

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

March 20, 2025

Mike Medina

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - Wolfe USX CC07-16

Work Order #2501188

Enclosed are the results of analyses for samples received by Summit Scientific on 01/14/25 18:16. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Natalie Tessier For Paul Shrewsbury

President



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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
 Project Manager: Mike Medina

Reported:
 03/20/25 10:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BKG01@0.5'	2501188-01	Soil	01/14/25 10:42	01/14/25 18:16
BKG01@1'	2501188-02	Soil	01/14/25 10:44	01/14/25 18:16
BKG01@2'	2501188-03	Soil	01/14/25 10:46	01/14/25 18:16
BKG01@2.5'	2501188-04	Soil	01/14/25 10:48	01/14/25 18:16
BKG01@4'	2501188-05	Soil	01/14/25 10:50	01/14/25 18:16
BKG02@0.5'	2501188-06	Soil	01/14/25 11:00	01/14/25 18:16
BKG02@1'	2501188-07	Soil	01/14/25 11:02	01/14/25 18:16
BKG02@2'	2501188-08	Soil	01/14/25 11:04	01/14/25 18:16
BKG02@2.5'	2501188-09	Soil	01/14/25 11:06	01/14/25 18:16
BKG02@4'	2501188-10	Soil	01/14/25 11:08	01/14/25 18:16
BKG03@0.5'	2501188-11	Soil	01/14/25 11:10	01/14/25 18:16
BKG03@1'	2501188-12	Soil	01/14/25 11:12	01/14/25 18:16
BKG03@2'	2501188-13	Soil	01/14/25 11:14	01/14/25 18:16
BKG03@2.5'	2501188-14	Soil	01/14/25 11:16	01/14/25 18:16
BKG03@4'	2501188-15	Soil	01/14/25 11:18	01/14/25 18:16
BKG04@0.5'	2501188-16	Soil	01/14/25 11:40	01/14/25 18:16
BKG04@1'	2501188-17	Soil	01/14/25 11:42	01/14/25 18:16
BKG04@2'	2501188-18	Soil	01/14/25 11:44	01/14/25 18:16
BKG04@2.5'	2501188-19	Soil	01/14/25 11:46	01/14/25 18:16
BKG04@4'	2501188-20	Soil	01/14/25 11:48	01/14/25 18:16
BKG05@0.5'	2501188-21	Soil	01/14/25 12:00	01/14/25 18:16
BKG05@1'	2501188-22	Soil	01/14/25 12:02	01/14/25 18:16
BKG05@2'	2501188-23	Soil	01/14/25 12:04	01/14/25 18:16
BKG05@2.5'	2501188-24	Soil	01/14/25 12:06	01/14/25 18:16
BKG05@4'	2501188-25	Soil	01/14/25 12:08	01/14/25 18:16

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

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

Client: Noble/Tasman	Send Data To: Project Manager: Bryce Goldade	Send Invoice To: Company: Noble
Address: 6855 W. 119th Ave.	E-Mail: tas-chevron-4@tasman-geo.com	Project Name/Location: Wolfe USX CC07-10
City/State/Zip: Broomfield/CO/ 80020	E-Mail: RBUEUF27@chevron.com	A/E#:
Phone: 720-481-5294	Project Name: Wolfe USX CC07-10	PO/Billing Codes:
Sampler Name: Emily Lambert	Project Number:	Contact: Dan Peterson

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	BKG01@0.5'	11/14/25	1042	2			X			X			X				X	X		SAR, EC, pH by saturated paste
2	BKG01@1'		1044																	
3	BKG01@2'		1040																	
4	BKG01@2.5'		1048																	
5	BKG01@4'		1050																	
6	BKG02@0.5'		1100																	
7	BKG02@1'		1102																	
8	BKG02@2'		1104																	
9	BKG02@2.5'		1106																	
10	BKG02@4'		1108																	
11	BKG03@0.5'		1110																	
12	BKG03@1'		1112																	
13	BKG03@2'		1114																	
14	BKG03@2.5'		1116																	
15	BKG03@4'		1118																	

Relinquished by: <i>[Signature]</i>	Date/Time: 11/14/25 1400	Received by: Tasman Lock Box	Date/Time: 11/14/25 1400	TAT Business Days	Field DO	Notes:
Relinquished by: Tasman Lock Box	Date/Time: 11/16/25 1816	Received by: <i>[Signature]</i>	Date/Time: 11/16/25 1816	Same Day	Field EC	
Relinquished by:	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
Relinquished by:	Date/Time:	Received by:	Date/Time:	2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
Temperature Upon Receipt: 5.5	Corrected Temperature: 6	IR gun #: 1	HNO3 lot #:	Standard	X	Field Turb.

