 12:11	08/01/24 17:59
BKG06@3'	2408011-14	Soil	08/01/24 10:32	08/01/24 17:59
BKG06@4'	2408011-15	Soil	08/01/24 10:33	08/01/24 17:59

Summit Scientific

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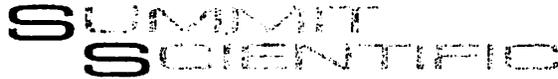
4653 Table Mountain Drive  
Golden, CO 80403  
303-277-9310

Lab ID 2408011-1 Page 1 of 2

<b>Send Data To:</b>		<b>Send Invoice To:</b>	
Client: Noble/Tasman	Project Manager: Jake Whritenour	Company: <u>Noble</u>	
Address: 6855 W. 119th Ave.	E-Mail: Jwhritenour@tasman-geo.com	Project Name/Location: <u>Johnson C29-28 Flowline</u>	
City/State/Zip: Broomfield/CO/ 80020		AFE#:	
Phone: 937-554-5108	Project Name: <u>Johnson C29-28 Flowline</u>	PO/Billing Codes:	
Sampler Name: <del>Molly Parks</del> <u>Sylvie B.</u>	Project Number: <u>34724</u>	Contact: <u>Kieth Mclean</u>	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested						Special Instructions			
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	Metals - 915	VOC - 915	TPH - 915	PAH - 915	SAR, EC, pH		Boron - HWS	HOLD	
1	FSO1-FL01-03@4'	8-1-24	12:32	3			X			X			X	X	X	X	X	X		SAR, EC, pH by saturated paste	
2	SS01-FL01-03@3'		12:35																		
3	SS02-FL01-03@3'		12:37																		
4	SS03-FL01-03@3'		12:42																		
5	SS04-FL01-03@3'		12:45																		
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					

Relinquished by: <u>Sylvie B.</u>	Date/Time: <u>8-1-24 16:20</u>	Received by: <u>Tasman Lock Box</u>	Date/Time: <u>8-1-24 16:20</u>	TAT Business Days	Field DO	Notes:
Relinquished by: <u>Tasman Lock Box</u>	Date/Time: <u>8/24</u>	Received by: <u>[Signature]</u>	Date/Time: <u>8/24</u>	Same Day <input checked="" type="checkbox"/>	Field EC	
	Date/Time: <u>17A</u>		Date/Time: <u>17A</u>	1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
Temperature Upon Receipt: <u>6.8</u>	Corrected Temperature: <u>0</u>	IR gun #:		Standard	Field Turb.	
				HNO3 lot #:		



4653 Table Mountain Drive  
Golden, CO 80403  
303-277-9310

Lab ID	Page 2 of 2
2408011.2	

Client: Noble/Tasman		Project Manager: Jake Whritenour		Company: Noble	
Address: 6855 W. 119th Ave.		E-Mail: Jwhritenour@tasman-geo.com		Project Name/Location: Johnson C29-28 Flowline	
City/State/Zip: Broomfield/CO/ 80020				AFE#:	
Phone: 937-554-5108		Project Name: Johnson C29-28 Flowline		PO/Billing Codes:	
Sampler Name: Molly Parks Sylvie Bouquet		Project Number: 34724		Contact: Keith Mclean	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix		Analysis Requested							Special Instructions		
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	Metals - 915	VOC - 915	TPH - 915	PAH - 915	SAR, EC, pH		Boron - HWS	HOLD
1	BK60203'	8-1-24	11:02	3			X			X										SAR, EC, pH by saturated paste
2	BK60204'		11:03																	
3	BK60303'		11:37																	
4	BK60304'		11:38																	
5	BK60403'		11:47																	
6	BK60404'		11:48																	
7	BK60503'		12:10																	
8	BK60504'		12:11																	
9	BK60603'		10:32																	
10	BK60604'		16:33																	
11																				
12																				
13																				
14																				
15																				

Relinquished by: <i>Sylvie B.</i>	Date/Time: 8-1-24 16:20	Received by: Tasman Lock Box	Date/Time: 8-1-24 16:20	TAT Business Days	Field DO	Notes:
Relinquished by: <i>Tasman Lock Box</i>	Date/Time: 8/24 1759	Received by: <i>[Signature]</i>	Date/Time: 8/24 1759	Same Day <input checked="" type="checkbox"/>	Field EC	
Relinquished by:	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
Relinquished by:	Date/Time:	Received by:	Date/Time:	2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
Temperature Upon Receipt: 8.8	Corrected Temperature: 8	IR gun #: /	HNO3 lot #:	Standard	Field Turb.	

S<sub>2</sub>

2/2

Sample Receipt Checklist

S2 Work Order# 2408011

Client: Nickel Terman Client Project ID: Johnson C29-28 Flowline

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

-

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

Temp (°C)  Thermometer #

	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"/>	on ice
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Same day
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 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"/>	
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 type="checkbox"/>	<input checked="" 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 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.

