

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

January 06, 2025

Jacob Whritenour

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - Torres USX AB 35-09

Work Order #2411299

Enclosed are the results of analyses for samples received by Summit Scientific on 11/15/24 18:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Jacob Wood". The signature is written in a cursive style with a large initial "J" and a distinct "W".

Jacob Wood For Paul Shrewsbury

President



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

Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01-03@4'	2411299-01	Soil	11/15/24 11:58	11/15/24 18:20
FL01-06@4'	2411299-02	Soil	11/15/24 12:31	11/15/24 18:20

### Case Narrative

This project has been renamed per client request on 01/06/2025.

This is a revision of the report originally sent on 01/02/2025 at 11:54 AM MT.

Summit Scientific

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Client: Tasman, Inc.		Project Manager: Daniel Simpson <sup>Mr</sup> <i>Mike Medina</i>		Send Data To: <i>tasman-geo.com</i>		Send Invoice To:	
Address: 6855 W. 119th Ave.		E-Mail: <del>Tas-chevron-5@tasman-geo.com</del> <sup>Mr</sup> <i>tas-chevron-2@tasman-geo.com</i>		Company: <i>Noble Energy, Inc</i>		Project Name/Location: <i>Torres-USK AB 35-9</i>	
City/State/Zip: Broomfield / CO / 80020		<i>cbvof27@chevron.com, jason.davidson@chevron.com</i>		AFE#: <i>UNRWE-AM149-ABN</i>		PO/Billing Codes:	
Phone: 303-487-1228		Project Name: <i>Torres-USK AB</i>		Contact: <i>Mike Montoya</i> <sup>Mr</sup> <i>Wade Firestein</i>			
Sampler Name: <i>Mckenzie Reynolds</i>		Project Number:					

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	<i>FL01-0304'</i>	<i>11/15/24</i>	<i>1158</i>	<i>2</i>			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		SAR, EC, pH by saturated paste	
2	<i>FL01-0604'</i>	<i>L</i>	<i>1231</i>	<i>L</i>			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
3																						
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15																						

Relinquished by: <i>[Signature]</i>	Date/Time: <i>11/15/2024 1630</i>	Received by: Tasman Lockbox	Date/Time: <i>11/15/2024 1630</i>	TAT Business Days	Field DO	Notes:
Relinquished by: <i>Tasman Lockbox</i>	Date/Time: <i>11/15/24 1815</i>	Received by: <i>[Signature]</i>	Date/Time: <i>11/15/24 1720</i>	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: <i>3.8</i>	Corrected Temperature	IR gun #: <i>2</i>	HNO3 lot #:	Standard	<input checked="" type="checkbox"/> Field Turb.	

S<sub>2</sub>

Sample Receipt Checklist

S2 Work Order# 2411299

Client: Noble/Tasman Client Project ID: Torres-USX AB

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

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

Temp (°C) 3.8 Thermometer # 2

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

Additional Comments (if any):

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

AS  
Custodian Printed Name

11/15/24  
Date/Time



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

Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

**FL01-03@4'**  
**2411299-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **11/15/24 11:58**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHK0987	11/19/24	11/20/24	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **11/15/24 11:58**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0435	109 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0398	99.5 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0383	95.8 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **11/15/24 11:58**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHK0988	11/19/24	11/22/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **11/15/24 11:58**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.66	69.3 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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**Reported:**  
01/06/25 10:38

**FL01-03@4'**  
**2411299-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **11/15/24 11:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHK1110	11/21/24	11/23/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **11/15/24 11:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0235	70.6 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0218	65.4 %	40-140		"	"	"	"	

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

Date Sampled: **11/15/24 11:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHK1381	11/27/24	12/02/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **11/15/24 11:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

**FL01-03@4'**  
**2411299-01 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.54	0.200	mg/kg dry	1	BHL0400	12/10/24	12/12/24	EPA 6020B	
Barium	98.8	0.400	"	"	"	"	"	"	
Cadmium	0.264	0.200	"	"	"	"	"	"	
Copper	5.02	0.400	"	"	"	"	"	"	
Lead	8.74	0.200	"	"	"	"	"	"	
Nickel	5.39	0.400	"	"	"	"	"	"	
Silver	0.0493	0.0200	"	"	"	"	"	"	
Zinc	22.6	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: 11/15/24 11:58

