

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

February 19, 2025

Daniel Simpson

Tasman Geosciences

6855 W. 119th Ave.


Broomfield, CO 80020

RE: Noble - DR. Joe CC06-09 FL

Work Order #2501247

Enclosed are the results of analyses for samples received by Summit Scientific on 01/16/25 18:06. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Jacob Wood For Paul Shrewsbury

President



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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BKG01@0-6"	2501247-01	Soil	01/16/25 11:04	01/16/25 18:06
BKG01@1'	2501247-02	Soil	01/16/25 11:11	01/16/25 18:06
BKG01@2'	2501247-03	Soil	01/16/25 11:13	01/16/25 18:06
BKG01@2.5'	2501247-04	Soil	01/16/25 11:15	01/16/25 18:06
BKG01@3'	2501247-05	Soil	01/16/25 11:20	01/16/25 18:06
BKG01@4'	2501247-06	Soil	01/16/25 11:24	01/16/25 18:06
BKG01@5'	2501247-07	Soil	01/16/25 11:28	01/16/25 18:06
BKG01@6'	2501247-08	Soil	01/16/25 11:32	01/16/25 18:06
BKG02@0-6"	2501247-09	Soil	01/16/25 11:38	01/16/25 18:06
BKG02@1'	2501247-10	Soil	01/16/25 11:40	01/16/25 18:06
BKG02@2'	2501247-11	Soil	01/16/25 11:42	01/16/25 18:06
BKG02@3'	2501247-12	Soil	01/16/25 11:50	01/16/25 18:06
BKG02@4'	2501247-13	Soil	01/16/25 11:54	01/16/25 18:06
BKG02@5'	2501247-14	Soil	01/16/25 11:58	01/16/25 18:06
BKG02@2.5'	2501247-15	Soil	01/16/25 11:46	01/16/25 18:06
FS01-FL01-09@5'	2501247-16	Soil	01/16/25 14:25	01/16/25 18:06
SS01-FL01R-W@4'	2501247-17	Soil	01/16/25 14:38	01/16/25 18:06
SS02-FL01R-W@4'	2501247-18	Soil	01/16/25 14:42	01/16/25 18:06
SS03-FL01R-W@4'	2501247-19	Soil	01/16/25 14:45	01/16/25 18:06
SS04-FL01R-W@4'	2501247-20	Soil	01/16/25 14:49	01/16/25 18:06

Summit Scientific

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

Page

2157

2501247.1

**Send Invoice To:**

Company: ABC Ltd

Project Manager: Daniel Simpson

Company No 316

E-Mail: [tas-chevron-5@tasman-geo.com](mailto:tas-chevron-5@tasman-geo.com)

Project Name/Location: Dr. Joe Cabot's FL

Call us now  
RBUEUF27@chevron.com, 545.626.0964 545.626.0964

APF#: V W R W E - 7 9 0 9 0 - 4 8 N

Project Name: Dr. Soe Ccok-09 FL

PO/Billing Codes:

Project Number:

Contact: Mr. J. A. ...

Project Number:		Preservative				Matrix		Analysis Requested					Special Instructions							
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	Metals - 915	VOC - 915	TPH - 915	PAH - 915	SAR, EC, pH	Boron - HWS	HOLD	
1	8k601a0.6"	01/16/25	1104	1			X			X			X				X	X		SAR, EC, pH by saturated paste
2	8k601a1'		1111																	
3	8k601a2'		1113																	
4	8k601a2.5'		1115																	
5	8k601a3'		1120																	
6	8k601a4'		1124																	
7	8k601a5'		1128																	
8	8k601a6'		1132																	
9	8k602a0-6"		1138																	
10	8k602a1'		1140																	
11	8k602a2'		1142																	
12	8k602a3'		1150																	
13	8k602a4'		1154																	
14	8k602a5'		1158																	
15	8k602a2.5'		1146																	
Relinquished by: <i>[Signature]</i>		Date/Time: 01/16/25 1630	Received by: <i>[Signature]</i> TAT Business Days Same Day		Date/Time: 01/16/25 1630		Field DO		Notes:											
Relinquished by: <i>[Signature]</i>		Date/Time: 1/16/25 1800	Received by: <i>[Signature]</i> 1 Day		Date/Time: 1/16/25 1800		Field EC													
Relinquished by: <i>[Signature]</i>		Date/Time: 1/16/25 1800	Received by: <i>[Signature]</i> 2 Days		Date/Time: 1/16/25 1800		Field ORP													
Relinquished by: <i>[Signature]</i>		Date/Time: 1/16/25 1800	Received by: <i>[Signature]</i> 3 Days		Date/Time: 1/16/25 1800		Field pH													
Relinquished by: <i>[Signature]</i>		Date/Time: 1/16/25 1800	Received by: <i>[Signature]</i> Standard		Date/Time: 1/16/25 1800		Field Temp.													
Temperature Upon Receipt: 3.1		Corrected Temperature: 8		IR gun #: 1		HNO3 lot #:														



# SUMMIT SCIENTIFIC

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

Lab ID 2501247.2 Page 2 of 2

Client: Tasman, Inc.	Project Manager: Daniel Simpson	Send Data To:	Company: <u>Nebl C</u>	Send Invoice To:
Address: 6855 W. 119th Ave.	E-Mail: <u>tas-chevtron-5@tasman-gco.com</u>		Project Name/Location: <u>Dr. 500000-001 FL</u>	
City/State/Zip: Broomfield / CO / 80020	Project Name: <u>Dr. 500000-001 FL</u>		AFEE#: <u>WLRV6-AV040-ABU</u>	
Phone: <u>303-987-1228</u>	Project Number:		PO/Billing Codes:	
Sample Name: <u>WLRV6-AV040</u>			Contact: <u>Mike Moore</u>	

				Preservative			Matrix		Analysis Requested						Special Instructions							
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	Metals - 915	VOC - 915	TPH - 915	PAH - 915	SAR, EC, pH	Boron - HWS	HOLD			
1	F501-FL01-09AS'	1/16/25	1425	2			X			X			X	X	X	X	X	X	X		SAR, EC, pH by saturated paste	
2	F501-FL01K-WA4'		1438										X	X	X	X	X	X	X			
3	F502-FL01K-WA4'		1442										X	X	X	X	X	X	X			
4	F503-FL01K-WA4'		1445										X	X	X	X	X	X	X			
5	F504-FL01K-WA4'		1449										X	X	X	X	X	X	X			
6													X	X	X	X	X	X	X			
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						
Relinquished by: <u>lyth W.</u>				Date/Time: <u>01/16/25 1630</u>	Received by: <u>125-60 uel b02</u>				Date/Time: <u>01/16/25 1630</u>	TAT Business Days		Field DO										
Relinquished by: <u>lyth W.</u>				Date/Time: <u>11025</u>	Received by: <u>lyth W.</u>				Date/Time: <u>11025</u>	Same Day		Field EC										
Relinquished by: <u>lyth W.</u>				Date/Time: <u>18010</u>	Received by: <u>lyth W.</u>				Date/Time: <u>18010</u>	1 Day		Field ORP										
Relinquished by: <u>lyth W.</u>				Date/Time: <u>18010</u>	Received by: <u>lyth W.</u>				Date/Time: <u>18010</u>	2 Days		Field pH										
Relinquished by: <u>lyth W.</u>				Date/Time: <u>18010</u>	Received by: <u>lyth W.</u>				Date/Time: <u>18010</u>	3 Days		Field Temp.										
Temperature Upon Receipt: <u>3.1</u>				Corrected Temperature <u>8</u>				IR gun #: <u>1</u>				HNO3 lot #: <u></u>										
Notes:																						