AS  
Custodian Printed Name

8/1/24  
Date/Time



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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**FS01-FL01-03@4'**  
**2408011-01 (Soil)**

Summit Scientific

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

Date Sampled: **08/01/24 12:32**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHH0038	08/01/24	08/01/24	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **08/01/24 12:32**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0435	109 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0402	100 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0413	103 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **08/01/24 12:32**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHH0037	08/01/24	08/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **08/01/24 12:32**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	9.05	72.4 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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Tasman Geosciences  
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Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

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08/06/24 09:40

**FS01-FL01-03@4'**  
**2408011-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **08/01/24 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHH0055	08/02/24	08/02/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **08/01/24 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0184	55.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0165	49.5 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**FS01-FL01-03@4'**  
**2408011-01 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	1.80	0.180	mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B
Barium	74.1	0.360	"	"	"	"	"	"
Cadmium	ND	0.180	"	"	"	"	"	"
Copper	3.66	0.360	"	"	"	"	"	"
Lead	5.49	0.180	"	"	"	"	"	"
Nickel	4.42	0.360	"	"	"	"	"	"
Silver	0.0260	0.0180	"	"	"	"	"	"
Zinc	16.0	0.360	"	"	"	"	"	"
Selenium	ND	0.234	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	52.2	0.0500	mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
Magnesium	10.4	0.0500	"	"	"	"	"	"	
Sodium	76.6	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **08/01/24 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.53	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

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Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**FS01-FL01-03@4'**  
**2408011-01 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 12:32**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	83.1			%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 12:32**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.636	0.0100		mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 12:32**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.98			pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

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Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS01-FL01-03@3'**  
**2408011-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **08/01/24 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHH0038	08/01/24	08/01/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **08/01/24 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0421	105 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0409	102 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0399	99.8 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **08/01/24 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHH0037	08/01/24	08/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/01/24 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	8.34	66.7 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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6855 W. 119th Ave.  
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Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS01-FL01-03@3'**  
**2408011-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **08/01/24 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHH0055	08/02/24	08/02/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **08/01/24 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0224	67.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0221	66.2 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS01-FL01-03@3'**  
**2408011-02 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.20	0.200	mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B	
Barium	71.8	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	4.07	0.400	"	"	"	"	"	"	
Lead	5.76	0.200	"	"	"	"	"	"	
Nickel	5.40	0.400	"	"	"	"	"	"	
Silver	0.0387	0.0200	"	"	"	"	"	"	
Zinc	16.9	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	81.1	0.0500	mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
Magnesium	22.2	0.0500	"	"	"	"	"	"	
Sodium	229	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **08/01/24 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	5.81	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

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Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS01-FL01-03@3'**  
**2408011-02 (Soil)**

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**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.1		%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.51	0.0100	mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.10		pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

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Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS02-FL01-03@3'**  
**2408011-03 (Soil)**

**Summit Scientific**

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

Date Sampled: **08/01/24 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHH0038	08/01/24	08/01/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **08/01/24 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0250	62.5 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0437	109 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0390	97.5 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **08/01/24 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHH0037	08/01/24	08/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/01/24 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	8.33	66.6 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS02-FL01-03@3'**  
**2408011-03 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **08/01/24 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHH0055	08/02/24	08/02/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **08/01/24 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0180	53.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0182	54.6 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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6855 W. 119th Ave.  
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Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS02-FL01-03@3'**  
**2408011-03 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	2.95	0.200	mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B	
Barium	65.4	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.39	0.400	"	"	"	"	"	"	
Lead	4.76	0.200	"	"	"	"	"	"	
Nickel	4.89	0.400	"	"	"	"	"	"	
Silver	0.0240	0.0200	"	"	"	"	"	"	
Zinc	14.8	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	96.0	0.0500	mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
Magnesium	10.3	0.0500	"	"	"	"	"	"	
Sodium	59.6	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **08/01/24 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.54	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

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Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS02-FL01-03@3'**  
**2408011-03 (Soil)**

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**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.1		%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.470	0.0100	mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 12:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.17		pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS03-FL01-03@3'**  
**2408011-04 (Soil)**

**Summit Scientific**

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

Date Sampled: **08/01/24 12:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHH0038	08/01/24	08/01/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **08/01/24 12:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0423	106 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0414	104 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0405	101 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **08/01/24 12:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHH0037	08/01/24	08/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/01/24 12:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	10.1	81.0 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS03-FL01-03@3'**  
**2408011-04 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **08/01/24 12:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHH0055	08/02/24	08/02/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **08/01/24 12:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0227	68.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0222	66.5 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 12:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 12:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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6855 W. 119th Ave.  
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Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS03-FL01-03@3'**  
**2408011-04 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	2.70	0.200	mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B	
Barium	57.8	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.53	0.400	"	"	"	"	"	"	
Lead	4.98	0.200	"	"	"	"	"	"	
Nickel	4.92	0.400	"	"	"	"	"	"	
Silver	0.0271	0.0200	"	"	"	"	"	"	
Zinc	15.1	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 12:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 12:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	31.6	0.0500	mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
Magnesium	56.2	0.0500	"	"	"	"	"	"	
Sodium	60.6	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **08/01/24 12:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.50	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

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Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS03-FL01-03@3'**  
**2408011-04 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 12:42**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	89.5			%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 12:42**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.367	0.0100		mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 12:42**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.89			pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

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Broomfield CO, 80020

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS04-FL01-03@3'**  
**2408011-05 (Soil)**

