

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

June 24, 2024

Jacob Whritenour
Tasman Geosciences
6855 W. 119th Ave.
Broomfield, CO 80020
RE: Noble - Novacek C28-27D
Work Order #2406083

Enclosed are the results of analyses for samples received by Summit Scientific on 06/06/24 17:53. 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 - Novacek C28-27D

Project Number: UWRWE-A2709-ABN

Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01R-W@3.5'	2406083-01	Soil	06/06/24 13:40	06/06/24 17:53
FL01-01@3.5'	2406083-02	Soil	06/06/24 13:58	06/06/24 17:53
FL01-02@3.5'	2406083-03	Soil	06/06/24 14:24	06/06/24 17:53
FL01-03@3.5'	2406083-04	Soil	06/06/24 14:35	06/06/24 17:53
FL01R-S@3.5'	2406083-05	Soil	06/06/24 14:40	06/06/24 17:53
BKG01@3.5'	2406083-06	Soil	06/06/24 14:40	06/06/24 17:53

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S₂

Sample Receipt Checklist

S2 Work Order# 2406083

Client: Navacek Client Project ID: C78-27D

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"/>	<u>on site</u>
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

6/6/24
Date/Time



Tasman Geosciences
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Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

FL01R-W@3.5'
2406083-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/06/24 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHF0168	06/07/24	06/08/24	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: **06/06/24 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0438	110 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0420	105 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0420	105 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/06/24 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHF0172	06/07/24	06/08/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **06/06/24 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	11.4	91.6 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Reported:
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2406083-01 (Soil)

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PAH by EPA Method 8270D SIM

Date Sampled: **06/06/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHF0170	06/07/24	06/07/24	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: **06/06/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0154	46.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0161	48.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **06/06/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHF0177	06/07/24	06/14/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **06/06/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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FL01R-W@3.5'
2406083-01 (Soil)

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Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	15.4	0.200	mg/kg dry	1	BHF0196	06/07/24	06/13/24	EPA 6020B
Barium	589	0.400	"	"	"	"	"	"
Cadmium	1.20	0.200	"	"	"	"	"	"
Copper	17.5	0.400	"	"	"	"	"	"
Lead	9.67	0.200	"	"	"	"	"	"
Nickel	16.7	0.400	"	"	"	"	"	"
Silver	0.0423	0.0200	"	"	"	"	"	"
Zinc	59.6	0.400	"	"	"	"	"	"
Selenium	0.282	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **06/06/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHF0282	06/11/24	06/11/24	EPA 7196A	

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

Date Sampled: **06/06/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	65.9	0.0500	mg/L dry	1	BHF0271	06/10/24	06/14/24	EPA 6020B	
Magnesium	6.09	0.0500	"	"	"	"	"	"	
Sodium	10.8	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **06/06/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.341	0.00100	units	1	BHF0462	06/17/24	06/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/06/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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2406083-01 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

% Solids	93.5	%	1	BHF0191	06/07/24	06/07/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **06/06/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.267	0.0100	mmhos/cm	1	BHF0273	06/10/24	06/11/24	EPA 120.1	

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

Date Sampled: **06/06/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.39		pH Units	1	BHF0272	06/10/24	06/11/24	EPA 9045D	

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06/24/24 07:58

FL01-01@3.5'
2406083-02 (Soil)

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Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/06/24 13:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHF0168	06/07/24	06/08/24	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: **06/06/24 13:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0420	105 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0430	107 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0440	110 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/06/24 13:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHF0172	06/07/24	06/08/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/06/24 13:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	13.7	109 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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FL01-01@3.5'
2406083-02 (Soil)

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PAH by EPA Method 8270D SIM

Date Sampled: **06/06/24 13:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHF0170	06/07/24	06/07/24	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: **06/06/24 13:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0248	74.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0272	81.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **06/06/24 13:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHF0177	06/07/24	06/14/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **06/06/24 13:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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FL01-01@3.5'
2406083-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.63	0.200	mg/kg dry	1	BHF0196	06/07/24	06/13/24	EPA 6020B	
Barium	15.2	0.400	"	"	"	"	"	"	
Cadmium	0.277	0.200	"	"	"	"	"	"	
Copper	11.8	0.400	"	"	"	"	"	"	
Lead	9.38	0.200	"	"	"	"	"	"	
Nickel	9.53	0.400	"	"	"	"	"	"	
Silver	0.0380	0.0200	"	"	"	"	"	"	
Zinc	53.0	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **06/06/24 13:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHF0282	06/11/24	06/11/24	EPA 7196A	