Client: Noble/Tasman	Send Data To:	Send Invoice To:
Address: 6855 W. 119th Ave.	Project Manager: Bryce Golm	Company: Noble
City/State/Zip: Broomfield/CO/ 80020	E-Mail: tas-chevron-4@tasman-geo.com	Project Name/Location: Wolfe USX CC07-10
Phone: 720-481-5294	E-Mail: RBUEUF27@chevron.com	AFE#:
Sample Name: Emily Lambert	Project Name: Wolfe USX CC07-10	PO/Billing Codes:
	Project Number:	Contact: Dan Peterson

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	BKG04@0.5'	1/14/25	1140	2			X			X						X	X			SAR, EC, pH by saturated paste
2	BKG04@1'		1142																	
3	BKG04@2'		1144																	
4	BKG04@2.5'		1140																	
5	BKG04@4'		1148																	
6	BKG05@0.5'		1200																	
7	BKG05@1'		1202																	
8	BKG05@2'		1204																	
9	BKG05@2.5'		1200																	
10	BKG05@4'		1208																	
11																				
12																				
13																				
14																				
15																				

Relinquished by: <i>E. [Signature]</i>	Date/Time: 1/14/25 1400	Received by: Tasman Lock Box	Date/Time: 1/14/25 1400	TAT Business Days	Field DO	Notes:
Relinquished by: <i>Tasman Lock Box</i>	Date/Time: 1/14/25 1810	Received by: <i>[Signature]</i>	Date/Time: 1/14/25 1810	Same Day	Field EC	
Relinquished by:	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
Temperature Upon Receipt: 5.5	Corrected Temperature: 6	IR gun #: 1	HNO3 lot #:	Standard	<input checked="" type="checkbox"/> Field Turb.	

S₂

2/2

Sample Receipt Checklist

S2 Work Order# 2501188

Client: Noble Tasman Client Project ID: Wolfe USX CCOT-114

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



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

Temp (°C)

Thermometer #

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ANZCE
If custody seals are present, are they intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out Completely? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water - is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column - HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.

AS
Custodian Printed Name

1/14/25
Date/Time

3/20/25



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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG01@0.5'
2501188-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 10:42**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BIB1202	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 10:42**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	1.35	0.200		mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	69.2	0.400		"	"	"	"	"	"	
Cadmium	0.277	0.200		"	"	"	"	"	"	
Copper	5.19	0.400		"	"	"	"	"	"	
Lead	8.14	0.200		"	"	"	"	"	"	
Nickel	4.24	0.400		"	"	"	"	"	"	
Silver	0.0335	0.0200		"	"	"	"	"	"	
Zinc	19.1	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 10:42**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 10:42**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Calcium	13.6	0.0500		mg/L dry	1	BIB0353	02/07/25	02/19/25	EPA 6020B	
Magnesium	21.9	0.0500		"	"	"	"	"	"	
Sodium	0.401	0.0500		"	"	"	"	"	"	

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Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG01@0.5'
2501188-01 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 10:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0157	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 10:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.4		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 10:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.215	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 10:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.89		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

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Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG01@1'
2501188-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 10:44**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1202	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 10:44**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.49	0.200	mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	81.4	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.87	0.400	"	"	"	"	"	"	
Lead	6.63	0.200	"	"	"	"	"	"	
Nickel	5.27	0.400	"	"	"	"	"	"	
Silver	0.0988	0.0200	"	"	"	"	"	"	
Zinc	18.3	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 10:44**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 10:44**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	16.3	0.0500	mg/L dry	1	BIB0353	02/07/25	02/19/25	EPA 6020B	
Magnesium	22.5	0.0500	"	"	"	"	"	"	
Sodium	1.14	0.0500	"	"	"	"	"	"	

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Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG01@1'
2501188-02 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0430	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.1		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.110	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.34		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

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Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG01@2'
2501188-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 10:46**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 10:46**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.48	0.200	mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	82.2	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.77	0.400	"	"	"	"	"	"	
Lead	6.40	0.200	"	"	"	"	"	"	
Nickel	5.24	0.400	"	"	"	"	"	"	
Silver	0.0495	0.0200	"	"	"	"	"	"	
Zinc	18.8	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 10:46**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 10:46**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	15.0	0.0500	mg/L dry	1	BIB0353	02/07/25	02/19/25	EPA 6020B	
Magnesium	23.0	0.0500	"	"	"	"	"	"	
Sodium	1.27	0.0500	"	"	"	"	"	"	