Notes:

Relinquished by: <u>WLRV</u>	Date/Time: <u>01/16/25 1630</u>	Received by: <u>WLRV</u>	Date/Time: <u>01/16/25 1630</u>	TAT Business Days	Field DO
Relinquished by: <u>WLRV</u>	Date/Time: <u>11/025</u>	Received by: <u>WLRV</u>	Date/Time: <u>11/025</u>	Same Day	Field EC
Relinquished by: <u>WLRV</u>	Date/Time: <u>1800</u>	Received by: <u>WLRV</u>	Date/Time: <u>1800</u>	1 Day	Field ORP
				2 Days	Field pH
				3 Days	Field Temp.
				Standard	Field Turb.

Temperature Upon Receipt: <u>3.1</u>	Corrected Temperature: <u>8</u>	IR gun #: <u>1</u>	HNO3 lot #: <u></u>
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S<sub>2</sub>2/2  
Sample Receipt Checklist

S2 Work Order# 2501247

Client: Taman Client Project ID: Dr Joe C001-09 FLReceived Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐Matrix (Circle all that apply) Air/Soil/Water/Other ☐ Temp (°C) 2.1 Thermometer # 1Bottle ware (Circle all that apply) Glass/Jar/Voa/Amber/Poly/Other ☐

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? <sup>(1)</sup> <b>NOTE:</b> 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"/>			on ZOE
If custody seals are present, are they intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>			
Are samples due within 48 hours?	<input checked="" 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, Total Residual Chlorine (TRC)		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) form present and filled out Completely? <sup>(1)</sup>		<input checked="" type="checkbox"/>		
Is the COC properly relinquished by the client w/ date and time recorded? <sup>(1)</sup>		<input checked="" type="checkbox"/>		NO Time
Were all samples received intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>			
Was adequate sample volume provided? <sup>(1)</sup>	<input checked="" type="checkbox"/>			
Were samples provided in appropriate bottle ware?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received? <sup>(1)</sup>	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC? <sup>(1)</sup>	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
Are any samples/bottles preserved (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"/>	
If samples are acid preserved for metals, is the pH ≤ 2? <sup>(1)</sup> Record the pH in Comments.			<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?			<input checked="" type="checkbox"/>	
Are there requested analysis that cannot be performed by S2? Note analysis in the comments column		<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.				

Control Form #: SRC-001

AS  
Custodian Printed Name1/21/25  
Date/Time



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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@0-6"**  
**2501247-01 (Soil)**

**Summit Scientific**

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

Date Sampled: 01/16/25 11:04									
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: 01/16/25 11:04									
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	1.74	0.200	mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	56.8	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	6.29	0.400	"	"	"	"	"	"	
Lead	5.31	0.200	"	"	"	"	"	"	
Nickel	3.28	0.400	"	"	"	"	"	"	
Silver	0.0220	0.0200	"	"	"	"	"	"	
Zinc	37.3	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: 01/16/25 11:04									
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: 01/16/25 11:04									
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	25.5	0.0500	mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	8.56	0.0500	"	"	"	"	"	"	
Sodium	76.6	0.0500	"	"	"	"	"	"	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@0-6"**  
**2501247-01 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.35	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.5		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.224	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.44		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@1'**  
**2501247-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 11:11**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 11:11**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.75	0.200	mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	44.2	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	5.23	0.400	"	"	"	"	"	"	
Lead	5.41	0.200	"	"	"	"	"	"	
Nickel	3.11	0.400	"	"	"	"	"	"	
Silver	0.0225	0.0200	"	"	"	"	"	"	
Zinc	27.6	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 11:11**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 11:11**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	61.8	0.0500	mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	7.66	0.0500	"	"	"	"	"	"	
Sodium	9.59	0.0500	"	"	"	"	"	"	

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@1'**  
**2501247-02 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	<b>0.306</b>	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	<b>91.1</b>		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	<b>0.203</b>	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:11**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	<b>8.60</b>		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@2'**  
**2501247-03 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 11:13**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 11:13**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	2.03	0.200	mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	48.3	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.90	0.400	"	"	"	"	"	"	
Lead	5.18	0.200	"	"	"	"	"	"	
Nickel	3.28	0.400	"	"	"	"	"	"	
Silver	0.0418	0.0200	"	"	"	"	"	"	
Zinc	19.2	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 11:13**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 11:13**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	188	0.0500	mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	8.63	0.0500	"	"	"	"	"	"	
Sodium	44.0	0.0500	"	"	"	"	"	"	

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Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@2'**  
**2501247-03 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:13**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	<b>0.852</b>	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:13**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	<b>95.6</b>		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:13**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	<b>0.769</b>	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:13**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	<b>7.42</b>		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@2.5'**  
**2501247-04 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.39	0.200	mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	41.8	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.89	0.400	"	"	"	"	"	"	
Lead	3.93	0.200	"	"	"	"	"	"	
Nickel	2.72	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	13.9	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	38.8	0.0500	mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	12.4	0.0500	"	"	"	"	"	"	
Sodium	86.8	0.0500	"	"	"	"	"	"	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@2.5'**  
**2501247-04 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.11	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.8		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.902	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.19		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@3'**  
**2501247-05 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 11:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 11:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.68	0.200	mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	64.5	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.26	0.400	"	"	"	"	"	"	
Lead	4.71	0.200	"	"	"	"	"	"	
Nickel	3.29	0.400	"	"	"	"	"	"	
Silver	0.0263	0.0200	"	"	"	"	"	"	
Zinc	12.1	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 11:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 11:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	46.5	0.0500	mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	17.7	0.0500	"	"	"	"	"	"	
Sodium	95.9	0.0500	"	"	"	"	"	"	

Summit Scientific

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@3'**  
**2501247-05 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.04	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	97.1		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.566	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.48		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@4'**  
**2501247-06 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 11:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 11:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	<b>1.31</b>	0.200	mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	<b>33.8</b>	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	<b>1.85</b>	0.400	"	"	"	"	"	"	
Lead	<b>3.37</b>	0.200	"	"	"	"	"	"	
Nickel	<b>2.09</b>	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	<b>9.80</b>	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 11:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 11:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	<b>21.8</b>	0.0500	mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	<b>9.78</b>	0.0500	"	"	"	"	"	"	
Sodium	<b>62.5</b>	0.0500	"	"	"	"	"	"	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@4'**  
**2501247-06 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.79	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.5		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.613	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.37		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@5'**  
**2501247-07 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 11:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 11:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.69	0.200	mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	38.8	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.00	0.400	"	"	"	"	"	"	
Lead	3.90	0.200	"	"	"	"	"	"	
Nickel	3.19	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	13.8	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 11:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 11:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	25.0	0.0500	mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	7.32	0.0500	"	"	"	"	"	"	
Sodium	86.9	0.0500	"	"	"	"	"	"	