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

Date Sampled: **06/06/24 13:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	159	0.0500	mg/L dry	1	BHF0271	06/10/24	06/14/24	EPA 6020B	
Magnesium	3.97	0.0500	"	"	"	"	"	"	
Sodium	3.29	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **06/06/24 13:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0704	0.00100	units	1	BHF0462	06/17/24	06/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/06/24 13:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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FL01-01@3.5'
2406083-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	97.9	%	1	BHF0191	06/07/24	06/07/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **06/06/24 13:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.102	0.0100	mmhos/cm	1	BHF0273	06/10/24	06/11/24	EPA 120.1	

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

Date Sampled: **06/06/24 13:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.73		pH Units	1	BHF0272	06/10/24	06/11/24	EPA 9045D	

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FL01-02@3.5'
2406083-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/06/24 14:24**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BHF0168	06/07/24	06/08/24	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: **06/06/24 14:24**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	0.0386	96.4 %	50-150	"	"	"	"	"	
Surrogate: Toluene-d8	0.0423	106 %	50-150	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0402	100 %	50-150	"	"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/06/24 14:24**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	BHF0172	06/07/24	06/08/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/06/24 14:24**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl	14.0	112 %	30-150	"	"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

FL01-02@3.5'
2406083-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **06/06/24 14:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHF0170	06/07/24	06/07/24	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: **06/06/24 14:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0219	65.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0237	71.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **06/06/24 14:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHF0177	06/07/24	06/14/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **06/06/24 14:24**

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 - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

FL01-02@3.5'
2406083-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	8.92	0.200	mg/kg dry	1	BHF0196	06/07/24	06/13/24	EPA 6020B
Barium	20.4	0.400	"	"	"	"	"	"
Cadmium	0.224	0.200	"	"	"	"	"	"
Copper	12.4	0.400	"	"	"	"	"	"
Lead	12.7	0.200	"	"	"	"	"	"
Nickel	13.5	0.400	"	"	"	"	"	"
Silver	0.0377	0.0200	"	"	"	"	"	"
Zinc	65.5	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **06/06/24 14:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHF0282	06/11/24	06/11/24	EPA 7196A	

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

Date Sampled: **06/06/24 14:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	78.8	0.0500	mg/L dry	1	BHF0271	06/10/24	06/14/24	EPA 6020B	
Magnesium	11.8	0.0500	"	"	"	"	"	"	
Sodium	2.36	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **06/06/24 14:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0656	0.00100	units	1	BHF0462	06/17/24	06/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/06/24 14:24**

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 - Novacek C28-27D
Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

FL01-02@3.5'
2406083-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	96.5	%	1	BHF0191	06/07/24	06/07/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **06/06/24 14:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.126	0.0100	mmhos/cm	1	BHF0273	06/10/24	06/11/24	EPA 120.1	

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

Date Sampled: **06/06/24 14:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.50		pH Units	1	BHF0272	06/10/24	06/11/24	EPA 9045D	

Summit Scientific

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

Project: Noble - Novacek C28-27D
Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

FL01-03@3.5'
2406083-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/06/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHF0168	06/07/24	06/08/24	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: **06/06/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0430	107 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0420	105 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0407	102 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/06/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHF0172	06/07/24	06/08/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/06/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	11.4	91.1 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Tasman Geosciences
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Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

FL01-03@3.5'
2406083-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **06/06/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHF0170	06/07/24	06/07/24	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: **06/06/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0258	77.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0238	71.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **06/06/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHF0177	06/07/24	06/14/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **06/06/24 14:35**

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

Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

FL01-03@3.5'
2406083-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	3.43	0.180	mg/kg dry	1	BHF0196	06/07/24	06/13/24	EPA 6020B
Barium	133	0.360	"	"	"	"	"	"
Cadmium	0.275	0.180	"	"	"	"	"	"
Copper	6.80	0.360	"	"	"	"	"	"
Lead	6.40	0.180	"	"	"	"	"	"
Nickel	7.88	0.360	"	"	"	"	"	"
Silver	0.0230	0.0180	"	"	"	"	"	"
Zinc	31.2	0.360	"	"	"	"	"	"
Selenium	ND	0.234	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **06/06/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHF0282	06/11/24	06/11/24	EPA 7196A	