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG01@2'
2501188-03 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0481	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.5		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.144	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.34		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG01@2.5'
2501188-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 10:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 10:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.02	0.200	mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	70.4	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.64	0.400	"	"	"	"	"	"	
Lead	5.79	0.200	"	"	"	"	"	"	
Nickel	4.66	0.400	"	"	"	"	"	"	
Silver	0.0337	0.0200	"	"	"	"	"	"	
Zinc	16.3	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 10:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 10:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	11.4	0.0500	mg/L dry	1	BIB0353	02/07/25	02/19/25	EPA 6020B	
Magnesium	9.17	0.0500	"	"	"	"	"	"	
Sodium	3.00	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG01@2.5'
2501188-04 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.160	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.5		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.165	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.57		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG01@4'
2501188-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 10:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 10:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.57	0.200	mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	57.9	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.49	0.400	"	"	"	"	"	"	
Lead	3.51	0.200	"	"	"	"	"	"	
Nickel	3.39	0.400	"	"	"	"	"	"	
Silver	0.0202	0.0200	"	"	"	"	"	"	
Zinc	11.7	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 10:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 10:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	62.6	0.0500	mg/L dry	1	BIB0353	02/07/25	02/19/25	EPA 6020B	
Magnesium	6.63	0.0500	"	"	"	"	"	"	
Sodium	3.86	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG01@4'
2501188-05 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.124	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.3		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.194	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.57		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG02@0.5'
2501188-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.54	0.200	mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	70.7	0.400	"	"	"	"	"	"	
Cadmium	0.277	0.200	"	"	"	"	"	"	
Copper	5.51	0.400	"	"	"	"	"	"	
Lead	8.11	0.200	"	"	"	"	"	"	
Nickel	4.58	0.400	"	"	"	"	"	"	
Silver	0.0341	0.0200	"	"	"	"	"	"	
Zinc	21.2	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	12.8	0.0500	mg/L dry	1	BIB0353	02/07/25	02/19/25	EPA 6020B	
Magnesium	27.7	0.0500	"	"	"	"	"	"	
Sodium	0.450	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG02@0.5'
2501188-06 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0162	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.4		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.216	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.70		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG02@1'
2501188-07 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:02**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:02**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.63	0.200	mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	73.6	0.400	"	"	"	"	"	"	
Cadmium	0.244	0.200	"	"	"	"	"	"	
Copper	4.92	0.400	"	"	"	"	"	"	
Lead	7.98	0.200	"	"	"	"	"	"	
Nickel	4.46	0.400	"	"	"	"	"	"	
Silver	0.0337	0.0200	"	"	"	"	"	"	
Zinc	18.9	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:02**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:02**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	16.7	0.0500	mg/L dry	1	BIB0353	02/07/25	02/19/25	EPA 6020B	
Magnesium	23.7	0.0500	"	"	"	"	"	"	
Sodium	0.628	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG02@1'
2501188-07 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0232	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.8		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.167	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.66		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG02@2'
2501188-08 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:04**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:04**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.57	0.200	mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	92.9	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	4.70	0.400	"	"	"	"	"	"	
Lead	6.65	0.200	"	"	"	"	"	"	
Nickel	5.95	0.400	"	"	"	"	"	"	
Silver	0.0483	0.0200	"	"	"	"	"	"	
Zinc	18.6	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:04**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:04**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	13.1	0.0500	mg/L dry	1	BIB0353	02/07/25	02/19/25	EPA 6020B	
Magnesium	8.78	0.0500	"	"	"	"	"	"	
Sodium	3.33	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG02@2'
2501188-08 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.175	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.0		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.179	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.61		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG02@2.5'
2501188-09 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:06**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:06**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.65	0.200	mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	69.9	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.08	0.400	"	"	"	"	"	"	
Lead	4.30	0.200	"	"	"	"	"	"	
Nickel	4.01	0.400	"	"	"	"	"	"	
Silver	0.0266	0.0200	"	"	"	"	"	"	
Zinc	13.4	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:06**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:06**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	19.4	0.0500	mg/L dry	1	BIB0353	02/07/25	02/19/25	EPA 6020B	
Magnesium	5.39	0.0500	"	"	"	"	"	"	
Sodium	7.32	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG02@2.5'
2501188-09 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.379	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.3		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.208	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.64		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG02@4'
2501188-10 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.28	0.200	mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	83.1	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.30	0.400	"	"	"	"	"	"	
Lead	3.45	0.200	"	"	"	"	"	"	
Nickel	3.23	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	11.2	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	42.8	0.0500	mg/L dry	1	BIB0353	02/07/25	02/19/25	EPA 6020B	
Magnesium	7.06	0.0500	"	"	"	"	"	"	
Sodium	15.6	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG02@4'
2501188-10 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.582	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	98.2		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.269	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.21		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG03@0.5'
2501188-11 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	1.42	0.200		mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	70.6	0.400		"	"	"	"	"	"	
Cadmium	0.313	0.200		"	"	"	"	"	"	
Copper	6.15	0.400		"	"	"	"	"	"	
Lead	8.01	0.200		"	"	"	"	"	"	
Nickel	4.50	0.400		"	"	"	"	"	"	
Silver	0.0332	0.0200		"	"	"	"	"	"	
Zinc	21.5	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Calcium	11.0	0.0500		mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	16.6	0.0500		"	"	"	"	"	"	
Sodium	0.351	0.0500		"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG03@0.5'
2501188-11 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0156	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.2		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.268	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.94		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG03@1'
2501188-12 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:12**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:12**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	1.65	0.200		mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	92.5	0.400		"	"	"	"	"	"	
Cadmium	0.301	0.200		"	"	"	"	"	"	
Copper	6.39	0.400		"	"	"	"	"	"	
Lead	8.91	0.200		"	"	"	"	"	"	
Nickel	5.10	0.400		"	"	"	"	"	"	
Silver	0.0360	0.0200		"	"	"	"	"	"	
Zinc	22.1	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:12**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:12**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Calcium	14.7	0.0500		mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	20.5	0.0500		"	"	"	"	"	"	
Sodium	1.38	0.0500		"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG03@1'
2501188-12 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0546	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.2		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.106	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.45		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG03@2'
2501188-13 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:14**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:14**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	1.50	0.200		mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	85.5	0.400		"	"	"	"	"	"	
Cadmium	0.205	0.200		"	"	"	"	"	"	
Copper	60.0	0.400		"	"	"	"	"	"	
Lead	9.97	0.200		"	"	"	"	"	"	
Nickel	4.77	0.400		"	"	"	"	"	"	
Silver	0.0537	0.0200		"	"	"	"	"	"	
Zinc	52.5	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:14**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:14**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Calcium	13.4	0.0500		mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	18.3	0.0500		"	"	"	"	"	"	
Sodium	2.22	0.0500		"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG03@2'
2501188-13 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0926	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.6		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.10	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.90		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG03@2.5'
2501188-14 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:16**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:16**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.34	0.200	mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	80.1	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	4.33	0.400	"	"	"	"	"	"	
Lead	5.68	0.200	"	"	"	"	"	"	
Nickel	4.22	0.400	"	"	"	"	"	"	
Silver	0.0269	0.0200	"	"	"	"	"	"	
Zinc	17.4	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:16**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:16**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	15.8	0.0500	mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	35.4	0.0500	"	"	"	"	"	"	
Sodium	1.35	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG03@2.5'
2501188-14 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0432	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.5		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.135	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.14		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG03@4'
2501188-15 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:18**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:18**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.29	0.200	mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	56.9	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.39	0.400	"	"	"	"	"	"	
Lead	4.36	0.200	"	"	"	"	"	"	
Nickel	3.53	0.400	"	"	"	"	"	"	
Silver	0.0230	0.0200	"	"	"	"	"	"	
Zinc	14.2	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:18**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:18**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	13.6	0.0500	mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	23.4	0.0500	"	"	"	"	"	"	
Sodium	1.89	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG03@4'
2501188-15 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0720	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	97.1		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.283	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.10		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG04@0.5'
2501188-16 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.35	0.200	mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	56.7	0.400	"	"	"	"	"	"	
Cadmium	0.249	0.200	"	"	"	"	"	"	
Copper	4.96	0.400	"	"	"	"	"	"	
Lead	6.99	0.200	"	"	"	"	"	"	
Nickel	3.97	0.400	"	"	"	"	"	"	
Silver	0.0306	0.0200	"	"	"	"	"	"	
Zinc	18.7	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	12.6	0.0500	mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	18.3	0.0500	"	"	"	"	"	"	
Sodium	0.711	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG04@0.5'
2501188-16 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0299	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.1		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.275	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.53		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG04@1'
2501188-17 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:42**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:42**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	1.41	0.200		mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	71.0	0.400		"	"	"	"	"	"	
Cadmium	0.262	0.200		"	"	"	"	"	"	
Copper	4.97	0.400		"	"	"	"	"	"	
Lead	8.05	0.200		"	"	"	"	"	"	
Nickel	4.32	0.400		"	"	"	"	"	"	
Silver	0.0297	0.0200		"	"	"	"	"	"	
Zinc	18.1	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:42**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:42**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Calcium	13.3	0.0500		mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	21.2	0.0500		"	"	"	"	"	"	
Sodium	0.678	0.0500		"	"	"	"	"	"	