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0101	12/03/24	12/04/24	EPA 7196A	

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

Date Sampled: 11/15/24 11:58

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	56.3	0.0500	mg/L dry	1	BHL0422	12/10/24	12/14/24	EPA 6020B	
Magnesium	29.9	0.0500	"	"	"	"	"	"	
Sodium	88.9	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: 11/15/24 11:58

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.38	0.00100	units	1	BHL0674	12/16/24	12/16/24	Calculation	

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

Date Sampled: 11/15/24 11:58

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Reported:**  
01/06/25 10:38

**FL01-03@4'**  
**2411299-01 (Soil)**

**Summit Scientific**

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

<b>% Solids</b>	<b>86.5</b>	%	1	BHK1121	11/21/24	11/21/24	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **11/15/24 11:58**


Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Specific Conductance (EC)</b>	<b>0.864</b>	0.0100	mmhos/cm	1	BHL0424	12/10/24	12/12/24	EPA 120.1	

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

Date Sampled: **11/15/24 11:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>pH</b>	<b>8.15</b>		pH Units	1	BHL0423	12/10/24	12/12/24	EPA 9045D	

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Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
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**Reported:**  
01/06/25 10:38

**FL01-06@4'**  
**2411299-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **11/15/24 12:31**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHK0987	11/19/24	11/20/24	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **11/15/24 12:31**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0427	107 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0400	100 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0388	97.1 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **11/15/24 12:31**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHK0988	11/19/24	11/22/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **11/15/24 12:31**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	10.8	86.1 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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01/06/25 10:38

**FL01-06@4'**  
**2411299-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **11/15/24 12:31**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHK1110	11/21/24	11/23/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **11/15/24 12:31**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0252	75.5 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0254	76.3 %	40-140		"	"	"	"	

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

Date Sampled: **11/15/24 12:31**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHK1381	11/27/24	12/02/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **11/15/24 12:31**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

**FL01-06@4'**  
**2411299-02 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	3.42	0.200	mg/kg dry	1	BHL0400	12/10/24	12/12/24	EPA 6020B
Barium	76.0	0.400	"	"	"	"	"	"
Cadmium	0.239	0.200	"	"	"	"	"	"
Copper	3.97	0.400	"	"	"	"	"	"
Lead	7.86	0.200	"	"	"	"	"	"
Nickel	5.42	0.400	"	"	"	"	"	"
Silver	0.0295	0.0200	"	"	"	"	"	"
Zinc	36.4	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: 11/15/24 12:31

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0101	12/03/24	12/04/24	EPA 7196A	

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

Date Sampled: 11/15/24 12:31

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	148	0.0500	mg/L dry	1	BHL0422	12/10/24	12/14/24	EPA 6020B	
Magnesium	64.5	0.0500	"	"	"	"	"	"	
Sodium	142	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: 11/15/24 12:31

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.45	0.00100	units	1	BHL0674	12/16/24	12/16/24	Calculation	

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

Date Sampled: 11/15/24 12:31

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

Project: Noble - Torres USX AB 35-09  
Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

**FL01-06@4'**  
**2411299-02 (Soil)**

**Summit Scientific**

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

<b>% Solids</b>	<b>86.8</b>	%	1	BHK1121	11/21/24	11/21/24	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **11/15/24 12:31**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Specific Conductance (EC)</b>	<b>1.80</b>	0.0100	mmhos/cm	1	BHL0424	12/10/24	12/12/24	EPA 120.1	

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

Date Sampled: **11/15/24 12:31**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>pH</b>	<b>8.13</b>		pH Units	1	BHL0423	12/10/24	12/12/24	EPA 9045D	