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

Date Sampled: **06/06/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	109	0.0500	mg/L dry	1	BHF0271	06/10/24	06/14/24	EPA 6020B	
Magnesium	23.9	0.0500	"	"	"	"	"	"	
Sodium	0.716	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **06/06/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0162	0.00100	units	1	BHF0462	06/17/24	06/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/06/24 14:35**

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

Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

FL01-03@3.5'
2406083-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	84.6	%	1	BHF0191	06/07/24	06/07/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **06/06/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0580	0.0100	mmhos/cm	1	BHF0273	06/10/24	06/11/24	EPA 120.1	

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

Date Sampled: **06/06/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.73		pH Units	1	BHF0272	06/10/24	06/11/24	EPA 9045D	

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Broomfield CO, 80020

Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

FL01R-S@3.5'
2406083-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHF0168	06/07/24	06/08/24	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: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0418	104 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0405	101 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0406	102 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHF0172	06/07/24	06/08/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	11.7	93.9 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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06/24/24 07:58

FL01R-S@3.5'
2406083-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHF0170	06/07/24	06/07/24	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: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0297	89.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0305	91.6 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHF0177	06/07/24	06/14/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

FL01R-S@3.5'
2406083-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.33	0.200	mg/kg dry	1	BHF0196	06/07/24	06/13/24	EPA 6020B	
Barium	702	0.400	"	"	"	"	"	"	
Cadmium	0.209	0.200	"	"	"	"	"	"	
Copper	6.69	0.400	"	"	"	"	"	"	
Lead	6.42	0.200	"	"	"	"	"	"	
Nickel	8.27	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	29.3	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHF0282	06/11/24	06/11/24	EPA 7196A	

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

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	113	0.0500	mg/L dry	1	BHF0271	06/10/24	06/14/24	EPA 6020B	
Magnesium	17.8	0.0500	"	"	"	"	"	"	
Sodium	0.626	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0144	0.00100	units	1	BHF0462	06/17/24	06/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

FL01R-S@3.5'
2406083-05 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.9		%	1	BHF0191	06/07/24	06/07/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0449	0.0100	mmhos/cm	1	BHF0273	06/10/24	06/11/24	EPA 120.1	

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

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.87		pH Units	1	BHF0272	06/10/24	06/11/24	EPA 9045D	

Summit Scientific

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

Project: Noble - Novacek C28-27D
Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

BKG01@3.5'
2406083-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.26	0.200	mg/kg dry	1	BHF0196	06/07/24	06/13/24	EPA 6020B	
Barium	104	0.400	"	"	"	"	"	"	
Cadmium	0.280	0.200	"	"	"	"	"	"	
Copper	10.8	0.400	"	"	"	"	"	"	
Lead	8.17	0.200	"	"	"	"	"	"	
Nickel	6.51	0.400	"	"	"	"	"	"	
Silver	0.0634	0.0200	"	"	"	"	"	"	
Zinc	36.7	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHF0282	06/11/24	06/11/24	EPA 7196A	

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

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	138	0.0500	mg/L dry	1	BHF0271	06/10/24	06/14/24	EPA 6020B	
Magnesium	7.98	0.0500	"	"	"	"	"	"	
Sodium	19.5	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.437	0.00100	units	1	BHF0462	06/17/24	06/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Project: Noble - Novacek C28-27D
Project Number: UWRWE-A2709-ABN
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Reported:
06/24/24 07:58

BKG01@3.5'
2406083-06 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.8		%	1	BHF0191	06/07/24	06/07/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.147	0.0100	mmhos/cm	1	BHF0273	06/10/24	06/11/24	EPA 120.1	

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

Date Sampled: **06/06/24 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.86		pH Units	1	BHF0272	06/10/24	06/11/24	EPA 9045D	

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Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

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 BHF0168 - EPA 5030 Soil MS

Blank (BHF0168-BLK1)