**Summit Scientific**

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

Date Sampled: **08/01/24 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHH0038	08/01/24	08/01/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **08/01/24 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0461	115 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0432	108 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0421	105 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **08/01/24 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHH0037	08/01/24	08/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/01/24 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	8.80	70.4 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS04-FL01-03@3'**  
**2408011-05 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **08/01/24 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHH0055	08/02/24	08/02/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **08/01/24 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0191	57.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0180	53.9 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS04-FL01-03@3'**  
**2408011-05 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	2.15	0.200	mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B
Barium	50.8	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	3.36	0.400	"	"	"	"	"	"
Lead	4.31	0.200	"	"	"	"	"	"
Nickel	4.35	0.400	"	"	"	"	"	"
Silver	0.0277	0.0200	"	"	"	"	"	"
Zinc	13.4	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	48.1	0.0500	mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
Magnesium	10.6	0.0500	"	"	"	"	"	"	
Sodium	54.1	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **08/01/24 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.84	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**SS04-FL01-03@3'**  
**2408011-05 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.6		%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.417	0.0100	mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.24		pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG02@3'**  
**2408011-06 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 11:02**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Boron</b>	<b>2.29</b>	2.00	mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 11:02**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Arsenic</b>	<b>3.73</b>	0.200	mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B	
<b>Barium</b>	<b>83.5</b>	0.400	"	"	"	"	"	"	
<b>Cadmium</b>	<b>ND</b>	0.200	"	"	"	"	"	"	
<b>Copper</b>	<b>4.16</b>	0.400	"	"	"	"	"	"	
<b>Lead</b>	<b>6.49</b>	0.200	"	"	"	"	"	"	
<b>Nickel</b>	<b>5.37</b>	0.400	"	"	"	"	"	"	
<b>Silver</b>	<b>0.0355</b>	0.0200	"	"	"	"	"	"	
<b>Zinc</b>	<b>19.8</b>	0.400	"	"	"	"	"	"	
<b>Selenium</b>	<b>ND</b>	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 11:02**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Chromium, Hexavalent</b>	<b>ND</b>	0.30	mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 11:02**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Calcium</b>	<b>109</b>	0.0500	mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
<b>Magnesium</b>	<b>95.7</b>	0.0500	"	"	"	"	"	"	
<b>Sodium</b>	<b>790</b>	0.0500	"	"	"	"	"	"	

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG02@3'**  
**2408011-06 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **08/01/24 11:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	13.3	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 11:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	85.9		%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 11:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	4.36	0.0100	mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 11:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.11		pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG02@4'**  
**2408011-07 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 11:03**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 11:03**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Arsenic</b>	<b>2.63</b>	0.180	mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B	
<b>Barium</b>	<b>73.1</b>	0.360	"	"	"	"	"	"	
Cadmium	ND	0.180	"	"	"	"	"	"	
<b>Copper</b>	<b>3.42</b>	0.360	"	"	"	"	"	"	
<b>Lead</b>	<b>5.05</b>	0.180	"	"	"	"	"	"	
<b>Nickel</b>	<b>4.26</b>	0.360	"	"	"	"	"	"	
<b>Silver</b>	<b>0.0230</b>	0.0180	"	"	"	"	"	"	
<b>Zinc</b>	<b>15.4</b>	0.360	"	"	"	"	"	"	
Selenium	ND	0.234	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 11:03**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 11:03**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Calcium</b>	<b>198</b>	0.0500	mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
<b>Magnesium</b>	<b>157</b>	0.0500	"	"	"	"	"	"	
<b>Sodium</b>	<b>881</b>	0.0500	"	"	"	"	"	"	

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG02@4'**  
**2408011-07 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **08/01/24 11:03**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	11.4	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 11:03**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.4		%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 11:03**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	5.49	0.0100	mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 11:03**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.82		pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG03@3'**  
**2408011-08 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 11:37**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Boron</b>	<b>3.32</b>	2.00	mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 11:37**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Arsenic</b>	<b>3.46</b>	0.200	mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B	
<b>Barium</b>	<b>81.8</b>	0.400	"	"	"	"	"	"	
<b>Cadmium</b>	ND	0.200	"	"	"	"	"	"	
<b>Copper</b>	<b>5.23</b>	0.400	"	"	"	"	"	"	
<b>Lead</b>	<b>7.31</b>	0.200	"	"	"	"	"	"	
<b>Nickel</b>	<b>5.75</b>	0.400	"	"	"	"	"	"	
<b>Silver</b>	<b>0.0456</b>	0.0200	"	"	"	"	"	"	
<b>Zinc</b>	<b>21.3</b>	0.400	"	"	"	"	"	"	
<b>Selenium</b>	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 11:37**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 11:37**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Calcium</b>	<b>71.2</b>	0.0500	mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
<b>Magnesium</b>	<b>177</b>	0.0500	"	"	"	"	"	"	
<b>Sodium</b>	<b>1060</b>	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG03@3'**  
**2408011-08 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **08/01/24 11:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	15.3	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 11:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.5		%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 11:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	3.16	0.0100	mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 11:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.52		pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

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

Project: Noble - Johnson C29-28 FL

Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG03@4'**  
**2408011-09 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 11:38**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 11:38**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	<b>3.12</b>	0.179	mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B	
Barium	<b>87.1</b>	0.357	"	"	"	"	"	"	
Cadmium	ND	0.179	"	"	"	"	"	"	
Copper	<b>3.57</b>	0.357	"	"	"	"	"	"	
Lead	<b>5.40</b>	0.179	"	"	"	"	"	"	
Nickel	<b>4.91</b>	0.357	"	"	"	"	"	"	
Silver	<b>0.0245</b>	0.0179	"	"	"	"	"	"	
Zinc	<b>16.0</b>	0.357	"	"	"	"	"	"	
Selenium	ND	0.232	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 11:38**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 11:38**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	<b>129</b>	0.0500	mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
Magnesium	<b>49.6</b>	0.0500	"	"	"	"	"	"	
Sodium	<b>556</b>	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG03@4'**  
**2408011-09 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **08/01/24 11:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	10.5	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 11:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.0		%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 11:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.97	0.0100	mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 11:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.12		pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