Summit Scientific

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@5'**  
**2501247-07 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.93	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.0		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.650	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.24		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@6'**  
**2501247-08 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 11:32**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 11:32**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.37	0.200	mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	35.1	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.58	0.400	"	"	"	"	"	"	
Lead	3.87	0.200	"	"	"	"	"	"	
Nickel	2.45	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	13.1	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 11:32**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 11:32**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	25.8	0.0500	mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	9.98	0.0500	"	"	"	"	"	"	
Sodium	87.5	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG01@6'**  
**2501247-08 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.71	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.2		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.647	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.57		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG02@0-6"**  
**2501247-09 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 11:38**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 11:38**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	2.81	0.200		mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	79.1	0.400		"	"	"	"	"	"	
Cadmium	0.210	0.200		"	"	"	"	"	"	
Copper	5.31	0.400		"	"	"	"	"	"	
Lead	7.43	0.200		"	"	"	"	"	"	
Nickel	4.32	0.400		"	"	"	"	"	"	
Silver	0.0350	0.0200		"	"	"	"	"	"	
Zinc	25.1	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 11:38**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 11:38**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Calcium	25.9	0.0500		mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	9.40	0.0500		"	"	"	"	"	"	
Sodium	87.6	0.0500		"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG02@0-6"**  
**2501247-09 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.75	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.8		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.781	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.53		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG02@1'**  
**2501247-10 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 11:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 11:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	2.62	0.200		mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	75.9	0.400		"	"	"	"	"	"	
Cadmium	0.202	0.200		"	"	"	"	"	"	
Copper	5.48	0.400		"	"	"	"	"	"	
Lead	7.30	0.200		"	"	"	"	"	"	
Nickel	4.33	0.400		"	"	"	"	"	"	
Silver	0.0298	0.0200		"	"	"	"	"	"	
Zinc	25.7	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 11:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 11:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Calcium	53.9	0.0500		mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	22.3	0.0500		"	"	"	"	"	"	
Sodium	113	0.0500		"	"	"	"	"	"	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG02@1'**  
**2501247-10 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.27	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.2		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.432	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.12		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG02@2'**  
**2501247-11 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 11:42**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 11:42**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.67	0.200	mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	48.0	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.38	0.400	"	"	"	"	"	"	
Lead	3.84	0.200	"	"	"	"	"	"	
Nickel	2.73	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	10.7	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 11:42**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 11:42**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	20.4	0.0500	mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	6.12	0.0500	"	"	"	"	"	"	
Sodium	60.5	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG02@2'**  
**2501247-11 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.02	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	97.2		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.754	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.34		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG02@3'**  
**2501247-12 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 11:50**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 11:50**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	2.75	0.200	mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	84.6	0.400	"	"	"	"	"	"	
Cadmium	0.200	0.200	"	"	"	"	"	"	
Copper	5.18	0.400	"	"	"	"	"	"	
Lead	7.96	0.200	"	"	"	"	"	"	
Nickel	4.64	0.400	"	"	"	"	"	"	
Silver	0.0347	0.0200	"	"	"	"	"	"	
Zinc	21.9	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 11:50**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 11:50**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	41.4	0.0500	mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	14.1	0.0500	"	"	"	"	"	"	
Sodium	134	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG02@3'**  
**2501247-12 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.59	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	80.8		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.447	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.69		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG02@4'**  
**2501247-13 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 11:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 11:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.57	0.200	mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	38.3	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.68	0.400	"	"	"	"	"	"	
Lead	3.08	0.200	"	"	"	"	"	"	
Nickel	2.29	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	9.12	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 11:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 11:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	22.1	0.0500	mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	5.46	0.0500	"	"	"	"	"	"	
Sodium	67.3	0.0500	"	"	"	"	"	"	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG02@4'**  
**2501247-13 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.32	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.9		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.991	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.18		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG02@5'**  
**2501247-14 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 11:58**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 11:58**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.39	0.200	mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	36.2	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.49	0.400	"	"	"	"	"	"	
Lead	2.97	0.200	"	"	"	"	"	"	
Nickel	1.96	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	8.21	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 11:58**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 11:58**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	65.6	0.0500	mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	20.2	0.0500	"	"	"	"	"	"	
Sodium	124	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG02@5'**  
**2501247-14 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.43	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	98.4		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.469	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.89		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG02@2.5'**  
**2501247-15 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 11:46**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIB0906	02/18/25	02/18/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 11:46**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.51	0.200	mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B	
Barium	45.4	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.18	0.400	"	"	"	"	"	"	
Lead	3.89	0.200	"	"	"	"	"	"	
Nickel	2.54	0.400	"	"	"	"	"	"	
Silver	0.0209	0.0200	"	"	"	"	"	"	
Zinc	10.8	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 11:46**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0814	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 11:46**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	22.2	0.0500	mg/L dry	1	BIB0297	02/06/25	02/13/25	EPA 6020B	
Magnesium	4.86	0.0500	"	"	"	"	"	"	
Sodium	76.0	0.0500	"	"	"	"	"	"	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**BKG02@2.5'**  
**2501247-15 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **01/16/25 11:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.81	0.00100	units	1	BIB0707	02/13/25	02/13/25	Calculation	

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

Date Sampled: **01/16/25 11:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	97.2		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 11:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.487	0.0100	mmhos/cm	1	BIB0299	02/06/25	02/07/25	EPA 120.1	

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

Date Sampled: **01/16/25 11:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.66		pH Units	1	BIB0303	02/06/25	02/07/25	EPA 9045D	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**FS01-FL01-09@5'**  
**2501247-16 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 14:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BIA0741	01/16/25	01/18/25	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: **01/16/25 14:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0378	94.5 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0395	98.8 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0372	93.1 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **01/16/25 14:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BIA0783	01/16/25	01/17/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/16/25 14:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	11.0	87.6 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**FS01-FL01-09@5'**  
**2501247-16 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **01/16/25 14:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Acenaphthene	ND	0.00500	mg/kg	1	BIA0852	01/20/25	01/27/25	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: **01/16/25 14:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 2-Methylnaphthalene-d10	0.0214	64.3 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0239	71.8 %	40-140		"	"	"	"	

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

Date Sampled: **01/16/25 14:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIA0828	01/17/25	01/20/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 14:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**FS01-FL01-09@5'**  
**2501247-16 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Arsenic	2.67	0.200	mg/kg dry	1	BIA0807	01/17/25	01/20/25	EPA 6020B
Barium	84.7	0.400	"	"	"	"	"	"
Cadmium	0.221	0.200	"	"	"	"	"	"
Copper	5.01	0.400	"	"	"	"	"	"
Lead	7.03	0.200	"	"	"	"	"	"
Nickel	4.69	0.400	"	"	"	"	"	"
Silver	0.0292	0.0200	"	"	"	"	"	"
Zinc	19.1	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0811	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	48.7	0.0500	mg/L dry	1	BIA0785	01/16/25	01/18/25	EPA 6020B	
Magnesium	14.7	0.0500	"	"	"	"	"	"	
Sodium	112	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **01/16/25 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.61	0.00100	units	1	BIA0840	01/19/25	01/19/25	Calculation	