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG04@1'
2501188-17 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0269	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.6		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0947	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:42**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.81		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG04@2'
2501188-18 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:44**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:44**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.20	0.200	mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	74.2	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	4.16	0.400	"	"	"	"	"	"	
Lead	5.43	0.200	"	"	"	"	"	"	
Nickel	4.08	0.400	"	"	"	"	"	"	
Silver	0.0246	0.0200	"	"	"	"	"	"	
Zinc	17.5	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:44**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:44**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	15.4	0.0500	mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	18.9	0.0500	"	"	"	"	"	"	
Sodium	2.59	0.0500	"	"	"	"	"	"	

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG04@2'
2501188-18 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.105	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.7		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.172	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.67		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG04@2.5'
2501188-19 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:46**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:46**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.23	0.200	mg/kg dry	1	BIB1692	02/28/25	03/19/25	EPA 6020B	
Barium	63.1	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.69	0.400	"	"	"	"	"	"	
Lead	4.75	0.200	"	"	"	"	"	"	
Nickel	3.68	0.400	"	"	"	"	"	"	
Silver	0.0210	0.0200	"	"	"	"	"	"	
Zinc	15.2	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:46**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:46**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	16.0	0.0500	mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	23.9	0.0500	"	"	"	"	"	"	
Sodium	2.73	0.0500	"	"	"	"	"	"	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG04@2.5'
2501188-19 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.101	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.2		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.191	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.04		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG04@4'
2501188-20 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 11:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 11:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.56	0.200	mg/kg dry	1	BIB1693	02/28/25	03/19/25	EPA 6020B	
Barium	53.6	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	6.03	0.400	"	"	"	"	"	"	
Lead	4.75	0.200	"	"	"	"	"	"	
Nickel	3.84	0.400	"	"	"	"	"	"	
Silver	0.0360	0.0200	"	"	"	"	"	"	
Zinc	16.0	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 11:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0042	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 11:48**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	15.5	0.0500	mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	57.5	0.0500	"	"	"	"	"	"	
Sodium	1.52	0.0500	"	"	"	"	"	"	