Summit Scientific

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG04@3'**  
**2408011-10 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 11:47**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 11:47**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.66	0.200	mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B	
Barium	61.4	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.47	0.400	"	"	"	"	"	"	
Lead	5.06	0.200	"	"	"	"	"	"	
Nickel	4.82	0.400	"	"	"	"	"	"	
Silver	0.0299	0.0200	"	"	"	"	"	"	
Zinc	14.9	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 11:47**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 11:47**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	73.3	0.0500	mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
Magnesium	31.1	0.0500	"	"	"	"	"	"	
Sodium	266	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG04@3'**  
**2408011-10 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **08/01/24 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	6.56	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.9		%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.91	0.0100	mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.03		pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

Summit Scientific

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG04@4'**  
**2408011-11 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 11:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 11:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.14	0.200	mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B	
Barium	69.1	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.49	0.400	"	"	"	"	"	"	
Lead	4.74	0.200	"	"	"	"	"	"	
Nickel	4.74	0.400	"	"	"	"	"	"	
Silver	0.0260	0.0200	"	"	"	"	"	"	
Zinc	15.1	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 11:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 11:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	91.1	0.0500	mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
Magnesium	21.9	0.0500	"	"	"	"	"	"	
Sodium	166	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG04@4'**  
**2408011-11 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **08/01/24 11:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.05	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 11:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.0		%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 11:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.29	0.0100	mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 11:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.14		pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

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

Project: Noble - Johnson C29-28 FL

Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG05@3'**  
**2408011-12 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 12:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 12:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Arsenic</b>	<b>2.50</b>	0.200		mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B	
<b>Barium</b>	<b>65.3</b>	0.400		"	"	"	"	"	"	
Cadmium	ND	0.200		"	"	"	"	"	"	
<b>Copper</b>	<b>3.23</b>	0.400		"	"	"	"	"	"	
<b>Lead</b>	<b>4.72</b>	0.200		"	"	"	"	"	"	
<b>Nickel</b>	<b>4.66</b>	0.400		"	"	"	"	"	"	
<b>Silver</b>	<b>0.0279</b>	0.0200		"	"	"	"	"	"	
<b>Zinc</b>	<b>14.4</b>	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 12:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 12:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Calcium</b>	<b>112</b>	0.0500		mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
<b>Magnesium</b>	<b>13.4</b>	0.0500		"	"	"	"	"	"	
<b>Sodium</b>	<b>158</b>	0.0500		"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG05@3'**  
**2408011-12 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **08/01/24 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.76	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.5		%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.853	0.0100	mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.35		pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

Summit Scientific

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG05@4'**  
**2408011-13 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 12:11**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 12:11**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Arsenic</b>	<b>1.87</b>	0.180	mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B	
<b>Barium</b>	<b>62.6</b>	0.360	"	"	"	"	"	"	
Cadmium	ND	0.180	"	"	"	"	"	"	
<b>Copper</b>	<b>2.70</b>	0.360	"	"	"	"	"	"	
<b>Lead</b>	<b>4.17</b>	0.180	"	"	"	"	"	"	
<b>Nickel</b>	<b>4.26</b>	0.360	"	"	"	"	"	"	
Silver	ND	0.0180	"	"	"	"	"	"	
<b>Zinc</b>	<b>12.2</b>	0.360	"	"	"	"	"	"	
Selenium	ND	0.234	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 12:11**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 12:11**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Calcium</b>	<b>198</b>	0.0500	mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
<b>Magnesium</b>	<b>24.5</b>	0.0500	"	"	"	"	"	"	
<b>Sodium</b>	<b>140</b>	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG05@4'**  
**2408011-13 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **08/01/24 12:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.50	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 12:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.7		%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 12:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.959	0.0100	mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 12:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.99		pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

Summit Scientific

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Johnson C29-28 FL

Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG06@3'**  
**2408011-14 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 10:32**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 10:32**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Arsenic</b>	<b>1.84</b>	0.200	mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B	
<b>Barium</b>	<b>52.7</b>	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
<b>Copper</b>	<b>2.82</b>	0.400	"	"	"	"	"	"	
<b>Lead</b>	<b>4.28</b>	0.200	"	"	"	"	"	"	
<b>Nickel</b>	<b>3.85</b>	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
<b>Zinc</b>	<b>13.5</b>	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 10:32**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 10:32**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Calcium</b>	<b>72.6</b>	0.0500	mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
<b>Magnesium</b>	<b>20.0</b>	0.0500	"	"	"	"	"	"	
<b>Sodium</b>	<b>136</b>	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG06@3'**  
**2408011-14 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **08/01/24 10:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.64	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 10:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.5		%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 10:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.974	0.0100	mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 10:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.19		pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