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

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

#### Summit Scientific

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

#### Batch BHK0987 - EPA 5030 Soil MS

##### Blank (BHK0987-BLK1)

Prepared & Analyzed: 11/19/24

Benzene	ND	0.0020	mg/kg								
Toluene	ND	0.0050	"								
Ethylbenzene	ND	0.0050	"								
Xylenes (total)	ND	0.010	"								
1,2,4-Trimethylbenzene	ND	0.0050	"								
1,3,5-Trimethylbenzene	ND	0.0050	"								
Naphthalene	ND	0.0038	"								
Gasoline Range Hydrocarbons	ND	0.50	"								
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0405</i>		<i>"</i>	<i>0.0400</i>		<i>101</i>	<i>50-150</i>				
<i>Surrogate: Toluene-d8</i>	<i>0.0400</i>		<i>"</i>	<i>0.0400</i>		<i>99.9</i>	<i>50-150</i>				
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0390</i>		<i>"</i>	<i>0.0400</i>		<i>97.4</i>	<i>50-150</i>				

##### LCS (BHK0987-BS1)

Prepared & Analyzed: 11/19/24

Benzene	0.120	0.0020	mg/kg	0.100		120	70-130				
Toluene	0.119	0.0050	"	0.100		119	70-130				
Ethylbenzene	0.127	0.0050	"	0.100		127	70-130				
m,p-Xylene	0.250	0.010	"	0.200		125	70-130				
o-Xylene	0.119	0.0050	"	0.100		119	70-130				
1,2,4-Trimethylbenzene	0.122	0.0050	"	0.100		122	70-130				
1,3,5-Trimethylbenzene	0.123	0.0050	"	0.100		123	70-130				
Naphthalene	0.105	0.0038	"	0.100		105	70-130				
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0410</i>		<i>"</i>	<i>0.0400</i>		<i>102</i>	<i>50-150</i>				
<i>Surrogate: Toluene-d8</i>	<i>0.0400</i>		<i>"</i>	<i>0.0400</i>		<i>100</i>	<i>50-150</i>				
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0393</i>		<i>"</i>	<i>0.0400</i>		<i>98.3</i>	<i>50-150</i>				

##### Matrix Spike (BHK0987-MS1)

Source: 2411286-01

Prepared & Analyzed: 11/19/24

Benzene	0.110	0.0020	mg/kg	0.100	ND	110	70-130				
Toluene	0.109	0.0050	"	0.100	ND	109	70-130				
Ethylbenzene	0.114	0.0050	"	0.100	ND	114	70-130				
m,p-Xylene	0.224	0.010	"	0.200	ND	112	70-130				
o-Xylene	0.107	0.0050	"	0.100	ND	107	70-130				
1,2,4-Trimethylbenzene	0.108	0.0050	"	0.100	ND	108	70-130				
1,3,5-Trimethylbenzene	0.109	0.0050	"	0.100	ND	109	70-130				
Naphthalene	0.0975	0.0038	"	0.100	ND	97.5	70-130				
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0427</i>		<i>"</i>	<i>0.0400</i>		<i>107</i>	<i>50-150</i>				
<i>Surrogate: Toluene-d8</i>	<i>0.0407</i>		<i>"</i>	<i>0.0400</i>		<i>102</i>	<i>50-150</i>				
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0388</i>		<i>"</i>	<i>0.0400</i>		<i>96.9</i>	<i>50-150</i>				