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG04@4'
2501188-20 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 11:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0399	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 11:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	97.0		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 11:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.137	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 11:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.21		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG05@0.5'
2501188-21 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 12:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 12:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.33	0.200	mg/kg dry	1	BIB1693	02/28/25	03/19/25	EPA 6020B	
Barium	57.1	0.400	"	"	"	"	"	"	
Cadmium	0.223	0.200	"	"	"	"	"	"	
Copper	4.47	0.400	"	"	"	"	"	"	
Lead	6.48	0.200	"	"	"	"	"	"	
Nickel	4.19	0.400	"	"	"	"	"	"	
Silver	0.0348	0.0200	"	"	"	"	"	"	
Zinc	18.2	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 12:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0043	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 12:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	15.0	0.0500	mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	28.2	0.0500	"	"	"	"	"	"	
Sodium	0.147	0.0500	"	"	"	"	"	"	

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

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG05@0.5'
2501188-21 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.00516	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.8		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.116	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.99		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

Summit Scientific

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Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG05@1'
2501188-22 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 12:02**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1203	02/21/25	03/06/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 12:02**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.94	0.200	mg/kg dry	1	BIB1693	02/28/25	03/19/25	EPA 6020B	
Barium	72.3	0.400	"	"	"	"	"	"	
Cadmium	0.231	0.200	"	"	"	"	"	"	
Copper	4.94	0.400	"	"	"	"	"	"	
Lead	6.66	0.200	"	"	"	"	"	"	
Nickel	4.50	0.400	"	"	"	"	"	"	
Silver	0.0332	0.0200	"	"	"	"	"	"	
Zinc	17.6	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 12:02**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0043	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 12:02**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	16.2	0.0500	mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	21.7	0.0500	"	"	"	"	"	"	
Sodium	0.270	0.0500	"	"	"	"	"	"	

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Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG05@1'
2501188-22 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0103	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.7		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0879	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.01		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

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Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG05@2'
2501188-23 (Soil)

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Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 12:04**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1204	02/21/25	02/25/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 12:04**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.91	0.200	mg/kg dry	1	BIB1693	02/28/25	03/19/25	EPA 6020B	
Barium	54.7	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.14	0.400	"	"	"	"	"	"	
Lead	4.15	0.200	"	"	"	"	"	"	
Nickel	3.49	0.400	"	"	"	"	"	"	
Silver	0.0291	0.0200	"	"	"	"	"	"	
Zinc	14.0	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 12:04**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0043	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 12:04**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	14.4	0.0500	mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	16.7	0.0500	"	"	"	"	"	"	
Sodium	0.419	0.0500	"	"	"	"	"	"	

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Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG05@2'
2501188-23 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0178	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.6		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0851	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.02		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

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Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG05@2.5'
2501188-24 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 12:06**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1204	02/21/25	02/25/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 12:06**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.80	0.200	mg/kg dry	1	BIB1693	02/28/25	03/19/25	EPA 6020B	
Barium	50.9	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.90	0.400	"	"	"	"	"	"	
Lead	4.46	0.200	"	"	"	"	"	"	
Nickel	3.23	0.400	"	"	"	"	"	"	
Silver	0.0268	0.0200	"	"	"	"	"	"	
Zinc	13.1	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 12:06**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0043	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 12:06**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	14.3	0.0500	mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	22.2	0.0500	"	"	"	"	"	"	
Sodium	0.325	0.0500	"	"	"	"	"	"	

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Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG05@2.5'
2501188-24 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0125	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.7		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0850	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.08		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

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6855 W. 119th Ave.
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Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG05@4'
2501188-25 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/14/25 12:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BIB1204	02/21/25	02/25/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/14/25 12:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	3.86	0.200	mg/kg dry	1	BIB1693	02/28/25	03/19/25	EPA 6020B	
Barium	81.0	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	4.20	0.400	"	"	"	"	"	"	
Lead	6.90	0.200	"	"	"	"	"	"	
Nickel	5.75	0.400	"	"	"	"	"	"	
Silver	0.0917	0.0200	"	"	"	"	"	"	
Zinc	18.5	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/14/25 12:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0043	02/03/25	02/05/25	EPA 7196A	

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

Date Sampled: **01/14/25 12:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	8.68	0.0500	mg/L dry	1	BIB0353	02/07/25	02/20/25	EPA 6020B	
Magnesium	4.34	0.0500	"	"	"	"	"	"	
Sodium	2.98	0.0500	"	"	"	"	"	"	

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Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

BKG05@4'
2501188-25 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/14/25 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.206	0.00100	units	1	BIB1211	02/21/25	02/21/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/14/25 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.6		%	1	BIB0008	02/03/25	02/03/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/14/25 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.152	0.0100	mmhos/cm	1	BIB0354	02/07/25	02/10/25	EPA 120.1	

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

Date Sampled: **01/14/25 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.94		pH Units	1	BIB0355	02/07/25	02/10/25	EPA 9045D	

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Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