Prepared: 06/07/24 Analyzed: 06/08/24

Benzene	ND	0.0020	mg/kg								
Toluene	ND	0.0050	"								
Ethylbenzene	ND	0.0050	"								
Xylenes (total)	ND	0.010	"								
1,2,4-Trimethylbenzene	ND	0.0050	"								
1,3,5-Trimethylbenzene	ND	0.0050	"								
Naphthalene	ND	0.0038	"								
Gasoline Range Hydrocarbons	ND	0.50	"								
Surrogate: 1,2-Dichloroethane-d4	0.0380		"	0.0400		95.0	50-150				
Surrogate: Toluene-d8	0.0412		"	0.0400		103	50-150				
Surrogate: 4-Bromofluorobenzene	0.0394		"	0.0400		98.6	50-150				

LCS (BHF0168-BS1)

Prepared: 06/07/24 Analyzed: 06/08/24

Benzene	0.0866	0.0020	mg/kg	0.100		86.6	70-130				
Toluene	0.0960	0.0050	"	0.100		96.0	70-130				
Ethylbenzene	0.0971	0.0050	"	0.100		97.1	70-130				
m,p-Xylene	0.191	0.010	"	0.200		95.5	70-130				
o-Xylene	0.0973	0.0050	"	0.100		97.3	70-130				
1,2,4-Trimethylbenzene	0.0928	0.0050	"	0.100		92.8	70-130				
1,3,5-Trimethylbenzene	0.0939	0.0050	"	0.100		93.9	70-130				
Naphthalene	0.0721	0.0038	"	0.100		72.1	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.0325		"	0.0400		81.2	50-150				
Surrogate: Toluene-d8	0.0400		"	0.0400		100	50-150				
Surrogate: 4-Bromofluorobenzene	0.0393		"	0.0400		98.2	50-150				

Matrix Spike (BHF0168-MS1)

Source: 2406061-01

Prepared: 06/07/24 Analyzed: 06/08/24

Benzene	0.0380	0.0020	mg/kg	0.100	ND	38.0	70-130				QM-07
Toluene	0.0493	0.0050	"	0.100	ND	49.3	70-130				QM-07
Ethylbenzene	0.0610	0.0050	"	0.100	ND	61.0	70-130				QM-07
m,p-Xylene	0.146	0.010	"	0.200	ND	73.0	70-130				
o-Xylene	0.0734	0.0050	"	0.100	ND	73.4	70-130				
1,2,4-Trimethylbenzene	0.0580	0.0050	"	0.100	ND	58.0	70-130				QM-07
1,3,5-Trimethylbenzene	0.0718	0.0050	"	0.100	ND	71.8	70-130				QM-07
Naphthalene	0.0268	0.0038	"	0.100	ND	26.8	70-130				QM-07
Surrogate: 1,2-Dichloroethane-d4	0.0345		"	0.0400		86.2	50-150				
Surrogate: Toluene-d8	0.0416		"	0.0400		104	50-150				
Surrogate: 4-Bromofluorobenzene	0.0401		"	0.0400		100	50-150				

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

Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

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 BHF0168 - EPA 5030 Soil MS

Matrix Spike Dup (BHF0168-MSD1)	Source: 2406061-01			Prepared: 06/07/24 Analyzed: 06/08/24						
Benzene	0.0464	0.0020	mg/kg	0.100	ND	46.4	70-130	19.9	30	QM-07
Toluene	0.0606	0.0050	"	0.100	ND	60.6	70-130	20.6	30	QM-07
Ethylbenzene	0.0731	0.0050	"	0.100	ND	73.1	70-130	18.1	30	
m,p-Xylene	0.173	0.010	"	0.200	ND	86.5	70-130	16.9	30	
o-Xylene	0.0847	0.0050	"	0.100	ND	84.7	70-130	14.4	30	
1,2,4-Trimethylbenzene	0.0719	0.0050	"	0.100	ND	71.9	70-130	21.4	30	QM-07
1,3,5-Trimethylbenzene	0.0816	0.0050	"	0.100	ND	81.6	70-130	12.8	30	
Naphthalene	0.0377	0.0038	"	0.100	ND	37.7	70-130	33.9	30	QM-07
Surrogate: 1,2-Dichloroethane-d4	0.0329		"	0.0400		82.2	50-150			
Surrogate: Toluene-d8	0.0417		"	0.0400		104	50-150			
Surrogate: 4-Bromofluorobenzene	0.0389		"	0.0400		97.2	50-150			