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

Date Sampled: **01/16/25 14:25**

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 - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**FS01-FL01-09@5'**  
**2501247-16 (Soil)**

**Summit Scientific**

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

% Solids	88.3	%	1	BIA0810	01/17/25	01/17/25	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **01/16/25 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	<b>0.810</b>	0.0100	mmhos/cm	1	BIA0786	01/16/25	01/17/25	EPA 120.1	

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

Date Sampled: **01/16/25 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	<b>8.06</b>		pH Units	1	BIA0787	01/16/25	01/17/25	EPA 9045D	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS01-FL01R-W@4'**  
**2501247-17 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 14:38**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BIA0741	01/16/25	01/18/25	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: **01/16/25 14:38**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0369	92.2 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0393	98.2 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0392	97.9 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **01/16/25 14:38**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	170	50	mg/kg	1	BIA0783	01/16/25	01/17/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/16/25 14:38**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	8.25	66.0 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS01-FL01R-W@4'**  
**2501247-17 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **01/16/25 14:38**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Acenaphthene	ND	0.00500	mg/kg	1	BIA0852	01/20/25	01/27/25	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: **01/16/25 14:38**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 2-Methylnaphthalene-d10	0.0231	69.2 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0248	74.4 %	40-140		"	"	"	"	

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

Date Sampled: **01/16/25 14:38**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIA0828	01/17/25	01/20/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 14:38**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS01-FL01R-W@4'**  
**2501247-17 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Arsenic	2.36	0.200	mg/kg dry	1	BIA0808	01/17/25	01/20/25	EPA 6020B
Barium	80.2	0.400	"	"	"	"	"	"
Cadmium	0.262	0.200	"	"	"	"	"	"
Copper	10.4	0.400	"	"	"	"	"	"
Lead	621	0.200	"	"	"	"	"	"
Nickel	4.39	0.400	"	"	"	"	"	"
Silver	0.0488	0.0200	"	"	"	"	"	"
Zinc	23.7	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 14:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0811	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 14:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	29.0	0.0500	mg/L dry	1	BIA0785	01/16/25	01/18/25	EPA 6020B	
Magnesium	6.19	0.0500	"	"	"	"	"	"	
Sodium	92.0	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **01/16/25 14:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.05	0.00100	units	1	BIA0840	01/19/25	01/19/25	Calculation	

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

Date Sampled: **01/16/25 14:38**

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 - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS01-FL01R-W@4'**  
**2501247-17 (Soil)**

**Summit Scientific**

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

% Solids	86.8	%	1	BIA0810	01/17/25	01/17/25	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **01/16/25 14:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	<b>0.584</b>	0.0100	mmhos/cm	1	BIA0786	01/16/25	01/17/25	EPA 120.1	

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

Date Sampled: **01/16/25 14:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	<b>8.23</b>		pH Units	1	BIA0787	01/16/25	01/17/25	EPA 9045D	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS02-FL01R-W@4'**  
**2501247-18 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 14:42**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BIA0741	01/16/25	01/18/25	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: **01/16/25 14:42**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0368	92.0 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0393	98.3 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0387	96.7 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **01/16/25 14:42**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BIA0783	01/16/25	01/17/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/16/25 14:42**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	11.4	91.0 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS02-FL01R-W@4'**  
**2501247-18 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **01/16/25 14:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BIA0852	01/20/25	01/27/25	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: **01/16/25 14:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0227	68.1 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0251	75.3 %	40-140		"	"	"	"	

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

Date Sampled: **01/16/25 14:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BIA0828	01/17/25	01/20/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 14:42**

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 - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS02-FL01R-W@4'**  
**2501247-18 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Arsenic	1.46	0.200	mg/kg dry	1	BIA0808	01/17/25	01/20/25	EPA 6020B
Barium	43.2	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	2.78	0.400	"	"	"	"	"	"
Lead	4.65	0.200	"	"	"	"	"	"
Nickel	2.90	0.400	"	"	"	"	"	"
Silver	ND	0.0200	"	"	"	"	"	"
Zinc	9.98	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 14:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0811	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 14:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	50.7	0.0500	mg/L dry	1	BIA0785	01/16/25	01/18/25	EPA 6020B	
Magnesium	15.0	0.0500	"	"	"	"	"	"	
Sodium	57.4	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **01/16/25 14:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.82	0.00100	units	1	BIA0840	01/19/25	01/19/25	Calculation	

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

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS02-FL01R-W@4'**  
**2501247-18 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 14:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.5		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 14:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.646	0.0100	mmhos/cm	1	BIA0786	01/16/25	01/17/25	EPA 120.1	

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

Date Sampled: **01/16/25 14:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.12		pH Units	1	BIA0787	01/16/25	01/17/25	EPA 9045D	

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS03-FL01R-W@4'**  
**2501247-19 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 14:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BIA0741	01/16/25	01/18/25	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: **01/16/25 14:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0371	92.8 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0393	98.2 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0378	94.4 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **01/16/25 14:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	68	50	mg/kg	1	BIA0783	01/16/25	01/17/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/16/25 14:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	10.9	87.2 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS03-FL01R-W@4'**  
**2501247-19 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **01/16/25 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BIA0852	01/20/25	01/27/25	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: **01/16/25 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0207	62.1 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0245	73.4 %	40-140		"	"	"	"	

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

Date Sampled: **01/16/25 14:45**


Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BIA0828	01/17/25	01/20/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 14:45**

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 - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS03-FL01R-W@4'**  
**2501247-19 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Arsenic	2.13	0.200	mg/kg dry	1	BIA0808	01/17/25	01/20/25	EPA 6020B
Barium	77.9	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	5.09	0.400	"	"	"	"	"	"
Lead	11.0	0.200	"	"	"	"	"	"
Nickel	4.30	0.400	"	"	"	"	"	"
Silver	0.0302	0.0200	"	"	"	"	"	"
Zinc	18.4	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0811	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	66.4	0.0500	mg/L dry	1	BIA0785	01/16/25	01/18/25	EPA 6020B	
Magnesium	11.4	0.0500	"	"	"	"	"	"	
Sodium	26.0	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **01/16/25 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.776	0.00100	units	1	BIA0840	01/19/25	01/19/25	Calculation	

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

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Broomfield CO, 80020

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS03-FL01R-W@4'**  
**2501247-19 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.0		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.201	0.0100	mmhos/cm	1	BIA0786	01/16/25	01/17/25	EPA 120.1	

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

Date Sampled: **01/16/25 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.46		pH Units	1	BIA0787	01/16/25	01/17/25	EPA 9045D	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS04-FL01R-W@4'**  
**2501247-20 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 14:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BIA0741	01/16/25	01/18/25	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: **01/16/25 14:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0341	85.4 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0391	97.6 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0377	94.3 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **01/16/25 14:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BIA0783	01/16/25	01/17/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/16/25 14:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	7.39	59.1 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS04-FL01R-W@4'**  
**2501247-20 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **01/16/25 14:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Acenaphthene	ND	0.00500	mg/kg	1	BIA0852	01/20/25	01/27/25	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: **01/16/25 14:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 2-Methylnaphthalene-d10	0.0244	73.3 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0262	78.7 %	40-140		"	"	"	"	