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

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

Batch BIB1202 - EPA 3050B

Blank (BIB1202-BLK1)										
					Prepared: 02/21/25 Analyzed: 03/06/25					
Boron	ND	2.00	mg/L							
LCS (BIB1202-BS1)										
					Prepared: 02/21/25 Analyzed: 03/06/25					
Boron	4.71	2.00	mg/L	5.00	94.2	80-120				
Duplicate (BIB1202-DUP1)										
					Source: 2501184-01 Prepared: 02/21/25 Analyzed: 03/06/25					
Boron	0.371	2.00	mg/L		0.365		1.52	20		
Matrix Spike (BIB1202-MS1)										
					Source: 2501184-01 Prepared: 02/21/25 Analyzed: 03/06/25					
Boron	5.08	2.00	mg/L	4.98	0.365	94.8	75-125			
Matrix Spike Dup (BIB1202-MSD1)										
					Source: 2501184-01 Prepared: 02/21/25 Analyzed: 03/06/25					
Boron	5.02	2.00	mg/L	4.98	0.365	93.6	75-125	1.12	25	

Batch BIB1203 - EPA 3050B

Blank (BIB1203-BLK1)										
					Prepared: 02/21/25 Analyzed: 03/06/25					
Boron	ND	2.00	mg/L							
LCS (BIB1203-BS1)										
					Prepared: 02/21/25 Analyzed: 03/06/25					
Boron	4.66	2.00	mg/L	5.00	93.2	80-120				
Duplicate (BIB1203-DUP1)										
					Source: 2501188-03 Prepared: 02/21/25 Analyzed: 03/06/25					
Boron	0.200	2.00	mg/L		0.215		7.17	20		
Matrix Spike (BIB1203-MS1)										
					Source: 2501188-03 Prepared: 02/21/25 Analyzed: 03/06/25					
Boron	4.83	2.00	mg/L	5.00	0.215	92.3	75-125			

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Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

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 BIB1203 - EPA 3050B

Matrix Spike Dup (BIB1203-MSD1)		Source: 2501188-03			Prepared: 02/21/25		Analyzed: 03/06/25			
Boron	5.11	2.00	mg/L	5.00	0.215	98.0	75-125	5.75	25	

Batch BIB1204 - EPA 3050B

Blank (BIB1204-BLK1)					Prepared: 02/21/25		Analyzed: 02/25/25			
Boron	ND	2.00	mg/L							

LCS (BIB1204-BS1)					Prepared: 02/21/25		Analyzed: 02/25/25			
Boron	4.59	2.00	mg/L	5.00	91.8	80-120				

Duplicate (BIB1204-DUP1)		Source: 2501188-23			Prepared: 02/21/25		Analyzed: 02/25/25			
Boron	0.0594	2.00	mg/L		0.0626			5.23	20	

Matrix Spike (BIB1204-MS1)		Source: 2501188-23			Prepared: 02/21/25		Analyzed: 02/25/25			
Boron	4.80	2.00	mg/L	5.00	0.0626	94.7	75-125			

Matrix Spike Dup (BIB1204-MSD1)		Source: 2501188-23			Prepared: 02/21/25		Analyzed: 02/25/25			
Boron	4.76	2.00	mg/L	5.00	0.0626	93.9	75-125	0.921	25	

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Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BIB1692 - EPA 3050B

Blank (BIB1692-BLK1)

Prepared: 02/28/25 Analyzed: 03/19/25

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 (BIB1692-BS1)

Prepared: 02/28/25 Analyzed: 03/19/25

Arsenic	38.2	0.200	mg/kg wet	38.5	99.3	80-120
Barium	39.1	0.400	"	38.5	102	80-120
Cadmium	1.98	0.200	"	1.92	103	80-120
Copper	37.9	0.400	"	38.5	98.6	80-120
Lead	19.4	0.200	"	19.2	101	80-120
Nickel	38.3	0.400	"	38.5	99.5	80-120
Silver	2.01	0.0200	"	1.92	105	80-120
Zinc	36.8	0.400	"	38.5	95.6	80-120
Selenium	4.28	0.260	"	3.85	111	80-120

Duplicate (BIB1692-DUP1)

Source: 2501188-01

Prepared: 02/28/25 Analyzed: 03/19/25

Arsenic	1.38	0.200	mg/kg dry	1.35	2.57	20
Barium	69.7	0.400	"	69.2	0.679	20
Cadmium	0.277	0.200	"	0.277	0.0325	20
Copper	5.24	0.400	"	5.19	1.06	20
Lead	7.92	0.200	"	8.14	2.71	20
Nickel	4.46	0.400	"	4.24	5.01	20
Silver	0.0335	0.0200	"	0.0335	0.0108	20
Zinc	19.5	0.400	"	19.1	2.24	20
Selenium	ND	0.260	"	ND		20