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

Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

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

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

**Batch BHK0987 - EPA 5030 Soil MS**

<b>Matrix Spike Dup (BHK0987-MSD1)</b>	<b>Source: 2411286-01</b>			<b>Prepared &amp; Analyzed: 11/19/24</b>						
Benzene	0.107	0.0020	mg/kg	0.100	ND	107	70-130	2.72	30	
Toluene	0.106	0.0050	"	0.100	ND	106	70-130	3.16	30	
Ethylbenzene	0.111	0.0050	"	0.100	ND	111	70-130	3.22	30	
m,p-Xylene	0.218	0.010	"	0.200	ND	109	70-130	2.86	30	
o-Xylene	0.105	0.0050	"	0.100	ND	105	70-130	2.49	30	
1,2,4-Trimethylbenzene	0.104	0.0050	"	0.100	ND	104	70-130	4.06	30	
1,3,5-Trimethylbenzene	0.105	0.0050	"	0.100	ND	105	70-130	3.90	30	
Naphthalene	0.0944	0.0038	"	0.100	ND	94.4	70-130	3.25	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0422</i>		<i>"</i>	<i>0.0400</i>		<i>106</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0404</i>		<i>"</i>	<i>0.0400</i>		<i>101</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0392</i>		<i>"</i>	<i>0.0400</i>		<i>98.0</i>	<i>50-150</i>			

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Torres USX AB 35-09  
Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

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

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

**Batch BHK0988 - EPA 3550A**

**Blank (BHK0988-BLK1)**

Prepared & Analyzed: 11/19/24

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	10.3		"	12.5		82.4		30-150			

**LCS (BHK0988-BS1)**

Prepared & Analyzed: 11/19/24

C10-C28 (DRO)	392	50	mg/kg	500		78.4		70-130			
Surrogate: <i>o</i> -Terphenyl	13.0		"	12.5		104		30-150			

**Matrix Spike (BHK0988-MS1)**

Source: 2411286-01

Prepared & Analyzed: 11/19/24

C10-C28 (DRO)	410	50	mg/kg	500	17.4	78.5		70-130			
Surrogate: <i>o</i> -Terphenyl	14.2		"	12.5		114		30-150			

**Matrix Spike Dup (BHK0988-MSD1)**

Source: 2411286-01

Prepared & Analyzed: 11/19/24

C10-C28 (DRO)	397	50	mg/kg	500	17.4	75.9		70-130	3.26	20	
Surrogate: <i>o</i> -Terphenyl	13.0		"	12.5		104		30-150			

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6855 W. 119th Ave.  
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Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

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

**Summit Scientific**

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

**Batch BHK1110 - EPA 5030 Soil MS**

**Blank (BHK1110-BLK1)**

Prepared: 11/21/24 Analyzed: 11/23/24

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0242</i>		"	<i>0.0333</i>		<i>72.6</i>	<i>40-140</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0231</i>		"	<i>0.0333</i>		<i>69.4</i>	<i>40-140</i>			

**LCS (BHK1110-BS1)**

Prepared: 11/21/24 Analyzed: 11/23/24

Acenaphthene	0.0243	0.00500	mg/kg	0.0333		72.9	40-140			
Anthracene	0.0262	0.00500	"	0.0333		78.5	40-140			
Benzo (a) anthracene	0.0280	0.00500	"	0.0333		83.9	40-140			
Benzo (a) pyrene	0.0236	0.00500	"	0.0333		70.8	40-140			
Benzo (b) fluoranthene	0.0254	0.00500	"	0.0333		76.2	40-140			
Benzo (k) fluoranthene	0.0239	0.00500	"	0.0333		71.6	40-140			
Chrysene	0.0246	0.00500	"	0.0333		73.7	40-140			
Dibenz (a,h) anthracene	0.0227	0.00500	"	0.0333		68.2	40-140			
Fluoranthene	0.0260	0.00500	"	0.0333		78.0	40-140			
Fluorene	0.0255	0.00500	"	0.0333		76.4	40-140			
Indeno (1,2,3-cd) pyrene	0.0284	0.00500	"	0.0333		85.1	40-140			
Pyrene	0.0256	0.00500	"	0.0333		76.8	40-140			
1-Methylnaphthalene	0.0251	0.00500	"	0.0333		75.2	40-140			
2-Methylnaphthalene	0.0262	0.00500	"	0.0333		78.5	40-140			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0273</i>		"	<i>0.0333</i>		<i>81.8</i>	<i>40-140</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0256</i>		"	<i>0.0333</i>		<i>76.9</i>	<i>40-140</i>			