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

Date Sampled: **01/16/25 14:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIA0828	01/17/25	01/20/25	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **01/16/25 14:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS04-FL01R-W@4'**  
**2501247-20 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Arsenic	1.38	0.200	mg/kg dry	1	BIA0808	01/17/25	01/20/25	EPA 6020B
Barium	39.2	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	2.58	0.400	"	"	"	"	"	"
Lead	3.58	0.200	"	"	"	"	"	"
Nickel	2.65	0.400	"	"	"	"	"	"
Silver	ND	0.0200	"	"	"	"	"	"
Zinc	8.84	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **01/16/25 14:49**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA0811	01/17/25	01/17/25	EPA 7196A	

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

Date Sampled: **01/16/25 14:49**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	51.9	0.0500	mg/L dry	1	BIA0785	01/16/25	01/18/25	EPA 6020B	
Magnesium	11.7	0.0500	"	"	"	"	"	"	
Sodium	29.4	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **01/16/25 14:49**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.960	0.00100	units	1	BIA0840	01/19/25	01/19/25	Calculation	

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

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

**SS04-FL01R-W@4'**  
**2501247-20 (Soil)**

**Summit Scientific**

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

Date Sampled: **01/16/25 14:49**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.7		%	1	BIA0810	01/17/25	01/17/25	Calculation	

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

Date Sampled: **01/16/25 14:49**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.265	0.0100	mmhos/cm	1	BIA0786	01/16/25	01/17/25	EPA 120.1	

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

Date Sampled: **01/16/25 14:49**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.29		pH Units	1	BIA0787	01/16/25	01/17/25	EPA 9045D	

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Broomfield CO, 80020

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

### Summit Scientific

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

#### Batch BIA0741 - EPA 5030 Soil MS

##### Blank (BIA0741-BLK1)

Prepared: 01/16/25 Analyzed: 01/18/25

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	0.0306		"	0.0400		76.5	50-150			
Surrogate: Toluene-d8	0.0392		"	0.0400		98.0	50-150			
Surrogate: 4-Bromofluorobenzene	0.0376		"	0.0400		94.0	50-150			

##### LCS (BIA0741-BS1)

Prepared: 01/16/25 Analyzed: 01/18/25

Benzene	0.110	0.0020	mg/kg	0.100		110	70-130			
Toluene	0.113	0.0050	"	0.100		113	70-130			
Ethylbenzene	0.122	0.0050	"	0.100		122	70-130			
m,p-Xylene	0.234	0.010	"	0.200		117	70-130			
o-Xylene	0.117	0.0050	"	0.100		117	70-130			
1,2,4-Trimethylbenzene	0.112	0.0050	"	0.100		112	70-130			
1,3,5-Trimethylbenzene	0.115	0.0050	"	0.100		115	70-130			
Naphthalene	0.0783	0.0038	"	0.100		78.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0280		"	0.0400		69.9	50-150			
Surrogate: Toluene-d8	0.0393		"	0.0400		98.3	50-150			
Surrogate: 4-Bromofluorobenzene	0.0388		"	0.0400		97.1	50-150			

##### Matrix Spike (BIA0741-MS1)

Source: 2501246-01

Prepared: 01/16/25 Analyzed: 01/19/25

Benzene	0.0847	0.0020	mg/kg	0.100	ND	84.7	70-130			
Toluene	0.0978	0.0050	"	0.100	ND	97.8	70-130			
Ethylbenzene	0.101	0.0050	"	0.100	ND	101	70-130			
m,p-Xylene	0.197	0.010	"	0.200	ND	98.4	70-130			
o-Xylene	0.0984	0.0050	"	0.100	ND	98.4	70-130			
1,2,4-Trimethylbenzene	0.0873	0.0050	"	0.100	ND	87.3	70-130			
1,3,5-Trimethylbenzene	0.0899	0.0050	"	0.100	ND	89.9	70-130			
Naphthalene	0.0883	0.0038	"	0.100	0.0114	76.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0267		"	0.0400		66.7	50-150			
Surrogate: Toluene-d8	0.0394		"	0.0400		98.4	50-150			
Surrogate: 4-Bromofluorobenzene	0.0383		"	0.0400		95.8	50-150			

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

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

**Batch BIA0741 - EPA 5030 Soil MS**

Matrix Spike Dup (BIA0741-MSD1)		Source: 2501246-01			Prepared: 01/16/25 Analyzed: 01/19/25					
Benzene	0.0884	0.0020	mg/kg	0.100	ND	88.4	70-130	4.33	30	
Toluene	0.0934	0.0050	"	0.100	ND	93.4	70-130	4.64	30	
Ethylbenzene	0.0932	0.0050	"	0.100	ND	93.2	70-130	7.82	30	
m,p-Xylene	0.181	0.010	"	0.200	ND	90.4	70-130	8.44	30	
o-Xylene	0.0901	0.0050	"	0.100	ND	90.1	70-130	8.78	30	
1,2,4-Trimethylbenzene	0.0765	0.0050	"	0.100	ND	76.5	70-130	13.2	30	
1,3,5-Trimethylbenzene	0.0785	0.0050	"	0.100	ND	78.5	70-130	13.6	30	
Naphthalene	0.0901	0.0038	"	0.100	0.0114	78.7	70-130	2.09	30	
Surrogate: 1,2-Dichloroethane-d4		0.0266	"	0.0400		66.4	50-150			
Surrogate: Toluene-d8		0.0390	"	0.0400		97.4	50-150			
Surrogate: 4-Bromofluorobenzene		0.0387	"	0.0400		96.8	50-150			

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Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

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

**Batch BIA0783 - EPA 3550A**

**Blank (BIA0783-BLK1)**

Prepared: 01/16/25 Analyzed: 01/17/25

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	12.8		"	12.5		103	30-150			

**LCS (BIA0783-BS1)**

Prepared: 01/16/25 Analyzed: 01/17/25

C10-C28 (DRO)	452	50	mg/kg	500		90.4	70-130			
Surrogate: o-Terphenyl	12.2		"	12.5		97.7	30-150			

**Matrix Spike (BIA0783-MS1)**

Source: 2501246-01

Prepared: 01/16/25 Analyzed: 01/17/25

C10-C28 (DRO)	513	50	mg/kg	500	95.3	83.6	70-130			
Surrogate: o-Terphenyl	12.3		"	12.5		98.8	30-150			

**Matrix Spike Dup (BIA0783-MSD1)**

Source: 2501246-01

Prepared: 01/16/25 Analyzed: 01/17/25

C10-C28 (DRO)	538	50	mg/kg	500	95.3	88.5	70-130	4.70	20	
Surrogate: o-Terphenyl	12.6		"	12.5		101	30-150			

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Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