Summit Scientific

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG06@4'**  
**2408011-15 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/01/24 10:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHH0070	08/02/24	08/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/01/24 10:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.59	0.200	mg/kg dry	1	BHH0066	08/02/24	08/05/24	EPA 6020B	
Barium	56.3	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.81	0.400	"	"	"	"	"	"	
Lead	4.89	0.200	"	"	"	"	"	"	
Nickel	3.57	0.400	"	"	"	"	"	"	
Silver	0.0229	0.0200	"	"	"	"	"	"	
Zinc	14.6	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/01/24 10:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHH0062	08/02/24	08/02/24	EPA 7196A	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **08/01/24 10:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	237	0.0500	mg/L dry	1	BHH0051	08/01/24	08/02/24	EPA 6020B	
Magnesium	176	0.0500	"	"	"	"	"	"	
Sodium	84.7	0.0500	"	"	"	"	"	"	

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**BKG06@4'**  
**2408011-15 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **08/01/24 10:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.02	0.00100	units	1	BHH0102	08/05/24	08/05/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/01/24 10:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.0		%	1	BHH0050	08/02/24	08/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/01/24 10:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.640	0.0100	mmhos/cm	1	BHH0053	08/01/24	08/02/24	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **08/01/24 10:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.31		pH Units	1	BHH0052	08/01/24	08/02/24	EPA 9045D	

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

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

#### Summit Scientific

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

#### Batch BHH0038 - EPA 5030 Soil MS

##### Blank (BHH0038-BLK1)

Prepared & Analyzed: 08/01/24

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0444		"	0.0400		111	50-150			
Surrogate: Toluene-d8	0.0409		"	0.0400		102	50-150			
Surrogate: 4-Bromofluorobenzene	0.0409		"	0.0400		102	50-150			

##### LCS (BHH0038-BS1)

Prepared & Analyzed: 08/01/24

Benzene	0.0768	0.0020	mg/kg	0.100		76.8	70-130			
Toluene	0.0981	0.0050	"	0.100		98.1	70-130			
Ethylbenzene	0.0967	0.0050	"	0.100		96.7	70-130			
m,p-Xylene	0.192	0.010	"	0.200		96.2	70-130			
o-Xylene	0.0948	0.0050	"	0.100		94.8	70-130			
1,2,4-Trimethylbenzene	0.0867	0.0050	"	0.100		86.7	70-130			
1,3,5-Trimethylbenzene	0.0880	0.0050	"	0.100		88.0	70-130			
Naphthalene	0.0757	0.0038	"	0.100		75.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0404		"	0.0400		101	50-150			
Surrogate: Toluene-d8	0.0431		"	0.0400		108	50-150			
Surrogate: 4-Bromofluorobenzene	0.0389		"	0.0400		97.2	50-150			

##### Matrix Spike (BHH0038-MS1)

Source: 2407402-01

Prepared & Analyzed: 08/01/24

Benzene	0.0755	0.0020	mg/kg	0.100	ND	75.5	70-130			
Toluene	0.0893	0.0050	"	0.100	ND	89.3	70-130			
Ethylbenzene	0.0804	0.0050	"	0.100	ND	80.4	70-130			
m,p-Xylene	0.162	0.010	"	0.200	ND	81.1	70-130			
o-Xylene	0.0802	0.0050	"	0.100	ND	80.2	70-130			
1,2,4-Trimethylbenzene	0.0715	0.0050	"	0.100	ND	71.5	70-130			
1,3,5-Trimethylbenzene	0.0720	0.0050	"	0.100	ND	72.0	70-130			
Naphthalene	0.0620	0.0038	"	0.100	ND	62.0	70-130			QM-07
Surrogate: 1,2-Dichloroethane-d4	0.0478		"	0.0400		119	50-150			
Surrogate: Toluene-d8	0.0432		"	0.0400		108	50-150			
Surrogate: 4-Bromofluorobenzene	0.0408		"	0.0400		102	50-150			

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

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

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

**Batch BHH0038 - EPA 5030 Soil MS**

<b>Matrix Spike Dup (BHH0038-MSD1)</b>	<b>Source: 2407402-01</b>			<b>Prepared &amp; Analyzed: 08/01/24</b>						
Benzene	0.0734	0.0020	mg/kg	0.100	ND	73.4	70-130	2.86	30	
Toluene	0.0903	0.0050	"	0.100	ND	90.3	70-130	1.07	30	
Ethylbenzene	0.0832	0.0050	"	0.100	ND	83.2	70-130	3.52	30	
m,p-Xylene	0.168	0.010	"	0.200	ND	84.1	70-130	3.63	30	
o-Xylene	0.0828	0.0050	"	0.100	ND	82.8	70-130	3.20	30	
1,2,4-Trimethylbenzene	0.0780	0.0050	"	0.100	ND	78.0	70-130	8.67	30	
1,3,5-Trimethylbenzene	0.0776	0.0050	"	0.100	ND	77.6	70-130	7.58	30	
Naphthalene	0.0659	0.0038	"	0.100	ND	65.9	70-130	6.09	30	QM-07
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0492</i>		<i>"</i>	<i>0.0400</i>		<i>123</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0432</i>		<i>"</i>	<i>0.0400</i>		<i>108</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0419</i>		<i>"</i>	<i>0.0400</i>		<i>105</i>	<i>50-150</i>			

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Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch BHH0037 - EPA 3550A**