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

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

**Summit Scientific**

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

**Batch BHK1110 - EPA 5030 Soil MS**

<b>Matrix Spike (BHK1110-MS1)</b>	<b>Source: 2411299-01</b>			<b>Prepared: 11/21/24 Analyzed: 11/23/24</b>						
Acenaphthene	0.0173	0.00500	mg/kg	0.0333	ND	52.0	40-140			
Anthracene	0.0168	0.00500	"	0.0333	ND	50.3	40-140			
Benzo (a) anthracene	0.0173	0.00500	"	0.0333	ND	51.9	40-140			
Benzo (a) pyrene	0.0140	0.00500	"	0.0333	ND	42.0	40-140			
Benzo (b) fluoranthene	0.0141	0.00500	"	0.0333	ND	42.4	40-140			
Benzo (k) fluoranthene	0.0140	0.00500	"	0.0333	ND	41.9	40-140			
Chrysene	0.0156	0.00500	"	0.0333	ND	46.9	40-140			
Dibenz (a,h) anthracene	0.0160	0.00500	"	0.0333	ND	48.0	40-140			
Fluoranthene	0.0165	0.00500	"	0.0333	ND	49.5	40-140			
Fluorene	0.0180	0.00500	"	0.0333	ND	54.0	40-140			
Indeno (1,2,3-cd) pyrene	0.0149	0.00500	"	0.0333	ND	44.8	40-140			
Pyrene	0.0172	0.00500	"	0.0333	ND	51.7	40-140			
1-Methylnaphthalene	0.0179	0.00500	"	0.0333	ND	53.8	40-140			
2-Methylnaphthalene	0.0196	0.00500	"	0.0333	ND	58.7	40-140			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0199</i>		<i>"</i>	<i>0.0333</i>		<i>59.7</i>	<i>40-140</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0155</i>		<i>"</i>	<i>0.0333</i>		<i>46.6</i>	<i>40-140</i>			

<b>Matrix Spike Dup (BHK1110-MSD1)</b>	<b>Source: 2411299-01</b>			<b>Prepared: 11/21/24 Analyzed: 11/23/24</b>						
Acenaphthene	0.0175	0.00500	mg/kg	0.0333	ND	52.4	40-140	0.877	30	
Anthracene	0.0167	0.00500	"	0.0333	ND	50.1	40-140	0.305	30	
Benzo (a) anthracene	0.0174	0.00500	"	0.0333	ND	52.1	40-140	0.458	30	
Benzo (a) pyrene	0.0140	0.00500	"	0.0333	ND	42.0	40-140	0.131	30	
Benzo (b) fluoranthene	0.0141	0.00500	"	0.0333	ND	42.3	40-140	0.349	30	
Benzo (k) fluoranthene	0.0138	0.00500	"	0.0333	ND	41.4	40-140	1.03	30	
Chrysene	0.0156	0.00500	"	0.0333	ND	46.7	40-140	0.348	30	
Dibenz (a,h) anthracene	0.0156	0.00500	"	0.0333	ND	46.7	40-140	2.80	30	
Fluoranthene	0.0163	0.00500	"	0.0333	ND	49.0	40-140	1.09	30	
Fluorene	0.0177	0.00500	"	0.0333	ND	53.0	40-140	1.92	30	
Indeno (1,2,3-cd) pyrene	0.0161	0.00500	"	0.0333	ND	48.4	40-140	7.64	30	
Pyrene	0.0166	0.00500	"	0.0333	ND	49.7	40-140	3.95	30	
1-Methylnaphthalene	0.0179	0.00500	"	0.0333	ND	53.6	40-140	0.257	30	
2-Methylnaphthalene	0.0188	0.00500	"	0.0333	ND	56.3	40-140	4.13	30	
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0192</i>		<i>"</i>	<i>0.0333</i>		<i>57.5</i>	<i>40-140</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0150</i>		<i>"</i>	<i>0.0333</i>		<i>44.9</i>	<i>40-140</i>			