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Project: Noble - Novacek C28-27D
Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

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 BHF0172 - EPA 3550A

Blank (BHF0172-BLK1)

Prepared & Analyzed: 06/07/24

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	16.1		"	12.5		129		30-150			

LCS (BHF0172-BS1)

Prepared & Analyzed: 06/07/24

C10-C28 (DRO)	435	50	mg/kg	500		87.1		70-130			
Surrogate: <i>o</i> -Terphenyl	13.1		"	12.5		105		30-150			

Matrix Spike (BHF0172-MS1)

Source: 2406061-01

Prepared & Analyzed: 06/07/24

C10-C28 (DRO)	370	50	mg/kg	500	33.4	67.3		70-130			QM-07
Surrogate: <i>o</i> -Terphenyl	11.3		"	12.5		90.7		30-150			

Matrix Spike Dup (BHF0172-MSD1)

Source: 2406061-01

Prepared & Analyzed: 06/07/24

C10-C28 (DRO)	389	50	mg/kg	500	33.4	71.2		70-130	5.14	20	
Surrogate: <i>o</i> -Terphenyl	11.9		"	12.5		94.8		30-150			

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Project: Noble - Novacek C28-27D
Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

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 BHF0170 - EPA 5030 Soil MS

Blank (BHF0170-BLK1)

Prepared & Analyzed: 06/07/24

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	0.0303		"	0.0333		91.0	40-150			
Surrogate: Fluoranthene-d10	0.0289		"	0.0333		86.6	40-150			

LCS (BHF0170-BS1)

Prepared & Analyzed: 06/07/24

Acenaphthene	0.0247	0.00500	mg/kg	0.0333		74.2	31-137			
Anthracene	0.0262	0.00500	"	0.0333		78.7	30-120			
Benzo (a) anthracene	0.0293	0.00500	"	0.0333		88.0	30-120			
Benzo (a) pyrene	0.0258	0.00500	"	0.0333		77.3	30-120			
Benzo (b) fluoranthene	0.0270	0.00500	"	0.0333		80.9	30-120			
Benzo (k) fluoranthene	0.0266	0.00500	"	0.0333		79.7	30-120			
Chrysene	0.0285	0.00500	"	0.0333		85.4	30-120			
Dibenz (a,h) anthracene	0.0246	0.00500	"	0.0333		73.7	30-120			
Fluoranthene	0.0271	0.00500	"	0.0333		81.4	30-120			
Fluorene	0.0301	0.00500	"	0.0333		90.3	30-120			
Indeno (1,2,3-cd) pyrene	0.0249	0.00500	"	0.0333		74.6	30-120			
Pyrene	0.0294	0.00500	"	0.0333		88.1	35-142			
1-Methylnaphthalene	0.0238	0.00500	"	0.0333		71.4	35-142			
2-Methylnaphthalene	0.0252	0.00500	"	0.0333		75.7	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0219		"	0.0333		65.7	40-150			
Surrogate: Fluoranthene-d10	0.0279		"	0.0333		83.8	40-150			

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Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

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 BHF0170 - EPA 5030 Soil MS

Matrix Spike (BHF0170-MS1)	Source: 2406083-01			Prepared & Analyzed: 06/07/24							
Acenaphthene	0.0166	0.00500	mg/kg	0.0333	ND	49.9	31-137				
Anthracene	0.0177	0.00500	"	0.0333	ND	53.2	30-120				
Benzo (a) anthracene	0.0199	0.00500	"	0.0333	ND	59.6	30-120				
Benzo (a) pyrene	0.0173	0.00500	"	0.0333	ND	51.8	30-120				
Benzo (b) fluoranthene	0.0180	0.00500	"	0.0333	ND	54.0	30-120				
Benzo (k) fluoranthene	0.0177	0.00500	"	0.0333	ND	53.1	30-120				
Chrysene	0.0196	0.00500	"	0.0333	ND	58.8	30-120				
Dibenz (a,h) anthracene	0.0166	0.00500	"	0.0333	ND	49.8	30-120				
Fluoranthene	0.0183	0.00500	"	0.0333	ND	54.8	30-120				
Fluorene	0.0202	0.00500	"	0.0333	ND	60.7	30-120				
Indeno (1,2,3-cd) pyrene	0.0159	0.00500	"	0.0333	ND	47.6	30-120				
Pyrene	0.0207	0.00500	"	0.0333	ND	62.2	35-142				
1-Methylnaphthalene	0.0174	0.00500	"	0.0333	ND	52.3	15-130				
2-Methylnaphthalene	0.0180	0.00500	"	0.0333	ND	53.9	15-130				
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0161</i>		<i>"</i>	<i>0.0333</i>		<i>48.4</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0189</i>		<i>"</i>	<i>0.0333</i>		<i>56.8</i>	<i>40-150</i>				

