

Summit Scientific

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

Jacob Wood For Paul Shrewsbury
President



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

Project: Noble - 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

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

Lab ID: 2501047.1
Page 8 of 24

Client: Tasman, Inc. Project Manager: Daniel Simpson
Address: 6855 W. 119th Ave. E-Mail: tas-chevron-5@tasman-geo.com
City/State/Zip: Broomfield / CO / 80020 RBUEJF27@chevron.com, TasGeo-Operations@chevron.com
Phone: 303-487-1228 Project Name: Dr. 50 e C66-09 FL
Sampler Name: WJAT + WJAT.C.S.4 Project Number: Project Name: Dr. 50 e C66-09 FL

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested				Special Instructions	
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	Metals - 915	VOC - 915	TPH - 915		PAH - 915
1	BK601A06"	01/16/25	1109	1			X							X	X		SAR, EC, pH by saturated paste
2	BK601A1'		1111														
3	BK601A2'		1113														
4	BK601A2.5'		1115														
5	BK601A3'		1120														
6	BK601A4'		1124														
7	BK601A5'		1128														
8	BK601A6'		1132														
9	BK602A0-6"		1138														
10	BK602A1'		1140														
11	BK602A2'		1142														
12	BK602A3'		1150														
13	BK602A4'		1154														
14	BK602A5'		1158														
15	BK602A2.5'		1146														

Relinquished by: WJAT Date/Time: 01/16/25 1630

Received by: Tasman Geo Date/Time: 01/16/25 1630

Notes:

Relinquished by: WJAT Date/Time: 1/16/25 1630

Received by: WJAT Date/Time: 1/16/25 1630

Temperature Upon Receipt: 3.1 Corrected Temperature: 8 IR gun #: 1 HNO3 lot #:

Company: Mobisic Project Name/Location: Dr. 50 e C66-09 FL
AFEH: WJAT RUC-81010-48M
PO/Billing Codes:
Contact: MIRE NOTON

SUMMIT SCIENTIFIC

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

Lab ID: 2501247.2
Page 2 of 2

Client: Tasman, Inc.
Address: 6855 W. 119th Ave.
City/State/Zip: Broomfield / CO / 80020
Phone: 303-487-1228
Sample Name: WYATT LABORATORY

Project Manager: Daniel Simpson
E-Mail: tas-chevron-5@tasman-geo.com
RBUJUF27@chevron.com
Project Name: Dr. Soledad 09 FL
Project Number: 015066606-09 FL

Send Data To:
Company: M&E
Project Name/Location: Dr. Soledad-09 FL
AFE#: WYATT 5-14-09-ABU
PO/Billing Codes:
Contact: HIRG 40-109A

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative						Matrix			Analysis Requested							Special Instructions
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	Metals - 915	VOC - 915	TPH - 915	PAH - 915	SAR, EC, pH	Boron - HWS	HOLD		
1	F501-FL01-09AS'	1/16/25	1425	2			X			X				X	X	X	X	X		SAR, EC, pH by saturated paste	
2	F501-FL01R-WA4'		1438	1										X	X	X	X	X			
3	F502-FL01R-WA4'		1442	1										X	X	X	X	X			
4	F503-FL01R-WA4'		1445	1										X	X	X	X	X			
5	F504-FL01R-WA4'		1449	1										X	X	X	X	X			
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					

Relinquished by: *W. W. W.* Date/Time: 01/16/25 1630
Received by: *W. W. W.* Date/Time: 01/16/25 1630

Relinquished by: *W. W. W.* Date/Time: 11/02/25 1810
Received by: *W. W. W.* Date/Time: 11/02/25 1800

Temperature Upon Receipt: 3.1 Corrected Temperature: 8 IR gun #: 1

TAT Business Days: Same Day < 1 Day, 2 Days, 3 Days, Standard

Field DO, Field EC, Field ORP, Field pH, Field Temp., Field Turb., HNO3 lot #:

Notes:

S₂

Sample Receipt Checklist

S2 Work Order# 2501247

2/2

Client: Tarman Client Project ID: Dr Joe CCAL-09 FL

Received Via: H.D./P.U./FedEx/UPS/USPS/Other Airbill #: _____

Matrix (Circle all that apply) Air/Soil/Water/Other Temp (°C) 2.1 Thermometer # 1

Bottle 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? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	-			on ZOE
If custody seals are present, are they intact? ⁽¹⁾	-			
Are samples due within 48 hours?	-			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 ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD, Total Residual Chlorine (TRC)		-		
Is a chain-of-custody (COC) form present and filled out Completely? ⁽¹⁾		-		
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾		-		NO TIME
Were all samples received intact? ⁽¹⁾	✓			
Was adequate sample volume provided? ⁽¹⁾	✓			
Were samples provided in appropriate bottle ware?	✓			
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	✓			
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	✓			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			✓	
Are any samples/bottles preserved (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.			✓	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Are there requested analysis that cannot be performed by S2? Note analysis in the comments column		✓		
Additional Comments (if any):				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				

Control Form #: SRC-001

AS

Custodian Printed Name

1/21/25
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)

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Total Metals by EPA 6020B Hot Water Soluble Extraction

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

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 11:04**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
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		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 11:04**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
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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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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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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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	0.306	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	91.1		%	1	BIA0810	01/17/25	01/17/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.203	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	8.60		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'
2501247-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

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

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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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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

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	0.852	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	95.6		%	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)	0.769	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	7.42		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@2.5'
2501247-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

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

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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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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	

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@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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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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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

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	

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

Hexavalent Chromium by EPA Method 7196

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

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

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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

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	

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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

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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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	

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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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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	

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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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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	"	"	"	"	"	"	

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

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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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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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	"	"	"	"	"	"	

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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

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	

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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

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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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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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	

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

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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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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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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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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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	"	"	"	"	"	"	

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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	

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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

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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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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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	

Summit Scientific

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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

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

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

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 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 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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 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 14:25**

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)

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Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
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)	0.810	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	8.06		pH Units	1	BIA0787	01/16/25	01/17/25	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

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 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 14:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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 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 14:38**

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

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
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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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

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**

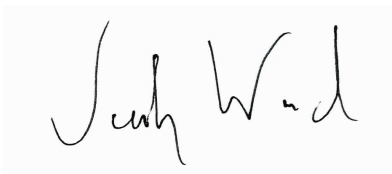
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.584	0.0100	mmhos/cm	1	BIA0786	01/16/25	01/17/25	EPA 120.1	

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	8.23		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

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

PAH by EPA Method 8270D SIM

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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

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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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

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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

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

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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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

Volatile Organic Compounds by EPA Method 8260B

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

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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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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)

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Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
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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Project: Noble - DR. Joe CC06-09 FL
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Project Manager: Daniel Simpson

Reported:
02/19/25 11:02

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

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Physical Parameters by APHA/ASTM/EPA Methods

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

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

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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

Volatile Organic Compounds by EPA Method 8260B

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

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

PAH by EPA Method 8270D SIM

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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 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 14:49**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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 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 14:49**

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

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

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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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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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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		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

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	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0306		"	0.0400		76.5	50-150			
<i>Surrogate: Toluene-d8</i>	0.0392		"	0.0400		98.0	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	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			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0280		"	0.0400		69.9	50-150			
<i>Surrogate: Toluene-d8</i>	0.0393		"	0.0400		98.3	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	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			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0267		"	0.0400		66.7	50-150			
<i>Surrogate: Toluene-d8</i>	0.0394		"	0.0400		98.4	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0383		"	0.0400		95.8	50-150			

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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

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

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

Batch 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	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0266</i>		<i>"</i>	<i>0.0400</i>		<i>66.4</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0390</i>		<i>"</i>	<i>0.0400</i>		<i>97.4</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0387</i>		<i>"</i>	<i>0.0400</i>		<i>96.8</i>	<i>50-150</i>			

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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