**Blank (BHH0037-BLK1)**

Prepared & Analyzed: 08/01/24

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	12.1		"	12.5		96.8	30-150				

**LCS (BHH0037-BS1)**

Prepared & Analyzed: 08/01/24

C10-C28 (DRO)	489	50	mg/kg	500		97.7	70-130				
Surrogate: <i>o</i> -Terphenyl	12.6		"	12.5		101	30-150				

**Matrix Spike (BHH0037-MS1)**

Source: 2407402-01

Prepared & Analyzed: 08/01/24

C10-C28 (DRO)	506	50	mg/kg	500	ND	101	70-130				
Surrogate: <i>o</i> -Terphenyl	10.4		"	12.5		83.5	30-150				

**Matrix Spike Dup (BHH0037-MSD1)**

Source: 2407402-01

Prepared & Analyzed: 08/01/24

C10-C28 (DRO)	464	50	mg/kg	500	ND	92.9	70-130	8.53	20		
Surrogate: <i>o</i> -Terphenyl	10.1		"	12.5		80.5	30-150				

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Broomfield CO, 80020

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**PAH by EPA Method 8270D SIM - Quality Control**  
**Summit Scientific**

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

**Batch BHH0055 - EPA 5030 Soil MS**

**Blank (BHH0055-BLK1)**

Prepared & Analyzed: 08/02/24

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	0.0331		"	0.0333		99.4	40-150			
Surrogate: Fluoranthene-d10	0.0282		"	0.0333		84.5	40-150			

**LCS (BHH0055-BS1)**

Prepared & Analyzed: 08/02/24

Acenaphthene	0.0283	0.00500	mg/kg	0.0333		85.0	31-137			
Anthracene	0.0293	0.00500	"	0.0333		87.8	30-120			
Benzo (a) anthracene	0.0303	0.00500	"	0.0333		90.8	30-120			
Benzo (a) pyrene	0.0286	0.00500	"	0.0333		85.8	30-120			
Benzo (b) fluoranthene	0.0297	0.00500	"	0.0333		89.0	30-120			
Benzo (k) fluoranthene	0.0301	0.00500	"	0.0333		90.4	30-120			
Chrysene	0.0294	0.00500	"	0.0333		88.3	30-120			
Dibenz (a,h) anthracene	0.0258	0.00500	"	0.0333		77.4	30-120			
Fluoranthene	0.0286	0.00500	"	0.0333		85.7	30-120			
Fluorene	0.0292	0.00500	"	0.0333		87.5	30-120			
Indeno (1,2,3-cd) pyrene	0.0196	0.00500	"	0.0333		58.7	30-120			
Pyrene	0.0323	0.00500	"	0.0333		97.0	35-142			
1-Methylnaphthalene	0.0265	0.00500	"	0.0333		79.4	35-142			
2-Methylnaphthalene	0.0286	0.00500	"	0.0333		85.9	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0277		"	0.0333		83.2	40-150			
Surrogate: Fluoranthene-d10	0.0300		"	0.0333		89.9	40-150			

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**PAH by EPA Method 8270D SIM - Quality Control**

**Summit Scientific**

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

**Batch BHH0055 - EPA 5030 Soil MS**

<b>Matrix Spike (BHH0055-MS1)</b>	<b>Source: 2408011-01</b>			<b>Prepared &amp; Analyzed: 08/02/24</b>							
Acenaphthene	0.0192	0.00500	mg/kg	0.0333	ND	57.7	31-137				
Anthracene	0.0195	0.00500	"	0.0333	ND	58.4	30-120				
Benzo (a) anthracene	0.0205	0.00500	"	0.0333	ND	61.5	30-120				
Benzo (a) pyrene	0.0182	0.00500	"	0.0333	ND	54.5	30-120				
Benzo (b) fluoranthene	0.0190	0.00500	"	0.0333	ND	57.0	30-120				
Benzo (k) fluoranthene	0.0203	0.00500	"	0.0333	ND	60.9	30-120				
Chrysene	0.0202	0.00500	"	0.0333	ND	60.7	30-120				
Dibenz (a,h) anthracene	0.0146	0.00500	"	0.0333	ND	43.9	30-120				
Fluoranthene	0.0186	0.00500	"	0.0333	ND	55.9	30-120				
Fluorene	0.0203	0.00500	"	0.0333	ND	60.8	30-120				
Indeno (1,2,3-cd) pyrene	0.0107	0.00500	"	0.0333	ND	32.2	30-120				
Pyrene	0.0220	0.00500	"	0.0333	ND	65.9	35-142				
1-Methylnaphthalene	0.0176	0.00500	"	0.0333	ND	52.9	15-130				
2-Methylnaphthalene	0.0181	0.00500	"	0.0333	ND	54.4	15-130				
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0176</i>		<i>"</i>	<i>0.0333</i>		<i>52.7</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0198</i>		<i>"</i>	<i>0.0333</i>		<i>59.3</i>	<i>40-150</i>				