Matrix Spike Dup (BHF0170-MSD1)	Source: 2406083-01			Prepared & Analyzed: 06/07/24							
Acenaphthene	0.0224	0.00500	mg/kg	0.0333	ND	67.2	31-137	29.5	30		
Anthracene	0.0223	0.00500	"	0.0333	ND	66.9	30-120	22.8	30		
Benzo (a) anthracene	0.0248	0.00500	"	0.0333	ND	74.3	30-120	22.0	30		
Benzo (a) pyrene	0.0221	0.00500	"	0.0333	ND	66.3	30-120	24.4	30		
Benzo (b) fluoranthene	0.0265	0.00500	"	0.0333	ND	79.4	30-120	38.2	30		QR-02
Benzo (k) fluoranthene	0.0244	0.00500	"	0.0333	ND	73.1	30-120	31.7	30		QR-02
Chrysene	0.0250	0.00500	"	0.0333	ND	74.9	30-120	24.0	30		
Dibenz (a,h) anthracene	0.0178	0.00500	"	0.0333	ND	53.4	30-120	6.88	30		
Fluoranthene	0.0227	0.00500	"	0.0333	ND	68.2	30-120	21.8	30		
Fluorene	0.0255	0.00500	"	0.0333	ND	76.5	30-120	22.9	30		
Indeno (1,2,3-cd) pyrene	0.0171	0.00500	"	0.0333	ND	51.3	30-120	7.52	30		
Pyrene	0.0257	0.00500	"	0.0333	ND	77.0	35-142	21.4	30		
1-Methylnaphthalene	0.0262	0.00500	"	0.0333	ND	78.5	15-130	40.2	50		
2-Methylnaphthalene	0.0247	0.00500	"	0.0333	ND	74.1	15-130	31.6	50		
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0249</i>		<i>"</i>	<i>0.0333</i>		<i>74.8</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0235</i>		<i>"</i>	<i>0.0333</i>		<i>70.4</i>	<i>40-150</i>				

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Project: Noble - Novacek C28-27D
Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

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

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

Batch BHF0177 - EPA 3050B

Blank (BHF0177-BLK1)				Prepared: 06/07/24 Analyzed: 06/14/24							
Boron	ND	2.00	mg/L								
LCS (BHF0177-BS1)				Prepared: 06/07/24 Analyzed: 06/14/24							
Boron	5.16	2.00	mg/L	5.00		103	80-120				
Duplicate (BHF0177-DUP1)				Source: 2406083-01 Prepared: 06/07/24 Analyzed: 06/14/24							
Boron	0.153	2.00	mg/L		0.176			13.6	20		
Matrix Spike (BHF0177-MS1)				Source: 2406083-01 Prepared: 06/07/24 Analyzed: 06/14/24							
Boron	5.54	2.00	mg/L	5.02	0.176	107	75-125				
Matrix Spike Dup (BHF0177-MSD1)				Source: 2406083-01 Prepared: 06/07/24 Analyzed: 06/14/24							
Boron	5.53	2.00	mg/L	5.02	0.176	107	75-125	0.217	25		

Summit Scientific

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Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

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 BHF0196 - EPA 3050B

Blank (BHF0196-BLK1)

Prepared: 06/07/24 Analyzed: 06/13/24

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 (BHF0196-BS1)