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 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: <i>o</i> -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: <i>o</i> -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: <i>o</i> -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: <i>o</i> -Terphenyl	12.6		"	12.5		101		30-150			

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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

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch 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	"							
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0136</i>		<i>"</i>	<i>0.0333</i>		<i>40.8</i>	<i>40-140</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0152</i>		<i>"</i>	<i>0.0333</i>		<i>45.7</i>	<i>40-140</i>			

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			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0165</i>		<i>"</i>	<i>0.0333</i>		<i>49.6</i>	<i>40-140</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0161</i>		<i>"</i>	<i>0.0333</i>		<i>48.3</i>	<i>40-140</i>			

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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

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch 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			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0246</i>	<i>0.00500</i>	<i>"</i>	<i>0.0333</i>	<i>ND</i>	<i>73.9</i>	<i>40-140</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0265</i>	<i>0.00500</i>	<i>"</i>	<i>0.0333</i>	<i>ND</i>	<i>79.5</i>	<i>40-140</i>			

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
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0145</i>	<i>0.00500</i>	<i>"</i>	<i>0.0333</i>	<i>ND</i>	<i>43.6</i>	<i>40-140</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0185</i>	<i>0.00500</i>	<i>"</i>	<i>0.0333</i>	<i>ND</i>	<i>55.5</i>	<i>40-140</i>			

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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 Hot Water Soluble Extraction - Quality Control
Summit Scientific

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

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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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 Hot Water Soluble Extraction - Quality Control

Summit Scientific

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

Batch BIB0906 - EPA 3050B

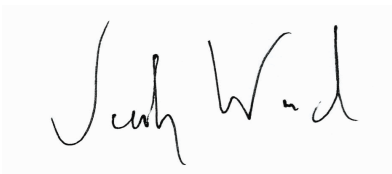
Matrix Spike Dup (BIB0906-MSD1)

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

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

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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		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit		

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	"					

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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		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit		

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

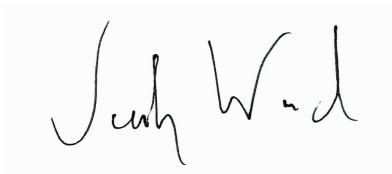
Summit Scientific

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

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 Number: UWRWE-A4040-ABN
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Reported:
02/19/25 11:02

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BIA0811 - 3060A Mod

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

Blank (BIA0814-BLK1)		Prepared & Analyzed: 01/17/25									
Chromium, Hexavalent	ND	0.30	mg/kg wet								
LCS (BIA0814-BS1)		Prepared & Analyzed: 01/17/25									
Chromium, Hexavalent	23.5	0.30	mg/kg wet	24.0	97.8	80-120					
Duplicate (BIA0814-DUP1)		Source: 2501246-16		Prepared & Analyzed: 01/17/25							
Chromium, Hexavalent	ND	0.30	mg/kg dry		ND					20	
Matrix Spike (BIA0814-MS1)		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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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	Result	Reporting		Spike	Source	%REC		RPD		Notes
		Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

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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Project Number: UWRWE-A4040-ABN
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Reported:
02/19/25 11:02

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

Summit Scientific

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

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

Reported:
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Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

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

Batch BIA0810 - General Preparation


Duplicate (BIA0810-DUP1)

Source: 2501246-13

Prepared & Analyzed: 01/17/25

% Solids	75.5		%		74.6			1.15	20	
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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 Result	%REC		RPD		Notes
		Limit	Units			%REC	Limits	RPD	Limit	

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

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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, Saturated Paste Extraction - Quality Control

Summit Scientific

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

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				
Duplicate (BIA0787-DUP1)										
					Source: 2501242-01 Prepared: 01/16/25 Analyzed: 01/17/25					
pH	8.91		pH Units	8.93				0.227	20	

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				
Duplicate (BIB0303-DUP1)										
					Source: 2501201-01 Prepared: 02/06/25 Analyzed: 02/07/25					
pH	7.82		pH Units	7.87				0.707	20	

Summit Scientific

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Project Number: UWRWE-A4040-ABN
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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