#### Summit Scientific

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

#### Batch BIA0852 - EPA 5030 Soil MS

##### Blank (BIA0852-BLK1)

Prepared: 01/20/25 Analyzed: 02/05/25

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	0.0136		"	0.0333		40.8	40-140			
Surrogate: Fluoranthene-d10	0.0152		"	0.0333		45.7	40-140			

##### LCS (BIA0852-BS1)

Prepared: 01/20/25 Analyzed: 02/01/25

Acenaphthene	0.0154	0.00500	mg/kg	0.0333		46.1	40-140			
Anthracene	0.0158	0.00500	"	0.0333		47.5	40-140			
Benzo (a) anthracene	0.0185	0.00500	"	0.0333		55.5	40-140			
Benzo (a) pyrene	0.0187	0.00500	"	0.0333		56.0	40-140			
Benzo (b) fluoranthene	0.0147	0.00500	"	0.0333		44.2	40-140			
Benzo (k) fluoranthene	0.0141	0.00500	"	0.0333		42.3	40-140			
Chrysene	0.0156	0.00500	"	0.0333		46.8	40-140			
Dibenz (a,h) anthracene	0.0484	0.00500	"	0.0333		145	40-140			QLCS-01
Fluoranthene	0.0167	0.00500	"	0.0333		50.2	40-140			
Fluorene	0.0173	0.00500	"	0.0333		51.8	40-140			
Indeno (1,2,3-cd) pyrene	0.0395	0.00500	"	0.0333		118	40-140			
Pyrene	0.0154	0.00500	"	0.0333		46.3	40-140			
1-Methylnaphthalene	0.0162	0.00500	"	0.0333		48.6	40-140			
2-Methylnaphthalene	0.0167	0.00500	"	0.0333		50.0	40-140			
Surrogate: 2-Methylnaphthalene-d10	0.0165		"	0.0333		49.6	40-140			
Surrogate: Fluoranthene-d10	0.0161		"	0.0333		48.3	40-140			

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Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

### Summit Scientific

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

#### Batch BIA0852 - EPA 5030 Soil MS

Matrix Spike (BIA0852-MS1)			Source: 2501202-01		Prepared: 01/20/25 Analyzed: 01/26/25						
Acenaphthene	0.0206	0.00500	mg/kg	0.0333	ND	61.9	40-140				
Anthracene	0.0244	0.00500	"	0.0333	ND	73.3	40-140				
Benzo (a) anthracene	0.0240	0.00500	"	0.0333	ND	72.0	40-140				
Benzo (a) pyrene	0.0220	0.00500	"	0.0333	ND	66.1	40-140				
Benzo (b) fluoranthene	0.0214	0.00500	"	0.0333	ND	64.2	40-140				
Benzo (k) fluoranthene	0.0208	0.00500	"	0.0333	ND	62.5	40-140				
Chrysene	0.0228	0.00500	"	0.0333	ND	68.5	40-140				
Dibenz (a,h) anthracene	0.0216	0.00500	"	0.0333	ND	64.9	40-140				
Fluoranthene	0.0257	0.00500	"	0.0333	ND	77.1	40-140				
Fluorene	0.0237	0.00500	"	0.0333	ND	71.0	40-140				
Indeno (1,2,3-cd) pyrene	0.0145	0.00500	"	0.0333	ND	43.5	40-140				
Pyrene	0.0225	0.00500	"	0.0333	ND	67.6	40-140				
1-Methylnaphthalene	0.0248	0.00500	"	0.0333	ND	74.3	40-140				
2-Methylnaphthalene	0.0257	0.00500	"	0.0333	ND	77.1	40-140				
Surrogate: 2-Methylnaphthalene-d10	0.0246		"	0.0333		73.9	40-140				
Surrogate: Fluoranthene-d10	0.0265		"	0.0333		79.5	40-140				

Matrix Spike Dup (BIA0852-MSD1)			Source: 2501202-01		Prepared: 01/20/25 Analyzed: 01/26/25						
Acenaphthene	0.0157	0.00500	mg/kg	0.0333	ND	47.2	40-140	27.0	30		
Anthracene	0.0175	0.00500	"	0.0333	ND	52.5	40-140	33.1	30		QR-02
Benzo (a) anthracene	0.0173	0.00500	"	0.0333	ND	51.9	40-140	32.4	30		QR-02
Benzo (a) pyrene	0.0166	0.00500	"	0.0333	ND	49.8	40-140	28.2	30		
Benzo (b) fluoranthene	0.0158	0.00500	"	0.0333	ND	47.5	40-140	30.0	30		
Benzo (k) fluoranthene	0.0149	0.00500	"	0.0333	ND	44.6	40-140	33.5	30		QR-02
Chrysene	0.0157	0.00500	"	0.0333	ND	47.1	40-140	37.0	30		QR-02
Dibenz (a,h) anthracene	0.0168	0.00500	"	0.0333	ND	50.3	40-140	25.2	30		
Fluoranthene	0.0179	0.00500	"	0.0333	ND	53.7	40-140	35.8	30		QR-02
Fluorene	0.0170	0.00500	"	0.0333	ND	51.1	40-140	32.6	30		QR-02
Indeno (1,2,3-cd) pyrene	0.0116	0.00500	"	0.0333	ND	34.9	40-140	22.1	30		QM-05
Pyrene	0.0165	0.00500	"	0.0333	ND	49.6	40-140	30.8	30		QR-02
1-Methylnaphthalene	0.0160	0.00500	"	0.0333	ND	48.1	40-140	42.9	30		QR-02
2-Methylnaphthalene	0.0170	0.00500	"	0.0333	ND	51.1	40-140	40.6	30		QR-02
Surrogate: 2-Methylnaphthalene-d10	0.0145		"	0.0333		43.6	40-140				
Surrogate: Fluoranthene-d10	0.0185		"	0.0333		55.5	40-140				

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Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

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

**Batch BIA0828 - EPA 3050B**

**Blank (BIA0828-BLK1)**

Prepared: 01/17/25 Analyzed: 01/20/25

Boron ND 2.00 mg/L

**LCS (BIA0828-BS1)**

Prepared: 01/17/25 Analyzed: 01/20/25

Boron 5.17 2.00 mg/L 5.00 103 80-120

**Duplicate (BIA0828-DUP1)**

**Source: 2412038-37**

Prepared: 01/17/25 Analyzed: 01/20/25

Boron 0.123 2.00 mg/L 0.153 21.6 20 QR-01

**Matrix Spike (BIA0828-MS1)**

**Source: 2412038-37**

Prepared: 01/17/25 Analyzed: 01/20/25

Boron 5.31 2.00 mg/L 5.00 0.153 103 75-125

**Matrix Spike Dup (BIA0828-MSD1)**

**Source: 2412038-37**

Prepared: 01/17/25 Analyzed: 01/20/25

Boron 5.36 2.00 mg/L 5.00 0.153 104 75-125 0.877 25

**Batch BIB0906 - EPA 3050B**

**Blank (BIB0906-BLK1)**

Prepared & Analyzed: 02/18/25

Boron ND 2.00 mg/L

**LCS (BIB0906-BS1)**

Prepared: 02/18/25 Analyzed: 02/19/25

Boron 4.68 2.00 mg/L 5.00 93.6 80-120

**Duplicate (BIB0906-DUP1)**

**Source: 2501247-01**

Prepared & Analyzed: 02/18/25

Boron 0.876 2.00 mg/L 0.961 9.25 20

**Matrix Spike (BIB0906-MS1)**

**Source: 2501247-01**

Prepared & Analyzed: 02/18/25

Boron 5.53 2.00 mg/L 4.98 0.961 91.8 75-125

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**Reported:**  
02/19/25 11:02