<b>Matrix Spike Dup (BHH0055-MSD1)</b>	<b>Source: 2408011-01</b>			<b>Prepared &amp; Analyzed: 08/02/24</b>							
Acenaphthene	0.0196	0.00500	mg/kg	0.0333	ND	58.7	31-137	1.60	30		
Anthracene	0.0190	0.00500	"	0.0333	ND	57.1	30-120	2.30	30		
Benzo (a) anthracene	0.0200	0.00500	"	0.0333	ND	60.0	30-120	2.53	30		
Benzo (a) pyrene	0.0185	0.00500	"	0.0333	ND	55.5	30-120	1.82	30		
Benzo (b) fluoranthene	0.0182	0.00500	"	0.0333	ND	54.5	30-120	4.43	30		
Benzo (k) fluoranthene	0.0193	0.00500	"	0.0333	ND	57.9	30-120	5.07	30		
Chrysene	0.0202	0.00500	"	0.0333	ND	60.5	30-120	0.383	30		
Dibenz (a,h) anthracene	0.0174	0.00500	"	0.0333	ND	52.0	30-120	16.9	30		
Fluoranthene	0.0188	0.00500	"	0.0333	ND	56.5	30-120	1.01	30		
Fluorene	0.0198	0.00500	"	0.0333	ND	59.3	30-120	2.58	30		
Indeno (1,2,3-cd) pyrene	0.0119	0.00500	"	0.0333	ND	35.8	30-120	10.6	30		
Pyrene	0.0215	0.00500	"	0.0333	ND	64.5	35-142	2.24	30		
1-Methylnaphthalene	0.0206	0.00500	"	0.0333	ND	61.9	15-130	15.5	50		
2-Methylnaphthalene	0.0205	0.00500	"	0.0333	ND	61.5	15-130	12.3	50		
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0201</i>		<i>"</i>	<i>0.0333</i>		<i>60.4</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0198</i>		<i>"</i>	<i>0.0333</i>		<i>59.4</i>	<i>40-150</i>				

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control**  
**Summit Scientific**

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

**Batch BHH0070 - EPA 3050B**

**Blank (BHH0070-BLK1)**

Prepared: 08/02/24 Analyzed: 08/03/24

Boron ND 2.00 mg/L

**LCS (BHH0070-BS1)**

Prepared: 08/02/24 Analyzed: 08/03/24

Boron 4.82 2.00 mg/L 5.00 96.5 80-120

**Duplicate (BHH0070-DUP1)**

**Source: 2408011-01**

Prepared: 08/02/24 Analyzed: 08/03/24

Boron 0.338 2.00 mg/L 0.405 18.0 20

**Matrix Spike (BHH0070-MS1)**

**Source: 2408011-01**

Prepared: 08/02/24 Analyzed: 08/03/24

Boron 4.78 2.00 mg/L 5.01 0.405 87.2 75-125

**Matrix Spike Dup (BHH0070-MSD1)**

**Source: 2408011-01**

Prepared: 08/02/24 Analyzed: 08/03/24

Boron 4.86 2.00 mg/L 5.01 0.405 88.9 75-125 1.68 25

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**Total Metals by EPA 6020B - Quality Control**  
**Summit Scientific**

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

**Batch BHH0066 - EPA 3050B**

**Blank (BHH0066-BLK1)**

Prepared: 08/02/24 Analyzed: 08/05/24

Arsenic	ND	0.200	mg/kg wet						
Barium	ND	0.400	"						
Cadmium	ND	0.200	"						
Copper	ND	0.400	"						
Lead	ND	0.200	"						
Nickel	ND	0.400	"						
Silver	ND	0.0200	"						
Zinc	ND	0.400	"						
Selenium	ND	0.260	"						

**LCS (BHH0066-BS1)**

Prepared: 08/02/24 Analyzed: 08/05/24

Arsenic	40.2	0.200	mg/kg wet	39.4	102	80-120
Barium	40.8	0.400	"	39.4	104	80-120
Cadmium	2.03	0.200	"	1.97	103	80-120
Copper	40.2	0.400	"	39.4	102	80-120
Lead	20.0	0.200	"	19.7	102	80-120
Nickel	40.7	0.400	"	39.4	103	80-120
Silver	2.03	0.0200	"	1.97	103	80-120
Zinc	39.9	0.400	"	39.4	101	80-120
Selenium	4.04	0.260	"	3.94	103	80-120

**Duplicate (BHH0066-DUP1)**

Source: 2408011-01

Prepared: 08/02/24 Analyzed: 08/05/24

Arsenic	1.66	0.200	mg/kg dry	1.80	7.95	20
Barium	78.5	0.400	"	74.1	5.79	20
Cadmium	0.128	0.200	"	0.117	9.00	20
Copper	3.73	0.400	"	3.66	1.89	20
Lead	5.60	0.200	"	5.49	1.92	20
Nickel	4.62	0.400	"	4.42	4.38	20
Silver	0.0272	0.0200	"	0.0260	4.57	20
Zinc	16.6	0.400	"	16.0	3.52	20
Selenium	ND	0.260	"	ND		20

Summit Scientific

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

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**Total Metals by EPA 6020B - Quality Control**  
**Summit Scientific**

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

**Batch BHH0066 - EPA 3050B**

**Matrix Spike (BHH0066-MS1)**

Source: 2408011-01

Prepared: 08/02/24 Analyzed: 08/05/24

Arsenic	49.5	0.200	mg/kg dry	48.1	1.80	99.1	75-125			
Barium	114	0.400	"	48.1	74.1	83.5	75-125			
Cadmium	2.55	0.200	"	2.41	0.117	101	75-125			
Copper	35.4	0.400	"	48.1	3.66	66.0	75-125			QM-05
Lead	29.0	0.200	"	24.1	5.49	97.5	75-125			
Nickel	36.8	0.400	"	48.1	4.42	67.3	75-125			QM-05
Silver	2.43	0.0200	"	2.41	0.0260	99.9	75-125			
Zinc	48.8	0.400	"	48.1	16.0	68.1	75-125			QM-05
Selenium	4.14	0.260	"	4.81	ND	85.9	75-125			