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

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 BIB1692 - EPA 3050B

Matrix Spike (BIB1692-MS1)		Source: 2501188-01			Prepared: 02/28/25		Analyzed: 03/19/25				
Arsenic	30.9	0.200	mg/kg dry	45.8	1.35	64.4	75-125				QM-05
Barium	126	0.400	"	45.8	69.2	123	75-125				
Cadmium	2.57	0.200	"	2.29	0.277	100	75-125				
Copper	34.3	0.400	"	45.8	5.19	63.6	75-125				QM-05
Lead	30.9	0.200	"	22.9	8.14	99.5	75-125				
Nickel	34.4	0.400	"	45.8	4.24	65.7	75-125				QM-05
Silver	2.27	0.0200	"	2.29	0.0335	97.6	75-125				
Zinc	50.2	0.400	"	45.8	19.1	68.0	75-125				QM-05
Selenium	4.78	0.260	"	4.58	ND	104	75-125				

Matrix Spike Dup (BIB1692-MSD1)		Source: 2501188-01			Prepared: 02/28/25		Analyzed: 03/19/25				
Arsenic	30.1	0.200	mg/kg dry	44.4	1.35	64.8	75-125	2.58	25		QM-05
Barium	120	0.400	"	44.4	69.2	113	75-125	4.92	25		
Cadmium	2.35	0.200	"	2.22	0.277	93.5	75-125	8.84	25		
Copper	34.0	0.400	"	44.4	5.19	64.9	75-125	0.976	25		QM-05
Lead	28.8	0.200	"	22.2	8.14	93.0	75-125	7.23	25		
Nickel	33.7	0.400	"	44.4	4.24	66.3	75-125	2.02	25		QM-05
Silver	2.07	0.0200	"	2.22	0.0335	91.7	75-125	9.38	25		
Zinc	48.5	0.400	"	44.4	19.1	66.3	75-125	3.53	25		QM-05
Selenium	4.36	0.260	"	4.44	ND	98.3	75-125	9.24	25		

Batch BIB1693 - EPA 3050B

Blank (BIB1693-BLK1)					Prepared: 02/28/25		Analyzed: 03/19/25				
Arsenic	ND	0.200	mg/kg wet								
Barium	ND	0.400	"								
Cadmium	ND	0.200	"								
Copper	ND	0.400	"								
Lead	ND	0.200	"								
Nickel	ND	0.400	"								
Silver	ND	0.0200	"								
Zinc	ND	0.400	"								
Selenium	ND	0.260	"								

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

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 BIB1693 - EPA 3050B

LCS (BIB1693-BS1)

Prepared: 02/28/25 Analyzed: 03/19/25

Arsenic	40.2	0.200	mg/kg wet	41.0		98.1	80-120			
Barium	42.2	0.400	"	41.0		103	80-120			
Cadmium	2.10	0.200	"	2.05		102	80-120			
Copper	43.0	0.400	"	41.0		105	80-120			
Lead	20.9	0.200	"	20.5		102	80-120			
Nickel	42.5	0.400	"	41.0		104	80-120			
Silver	2.08	0.0200	"	2.05		102	80-120			
Zinc	42.7	0.400	"	41.0		104	80-120			
Selenium	3.92	0.260	"	4.10		95.7	80-120			

Duplicate (BIB1693-DUP1)

Source: 2501188-20

Prepared: 02/28/25 Analyzed: 03/19/25

Arsenic	1.54	0.200	mg/kg dry		1.56			1.19	20	
Barium	52.0	0.400	"		53.6			3.07	20	
Cadmium	0.170	0.200	"		0.178			4.60	20	
Copper	3.43	0.400	"		6.03			55.0	20	QR-04
Lead	4.59	0.200	"		4.75			3.43	20	
Nickel	3.76	0.400	"		3.84			2.17	20	
Silver	0.0322	0.0200	"		0.0360			11.2	20	
Zinc	14.0	0.400	"		16.0			13.3	20	
Selenium	ND	0.260	"		ND				20	

Matrix Spike (BIB1693-MS1)

Source: 2501188-20

Prepared: 02/28/25 Analyzed: 03/19/25

Arsenic	41.4	0.200	mg/kg dry	40.6	1.56	98.3	75-125			
Barium	93.6	0.400	"	40.6	53.6	98.6	75-125			
Cadmium	2.18	0.200	"	2.03	0.178	98.6	75-125			
Copper	33.0	0.400	"	40.6	6.03	66.4	75-125			QM-05
Lead	24.8	0.200	"	20.3	4.75	98.6	75-125			
Nickel	33.5	0.400	"	40.6	3.84	73.2	75-125			QM-05
Silver	1.99	0.0200	"	2.03	0.0360	96.2	75-125			
Zinc	45.9	0.400	"	40.6	16.0	73.7	75-125			QM-05
Selenium	3.35	0.260	"	4.06	ND	82.6	75-125			

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BIB1693 - EPA 3050B

Matrix Spike Dup (BIB1693-MSD1)	Source: 2501188-20			Prepared: 02/28/25 Analyzed: 03/19/25						
Arsenic	42.0	0.200	mg/kg dry	41.2	1.56	98.0	75-125	1.22	25	
Barium	97.1	0.400	"	41.2	53.6	105	75-125	3.60	25	
Cadmium	2.28	0.200	"	2.06	0.178	102	75-125	4.56	25	
Copper	33.4	0.400	"	41.2	6.03	66.3	75-125	1.21	25	QM-05
Lead	25.6	0.200	"	20.6	4.75	101	75-125	3.40	25	
Nickel	33.8	0.400	"	41.2	3.84	72.8	75-125	0.902	25	QM-05
Silver	2.08	0.0200	"	2.06	0.0360	99.2	75-125	4.58	25	
Zinc	46.1	0.400	"	41.2	16.0	72.9	75-125	0.368	25	QM-05
Selenium	3.48	0.260	"	4.12	ND	84.5	75-125	3.77	25	