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

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

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

**Batch BHK1381 - EPA 3050B**

**Blank (BHK1381-BLK1)**

Prepared: 11/27/24 Analyzed: 12/02/24

Boron ND 2.00 mg/L

**LCS (BHK1381-BS1)**

Prepared: 11/27/24 Analyzed: 12/02/24

Boron 5.03 2.00 mg/L 5.00 101 80-120

**Duplicate (BHK1381-DUP1)**

Source: 2411293-01

Prepared: 11/27/24 Analyzed: 12/02/24

Boron 0.205 2.00 mg/L 0.227 10.1 20

**Matrix Spike (BHK1381-MS1)**

Source: 2411293-01

Prepared: 11/27/24 Analyzed: 12/02/24

Boron 5.11 2.00 mg/L 5.00 0.227 97.6 75-125

**Matrix Spike Dup (BHK1381-MSD1)**

Source: 2411293-01

Prepared: 11/27/24 Analyzed: 12/02/24

Boron 5.36 2.00 mg/L 5.00 0.227 103 75-125 4.86 25

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Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

**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 BHL0400 - EPA 3050B**

**Blank (BHL0400-BLK1)**

Prepared: 12/10/24 Analyzed: 12/11/24

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

**LCS (BHL0400-BS1)**

Prepared: 12/10/24 Analyzed: 12/11/24

Arsenic	44.1	0.200	mg/kg wet	41.3	107	80-120
Barium	44.3	0.400	"	41.3	107	80-120
Cadmium	2.32	0.200	"	2.07	113	80-120
Copper	49.3	0.400	"	41.3	119	80-120
Lead	23.6	0.200	"	20.7	114	80-120
Nickel	45.2	0.400	"	41.3	109	80-120
Silver	2.23	0.0200	"	2.07	108	80-120
Zinc	45.3	0.400	"	41.3	110	80-120
Selenium	4.12	0.260	"	4.13	99.6	80-120

**Duplicate (BHL0400-DUP1)**

Source: 2411291-01

Prepared: 12/10/24 Analyzed: 12/11/24

Arsenic	7.36	0.200	mg/kg dry	6.38	14.3	20	
Barium	20.6	0.400	"	15.1	30.5	20	QR-04
Cadmium	0.381	0.200	"	0.275	32.3	20	QR-01
Copper	5.42	0.400	"	4.04	29.1	20	QR-04
Lead	13.8	0.200	"	10.9	23.9	20	QR-04
Nickel	15.3	0.400	"	4.98	102	20	QR-04
Silver	0.0607	0.0200	"	0.0558	8.41	20	
Zinc	20.5	0.400	"	21.2	3.26	20	
Selenium	ND	0.260	"	ND		20	

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

**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 BHL0400 - EPA 3050B**

**Matrix Spike (BHL0400-MS1)**

Source: 2411291-01

Prepared: 12/10/24 Analyzed: 12/11/24

Arsenic	56.4	0.200	mg/kg dry	44.7	6.38	112	75-125				
Barium	95.7	0.400	"	44.7	15.1	180	75-125				QM-05
Cadmium	3.32	0.200	"	2.23	0.275	137	75-125				QM-05
Copper	39.8	0.400	"	44.7	4.04	80.0	75-125				
Lead	40.8	0.200	"	22.3	10.9	134	75-125				QM-05
Nickel	38.1	0.400	"	44.7	4.98	74.1	75-125				QM-05
Silver	2.76	0.0200	"	2.23	0.0558	121	75-125				
Zinc	53.7	0.400	"	44.7	21.2	72.7	75-125				QM-05
Selenium	4.58	0.260	"	4.47	ND	103	75-125				

**Matrix Spike Dup (BHL0400-MSD1)**

Source: 2411291-01

Prepared: 12/10/24 Analyzed: 12/11/24

Arsenic	53.4	0.200	mg/kg dry	45.4	6.38	104	75-125	5.39	25		
Barium	73.1	0.400	"	45.4	15.1	128	75-125	26.8	25		QM-05
Cadmium	3.07	0.200	"	2.27	0.275	123	75-125	7.92	25		
Copper	38.5	0.400	"	45.4	4.04	76.0	75-125	3.12	25		
Lead	38.2	0.200	"	22.7	10.9	121	75-125	6.58	25		
Nickel	37.0	0.400	"	45.4	4.98	70.5	75-125	2.92	25		QM-05
Silver	2.57	0.0200	"	2.27	0.0558	111	75-125	7.20	25		
Zinc	53.7	0.400	"	45.4	21.2	71.6	75-125	0.0234	25		QM-05
Selenium	4.17	0.260	"	4.54	ND	91.8	75-125	9.48	25		