**Matrix Spike Dup (BHH0066-MSD1)**

Source: 2408011-01

Prepared: 08/02/24 Analyzed: 08/05/24

Arsenic	49.8	0.200	mg/kg dry	47.0	1.80	102	75-125	0.579	25	
Barium	118	0.400	"	47.0	74.1	93.8	75-125	3.37	25	
Cadmium	2.64	0.200	"	2.35	0.117	107	75-125	3.44	25	
Copper	35.8	0.400	"	47.0	3.66	68.4	75-125	1.03	25	QM-05
Lead	29.6	0.200	"	23.5	5.49	102	75-125	2.05	25	
Nickel	37.2	0.400	"	47.0	4.42	69.8	75-125	1.06	25	QM-05
Silver	2.49	0.0200	"	2.35	0.0260	105	75-125	2.20	25	
Zinc	48.5	0.400	"	47.0	16.0	69.1	75-125	0.591	25	QM-05
Selenium	4.09	0.260	"	4.70	ND	87.0	75-125	1.13	25	

Summit Scientific

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Broomfield CO, 80020

Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**Hexavalent Chromium by EPA Method 7196 - Quality Control**  
**Summit Scientific**

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

**Batch BHH0062 - 3060A Mod**

**Blank (BHH0062-BLK1)**

Prepared & Analyzed: 08/02/24

Chromium, Hexavalent      ND      0.30 mg/kg wet

**LCS (BHH0062-BS1)**

Prepared & Analyzed: 08/02/24

Chromium, Hexavalent      25.6      0.30 mg/kg wet      25.0      102      80-120

**Duplicate (BHH0062-DUP1)**

**Source: 2408011-01**

Prepared & Analyzed: 08/02/24

Chromium, Hexavalent      ND      0.30 mg/kg dry      ND      20

**Matrix Spike (BHH0062-MS1)**

**Source: 2408011-01**

Prepared & Analyzed: 08/02/24

Chromium, Hexavalent      25.9      0.30 mg/kg dry      30.1      ND      86.2      75-125

**Matrix Spike Dup (BHH0062-MSD1)**

**Source: 2408011-01**

Prepared & Analyzed: 08/02/24

Chromium, Hexavalent      27.0      0.30 mg/kg dry      30.1      ND      89.6      75-125      3.87      20

Summit Scientific

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Project: Noble - Johnson C29-28 FL  
Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control**

**Summit Scientific**

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

**Batch BHH0051 - General Preparation**

**Blank (BHH0051-BLK1)**

Prepared: 08/01/24 Analyzed: 08/02/24

Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							

**LCS (BHH0051-BS1)**

Prepared: 08/01/24 Analyzed: 08/02/24

Calcium	5.59	0.0500	mg/L wet	5.00	112	70-130
Magnesium	5.43	0.0500	"	5.00	109	70-130
Sodium	5.38	0.0500	"	5.00	108	70-130

Summit Scientific

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 Broomfield CO, 80020

Project: Noble - Johnson C29-28 FL  
 Project Number: UWRWE-A3072-ABN 34724  
 Project Manager: Jacob Whritenour

**Reported:**  
 08/06/24 09:40

**Physical Parameters by APHA/ASTM/EPA Methods - Quality Control**  
**Summit Scientific**

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

**Batch BHH0050 - General Preparation**

<b>Duplicate (BHH0050-DUP1)</b>		<b>Source: 2408011-02</b>			<b>Prepared &amp; Analyzed: 08/02/24</b>			
% Solids	87.7		%		87.1		0.710	20

Summit Scientific

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

Project: Noble - Johnson C29-28 FL

Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control**

**Summit Scientific**

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

**Batch BHH0053 - General Preparation**

**Blank (BHH0053-BLK1)**

Prepared: 08/01/24 Analyzed: 08/02/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BHH0053-BS1)**

Prepared: 08/01/24 Analyzed: 08/02/24

Specific Conductance (EC) 0.158 0.0100 mmhos/cm 0.150 105 95-105

**Duplicate (BHH0053-DUP1)**

Source: 2407402-01

Prepared: 08/01/24 Analyzed: 08/02/24

Specific Conductance (EC) 1.24 0.0100 mmhos/cm 1.27 2.31 20

Summit Scientific

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

Project: Noble - Johnson C29-28 FL

Project Number: UWRWE-A3072-ABN 34724  
Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control**

**Summit Scientific**

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

**Batch BHH0052 - General Preparation**

**LCS (BHH0052-BS1)**

Prepared: 08/01/24 Analyzed: 08/02/24

pH	9.08		pH Units	9.18		98.9	95-105			
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**Duplicate (BHH0052-DUP1)**

Source: 2407402-01

Prepared: 08/01/24 Analyzed: 08/02/24

pH	7.99		pH Units	8.01		0.250	20			
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Summit Scientific

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

Project: Noble - Johnson C29-28 FL

Project Number: UWRWE-A3072-ABN 34724

Project Manager: Jacob Whritenour

**Reported:**  
08/06/24 09:40

### Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The associated LCS and/or LCSD were within acceptance limits, therefore the data are considered valid.
- 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