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Tasman Geosciences
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Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16
Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BIB0042 - 3060A Mod

Blank (BIB0042-BLK1)											
Prepared: 02/03/25 Analyzed: 02/05/25											
Chromium, Hexavalent	ND	0.30	mg/kg wet								
LCS (BIB0042-BS1)											
Prepared: 02/03/25 Analyzed: 02/05/25											
Chromium, Hexavalent	26.3	0.30	mg/kg wet	24.5		107	80-120				
Duplicate (BIB0042-DUP1)											
Source: 2501188-01 Prepared: 02/03/25 Analyzed: 02/05/25											
Chromium, Hexavalent	ND	0.30	mg/kg dry		ND					20	
Matrix Spike (BIB0042-MS1)											
Source: 2501188-01 Prepared: 02/03/25 Analyzed: 02/05/25											
Chromium, Hexavalent	29.5	0.30	mg/kg dry	28.8	ND	102	75-125				
Matrix Spike Dup (BIB0042-MSD1)											
Source: 2501188-01 Prepared: 02/03/25 Analyzed: 02/05/25											
Chromium, Hexavalent	30.1	0.30	mg/kg dry	29.1	ND	103	75-125	1.81		20	

Batch BIB0043 - 3060A Mod

Blank (BIB0043-BLK1)											
Prepared: 02/03/25 Analyzed: 02/05/25											
Chromium, Hexavalent	ND	0.30	mg/kg wet								
LCS (BIB0043-BS1)											
Prepared: 02/03/25 Analyzed: 02/05/25											
Chromium, Hexavalent	28.0	0.30	mg/kg wet	26.0		108	80-120				
Duplicate (BIB0043-DUP1)											
Source: 2501186-01 Prepared: 02/03/25 Analyzed: 02/05/25											
Chromium, Hexavalent	ND	0.30	mg/kg dry		ND					20	
Matrix Spike (BIB0043-MS1)											
Source: 2501186-01 Prepared: 02/03/25 Analyzed: 02/05/25											
Chromium, Hexavalent	30.0	0.30	mg/kg dry	29.4	ND	102	75-125				

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Tasman Geosciences
 6855 W. 119th Ave.
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Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
 Project Manager: Mike Medina

Reported:
 03/20/25 10:30

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 BIB0043 - 3060A Mod

Matrix Spike Dup (BIB0043-MSD1)

Source: 2501186-01

Prepared: 02/03/25 Analyzed: 02/05/25

Chromium, Hexavalent	31.2	0.30	mg/kg dry	30.6	ND	102	75-125	4.00	20	
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

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 BIB0353 - General Preparation

Blank (BIB0353-BLK1)

Prepared: 02/07/25 Analyzed: 02/18/25

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

LCS (BIB0353-BS1)

Prepared: 02/07/25 Analyzed: 02/18/25

Calcium	5.11	0.0500	mg/L wet	5.00	102	70-130				
Magnesium	4.99	0.0500	"	5.00	99.9	70-130				
Sodium	5.17	0.0500	"	5.00	103	70-130				

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

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

Summit Scientific

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

Batch BIB0008 - General Preparation

Duplicate (BIB0008-DUP1)

Source: 2501188-01

Prepared & Analyzed: 02/03/25

% Solids	88.8	%		89.4		0.690	20
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

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

Summit Scientific

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

Batch BIB0354 - General Preparation

Blank (BIB0354-BLK1)

Prepared: 02/07/25 Analyzed: 02/10/25

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BIB0354-BS1)

Prepared: 02/07/25 Analyzed: 02/10/25

Specific Conductance (EC) 0.151 0.0100 mmhos/cm 0.150 101 95-105

Duplicate (BIB0354-DUP1)

Source: 2501187-01

Prepared: 02/07/25 Analyzed: 02/10/25

Specific Conductance (EC) 0.494 0.0100 mmhos/cm 0.465 6.11 20

Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

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

Summit Scientific

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

Batch BIB0355 - General Preparation

LCS (BIB0355-BS1)

Prepared: 02/07/25 Analyzed: 02/10/25

pH	9.12	pH Units	9.18	99.3	95-105
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Duplicate (BIB0355-DUP1)

Source: 2501187-01

Prepared: 02/07/25 Analyzed: 02/10/25

pH	8.16	pH Units	8.32	1.94	20
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Summit Scientific

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

Project: Noble - Wolfe USX CC07-16

Project Number: UWRWE-A4002-ABN
Project Manager: Mike Medina

Reported:
03/20/25 10:30

Notes and Definitions

- QR-04 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values. Only applies to source/DUP and MS/MSD pairs.
- 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.
- 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