Summit Scientific

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

Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

**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 BHL0101 - 3060A Mod**

**Blank (BHL0101-BLK1)**

Prepared: 12/03/24 Analyzed: 12/04/24

Chromium, Hexavalent ND 0.30 mg/kg wet

**LCS (BHL0101-BS1)**

Prepared: 12/03/24 Analyzed: 12/04/24

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

**Duplicate (BHL0101-DUP1)**

**Source: 2411291-01**

Prepared: 12/03/24 Analyzed: 12/04/24

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

**Matrix Spike (BHL0101-MS1)**

**Source: 2411291-01**

Prepared: 12/03/24 Analyzed: 12/04/24

Chromium, Hexavalent 29.2 0.30 mg/kg dry 28.1 ND 104 75-125

**Matrix Spike Dup (BHL0101-MSD1)**

**Source: 2411291-01**

Prepared: 12/03/24 Analyzed: 12/04/24

Chromium, Hexavalent 29.4 0.30 mg/kg dry 28.1 ND 105 75-125 0.768 20

Summit Scientific

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

Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

**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 BHL0422 - General Preparation**

**Blank (BHL0422-BLK1)**

Prepared: 12/10/24 Analyzed: 12/14/24

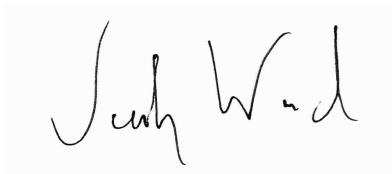
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							

**LCS (BHL0422-BS1)**

Prepared: 12/10/24 Analyzed: 12/14/24

Calcium	5.34	0.0500	mg/L wet	5.00		107	70-130			
Magnesium	5.03	0.0500	"	5.00		101	70-130			
Sodium	5.02	0.0500	"	5.00		100	70-130			

Summit Scientific



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

Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
 Project Manager: Jacob Whritenour

**Reported:**  
 01/06/25 10:38

**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 BHK1121 - General Preparation**


**Duplicate (BHK1121-DUP1)**

**Source: 2411272-01**

Prepared & Analyzed: 11/21/24

% Solids	77.6		%		79.9			2.90	20	
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Summit Scientific



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

Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

**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 BHL0424 - General Preparation**

**Blank (BHL0424-BLK1)**

Prepared: 12/10/24 Analyzed: 12/12/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BHL0424-BS1)**

Prepared: 12/10/24 Analyzed: 12/12/24

Specific Conductance (EC) 0.151 0.0100 mmhos/cm 0.150 100 95-105

**Duplicate (BHL0424-DUP1)**

Source: 2411292-01

Prepared: 12/10/24 Analyzed: 12/12/24

Specific Conductance (EC) 1.82 0.0100 mmhos/cm 1.85 1.64 20

Summit Scientific

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

Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
 Project Manager: Jacob Whritenour

**Reported:**  
 01/06/25 10:38

**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 BHL0423 - General Preparation**

**LCS (BHL0423-BS1)**

Prepared: 12/10/24 Analyzed: 12/12/24

pH	9.05	pH Units	9.18	98.6	95-105
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**Duplicate (BHL0423-DUP1)**

Source: 2411292-01

Prepared: 12/10/24 Analyzed: 12/12/24

pH	7.87	pH Units	7.85	0.254	20
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Summit Scientific

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

Project: Noble - Torres USX AB 35-09

Project Number: UWRWE-A4149-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
01/06/25 10:38

### 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.
- QR-01 Analyses are not controlled on RPD values from sample concentrations below the reporting limit. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values.
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values.
- 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