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

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

**Batch BIB0906 - EPA 3050B**

Matrix Spike Dup (BIB0906-MSD1)				Source: 2501247-01			Prepared & Analyzed: 02/18/25			
Boron	5.70	2.00	mg/L	4.98	0.961	95.1	75-125	2.91	25	

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**Reported:**  
02/19/25 11:02

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

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

**Batch BIA0807 - EPA 3050B**

**Blank (BIA0807-BLK1)**

Prepared: 01/17/25 Analyzed: 01/20/25

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 (BIA0807-BS1)**

Prepared: 01/17/25 Analyzed: 01/20/25

Arsenic	42.1	0.200	mg/kg wet	41.3	102	80-120
Barium	42.1	0.400	"	41.3	102	80-120
Cadmium	2.03	0.200	"	2.07	98.4	80-120
Copper	43.0	0.400	"	41.3	104	80-120
Lead	20.2	0.200	"	20.7	97.6	80-120
Nickel	43.5	0.400	"	41.3	105	80-120
Silver	1.99	0.0200	"	2.07	96.5	80-120
Zinc	42.4	0.400	"	41.3	103	80-120
Selenium	4.09	0.260	"	4.13	99.1	80-120

**Duplicate (BIA0807-DUP1)**

Source: 2501246-22

Prepared: 01/17/25 Analyzed: 01/20/25

Arsenic	2.94	0.200	mg/kg dry	2.95	0.336	20
Barium	86.6	0.400	"	87.0	0.391	20
Cadmium	0.256	0.200	"	0.258	0.585	20
Copper	5.90	0.400	"	5.73	2.84	20
Lead	9.35	0.200	"	9.41	0.558	20
Nickel	5.09	0.400	"	4.93	3.20	20
Silver	0.0449	0.0200	"	0.0458	2.12	20
Zinc	24.6	0.400	"	24.0	2.44	20
Selenium	ND	0.260	"	ND		20

Summit Scientific

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Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

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

**Batch BIA0807 - EPA 3050B**

Matrix Spike (BIA0807-MS1)		Source: 2501246-22			Prepared: 01/17/25 Analyzed: 01/20/25					
Arsenic	48.2	0.200	mg/kg dry	45.4	2.95	99.6	75-125			
Barium	123	0.400	"	45.4	87.0	79.0	75-125			
Cadmium	2.43	0.200	"	2.27	0.258	95.7	75-125			
Copper	33.8	0.400	"	45.4	5.73	61.9	75-125			QM-05
Lead	37.3	0.200	"	22.7	9.41	123	75-125			
Nickel	33.8	0.400	"	45.4	4.93	63.5	75-125			QM-05
Silver	2.21	0.0200	"	2.27	0.0458	95.1	75-125			
Zinc	54.8	0.400	"	45.4	24.0	67.8	75-125			QM-05
Selenium	3.90	0.260	"	4.54	ND	85.9	75-125			

Matrix Spike Dup (BIA0807-MSD1)		Source: 2501246-22			Prepared: 01/17/25 Analyzed: 01/20/25					
Arsenic	47.6	0.200	mg/kg dry	45.8	2.95	97.4	75-125	1.29	25	
Barium	122	0.400	"	45.8	87.0	76.5	75-125	0.703	25	
Cadmium	2.45	0.200	"	2.29	0.258	95.9	75-125	0.903	25	
Copper	34.4	0.400	"	45.8	5.73	62.7	75-125	1.78	25	QM-05
Lead	32.7	0.200	"	22.9	9.41	102	75-125	13.0	25	
Nickel	34.4	0.400	"	45.8	4.93	64.3	75-125	1.78	25	QM-05
Silver	2.19	0.0200	"	2.29	0.0458	93.7	75-125	0.663	25	
Zinc	53.5	0.400	"	45.8	24.0	64.6	75-125	2.25	25	QM-05
Selenium	3.95	0.260	"	4.58	ND	86.3	75-125	1.36	25	

**Batch BIA0808 - EPA 3050B**

Blank (BIA0808-BLK1)		Prepared: 01/17/25 Analyzed: 01/20/25								
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	"							

Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

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

**Batch BIA0808 - EPA 3050B**

**LCS (BIA0808-BS1)**

Prepared: 01/17/25 Analyzed: 01/20/25

Arsenic	44.4	0.200	mg/kg wet	41.7	106	80-120
Barium	46.1	0.400	"	41.7	111	80-120
Cadmium	2.13	0.200	"	2.08	102	80-120
Copper	40.8	0.400	"	41.7	98.0	80-120
Lead	21.3	0.200	"	20.8	102	80-120
Nickel	41.5	0.400	"	41.7	99.6	80-120
Silver	2.14	0.0200	"	2.08	103	80-120
Zinc	40.8	0.400	"	41.7	97.9	80-120
Selenium	4.32	0.260	"	4.17	104	80-120

**Duplicate (BIA0808-DUP1)**

Source: 2501232-01

Prepared: 01/17/25 Analyzed: 01/20/25

Arsenic	2.99	0.200	mg/kg dry	2.95	1.60	20
Barium	131	0.400	"	129	1.60	20
Cadmium	0.227	0.200	"	0.223	1.60	20
Copper	5.53	0.400	"	5.44	1.60	20
Lead	7.00	0.200	"	6.89	1.60	20
Nickel	7.05	0.400	"	6.94	1.60	20
Silver	0.0348	0.0200	"	0.0343	1.60	20
Zinc	17.6	0.400	"	17.3	1.60	20
Selenium	ND	0.260	"	ND		20

**Matrix Spike (BIA0808-MS1)**

Source: 2501232-01

Prepared: 01/17/25 Analyzed: 01/20/25

Arsenic	53.9	0.200	mg/kg dry	48.9	2.95	104	75-125	
Barium	176	0.400	"	48.9	129	95.0	75-125	
Cadmium	2.63	0.200	"	2.44	0.223	98.4	75-125	
Copper	40.5	0.400	"	48.9	5.44	71.8	75-125	QM-05
Lead	30.6	0.200	"	24.4	6.89	97.0	75-125	
Nickel	42.8	0.400	"	48.9	6.94	73.5	75-125	QM-05
Silver	2.40	0.0200	"	2.44	0.0343	97.0	75-125	
Zinc	54.8	0.400	"	48.9	17.3	76.6	75-125	
Selenium	4.19	0.260	"	4.89	ND	85.7	75-125	

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

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

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

**Batch BIA0808 - EPA 3050B**

Matrix Spike Dup (BIA0808-MSD1)		Source: 2501232-01			Prepared: 01/17/25 Analyzed: 01/20/25					
Arsenic	51.6	0.200	mg/kg dry	48.1	2.95	101	75-125	4.41	25	
Barium	162	0.400	"	48.1	129	67.5	75-125	8.30	25	QM-05
Cadmium	2.57	0.200	"	2.40	0.223	97.5	75-125	2.31	25	
Copper	39.8	0.400	"	48.1	5.44	71.5	75-125	1.85	25	QM-05
Lead	30.2	0.200	"	24.0	6.89	97.1	75-125	1.15	25	
Nickel	43.9	0.400	"	48.1	6.94	76.8	75-125	2.36	25	
Silver	2.35	0.0200	"	2.40	0.0343	96.2	75-125	2.35	25	
Zinc	62.0	0.400	"	48.1	17.3	93.0	75-125	12.4	25	
Selenium	3.86	0.260	"	4.81	ND	80.3	75-125	8.13	25	

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Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

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

**Batch BIA0811 - 3060A Mod**

<b>Blank (BIA0811-BLK1)</b>					Prepared & Analyzed: 01/17/25					
Chromium, Hexavalent	ND	0.30	mg/kg wet							
<b>LCS (BIA0811-BS1)</b>					Prepared & Analyzed: 01/17/25					
Chromium, Hexavalent	23.5	0.30	mg/kg wet	24.3		97.0	80-120			
<b>Duplicate (BIA0811-DUP1)</b>					Source: 2501246-01 Prepared & Analyzed: 01/17/25					
Chromium, Hexavalent	ND	0.30	mg/kg dry		ND				20	
<b>Matrix Spike (BIA0811-MS1)</b>					Source: 2501246-01 Prepared & Analyzed: 01/17/25					
Chromium, Hexavalent	25.3	0.30	mg/kg dry	25.3	ND	100	75-125			
<b>Matrix Spike Dup (BIA0811-MSD1)</b>					Source: 2501246-01 Prepared & Analyzed: 01/17/25					
Chromium, Hexavalent	27.2	0.30	mg/kg dry	26.9	ND	101	75-125	7.13	20	

**Batch BIA0814 - 3060A Mod**

<b>Blank (BIA0814-BLK1)</b>					Prepared & Analyzed: 01/17/25					
Chromium, Hexavalent	ND	0.30	mg/kg wet							
<b>LCS (BIA0814-BS1)</b>					Prepared & Analyzed: 01/17/25					
Chromium, Hexavalent	23.5	0.30	mg/kg wet	24.0		97.8	80-120			
<b>Duplicate (BIA0814-DUP1)</b>					Source: 2501246-16 Prepared & Analyzed: 01/17/25					
Chromium, Hexavalent	ND	0.30	mg/kg dry		ND				20	
<b>Matrix Spike (BIA0814-MS1)</b>					Source: 2501246-16 Prepared & Analyzed: 01/17/25					
Chromium, Hexavalent	28.5	0.30	mg/kg dry	25.3	ND	113	75-125			

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - DR. Joe CC06-09 FL

Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

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

**Batch BIA0814 - 3060A Mod**

Matrix Spike Dup (BIA0814-MSD1)		Source: 2501246-16			Prepared & Analyzed: 01/17/25						
Chromium, Hexavalent		27.4	0.30	mg/kg dry	25.8	ND	106	75-125	3.87	20	

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

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

**Batch BIA0785 - General Preparation**

**Blank (BIA0785-BLK1)**

Prepared: 01/16/25 Analyzed: 01/17/25

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

**LCS (BIA0785-BS1)**

Prepared: 01/16/25 Analyzed: 01/17/25

Calcium	5.66	0.0500	mg/L wet	5.00	113	70-130
Magnesium	4.94	0.0500	"	5.00	98.8	70-130
Sodium	4.68	0.0500	"	5.00	93.6	70-130

**Batch BIB0297 - General Preparation**

**Blank (BIB0297-BLK1)**

Prepared: 02/06/25 Analyzed: 02/13/25

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

**LCS (BIB0297-BS1)**

Prepared: 02/06/25 Analyzed: 02/13/25

Calcium	5.78	0.0500	mg/L wet	5.00	116	70-130
Magnesium	5.24	0.0500	"	5.00	105	70-130
Sodium	4.86	0.0500	"	5.00	97.2	70-130

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6855 W. 119th Ave.  
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Project: Noble - DR. Joe CC06-09 FL

Project Number: UWRWE-A4040-ABN

Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

**Summit Scientific**

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

**Batch BIA0810 - General Preparation**

Duplicate (BIA0810-DUP1)		Source: 2501246-13			Prepared & Analyzed: 01/17/25					
% Solids	75.5		%		74.6		1.15		20	

Summit Scientific

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Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

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

**Batch BIA0786 - General Preparation**

**Blank (BIA0786-BLK1)**

Prepared: 01/16/25 Analyzed: 01/17/25

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BIA0786-BS1)**

Prepared: 01/16/25 Analyzed: 01/17/25

Specific Conductance (EC) 1.40 0.0100 mmhos/cm 1.41 99.0 95-105

**Duplicate (BIA0786-DUP1)**

**Source: 2501242-01**

Prepared: 01/16/25 Analyzed: 01/17/25

Specific Conductance (EC) 0.456 0.0100 mmhos/cm 0.457 0.216 20

**Batch BIB0299 - General Preparation**

**Blank (BIB0299-BLK1)**

Prepared: 02/06/25 Analyzed: 02/07/25

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BIB0299-BS1)**

Prepared: 02/06/25 Analyzed: 02/07/25

Specific Conductance (EC) 1.37 0.0100 mmhos/cm 1.41 97.0 95-105

**Duplicate (BIB0299-DUP1)**

**Source: 2501201-01**

Prepared: 02/06/25 Analyzed: 02/07/25

Specific Conductance (EC) 0.677 0.0100 mmhos/cm 0.678 0.285 20

Summit Scientific

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - DR. Joe CC06-09 FL  
Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

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

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

**Batch BIA0787 - General Preparation**

**LCS (BIA0787-BS1)**

Prepared: 01/16/25 Analyzed: 01/17/25

pH	9.29		pH Units	9.18		101	95-105		
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**Duplicate (BIA0787-DUP1)**

**Source: 2501242-01**

Prepared: 01/16/25 Analyzed: 01/17/25

pH	8.91		pH Units		8.93			0.227	20
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**Batch BIB0303 - General Preparation**

**LCS (BIB0303-BS1)**

Prepared: 02/06/25 Analyzed: 02/07/25

pH	9.22		pH Units	9.18		100	95-105		
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**Duplicate (BIB0303-DUP1)**

**Source: 2501201-01**

Prepared: 02/06/25 Analyzed: 02/07/25

pH	7.82		pH Units		7.87			0.707	20
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Summit Scientific

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

Project: Noble - DR. Joe CC06-09 FL

Project Number: UWRWE-A4040-ABN  
Project Manager: Daniel Simpson

**Reported:**  
02/19/25 11:02

### Notes and Definitions

QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QR-01	Analyses are not controlled on RPD values from sample concentrations below the reporting limit. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values.
QLCS-01	The spike recovery was outside acceptance limits for this analyte indicating a potential high bias. The corresponding samples did not exhibit concentrations above reporting level for this analyte. Data quality is not affected.
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