Prepared: 06/07/24 Analyzed: 06/13/24

Arsenic	37.7	0.200	mg/kg wet	40.0	94.3	80-120
Barium	39.0	0.400	"	40.0	97.6	80-120
Cadmium	1.95	0.200	"	2.00	97.3	80-120
Copper	38.3	0.400	"	40.0	95.8	80-120
Lead	19.6	0.200	"	20.0	98.1	80-120
Nickel	38.2	0.400	"	40.0	95.5	80-120
Silver	1.94	0.0200	"	2.00	97.1	80-120
Zinc	38.0	0.400	"	40.0	94.9	80-120
Selenium	3.80	0.260	"	4.00	95.0	80-120

Duplicate (BHF0196-DUP1)

Source: 2403312-01

Prepared: 06/07/24 Analyzed: 06/13/24

Arsenic	7.03	0.200	mg/kg dry	9.98	34.6	20	QR-01
Barium	291	0.400	"	305	4.62	20	
Cadmium	0.209	0.200	"	0.231	9.93	20	
Copper	4.02	0.400	"	4.25	5.58	20	
Lead	3.48	0.200	"	3.95	12.8	20	
Nickel	7.83	0.400	"	4.92	45.7	20	QR-01
Silver	0.0185	0.0200	"	0.0169	9.05	20	
Zinc	14.3	0.400	"	12.6	12.4	20	
Selenium	ND	0.260	"	ND		20	

Summit Scientific

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

Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

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 BHF0196 - EPA 3050B

Matrix Spike (BHF0196-MS1)

Source: 2403312-01

Prepared: 06/07/24 Analyzed: 06/13/24

Arsenic	48.6	0.180	mg/kg dry	44.2	9.98	87.5	75-125				
Barium	391	0.360	"	44.2	305	195	75-125				QM-07
Cadmium	2.43	0.180	"	2.21	0.231	99.5	75-125				
Copper	44.4	0.360	"	44.2	4.25	90.9	75-125				
Lead	23.8	0.180	"	22.1	3.95	90.0	75-125				
Nickel	51.4	0.360	"	44.2	4.92	105	75-125				
Silver	2.14	0.0180	"	2.21	0.0169	96.1	75-125				
Zinc	57.1	0.360	"	44.2	12.6	101	75-125				
Selenium	3.95	0.234	"	4.42	ND	89.5	75-125				

Matrix Spike Dup (BHF0196-MSD1)

Source: 2403312-01

Prepared: 06/07/24 Analyzed: 06/13/24

Arsenic	46.2	0.180	mg/kg dry	44.2	9.98	82.1	75-125	5.05	25		
Barium	323	0.360	"	44.2	305	41.9	75-125	19.0	25		QM-07
Cadmium	2.33	0.180	"	2.21	0.231	95.1	75-125	4.05	25		
Copper	42.7	0.360	"	44.2	4.25	87.1	75-125	3.83	25		
Lead	22.6	0.180	"	22.1	3.95	84.6	75-125	5.13	25		
Nickel	44.8	0.360	"	44.2	4.92	90.4	75-125	13.5	25		
Silver	2.12	0.0180	"	2.21	0.0169	95.0	75-125	1.06	25		
Zinc	53.1	0.360	"	44.2	12.6	91.6	75-125	7.35	25		
Selenium	3.87	0.234	"	4.42	ND	87.7	75-125	2.01	25		

Post Spike (BHF0196-PS1)

Source: 2403312-01

Prepared: 06/07/24 Analyzed: 06/13/24

Arsenic	123		ug/l	100	22.4	100	75-125				
Barium	781		"	100	685	95.1	75-125				
Cadmium	5.54		"	5.00	0.520	100	75-125				
Copper	102		"	100	9.56	92.8	75-125				
Lead	55.0		"	50.0	8.88	92.2	75-125				
Nickel	107		"	100	11.1	95.5	75-125				
Silver	4.97		"	5.00	0.0380	98.6	75-125				
Zinc	122		"	100	28.3	93.6	75-125				
Selenium	9.39		"	10.0	0.331	90.6	75-125				

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Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BHF0282 - 3060A Mod

Blank (BHF0282-BLK1)

Prepared & Analyzed: 06/11/24

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BHF0282-BS1)

Prepared & Analyzed: 06/11/24

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

Duplicate (BHF0282-DUP1)

Source: 2406083-01

Prepared & Analyzed: 06/11/24

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BHF0282-MS1)

Source: 2406083-01

Prepared & Analyzed: 06/11/24

Chromium, Hexavalent 26.3 0.30 mg/kg dry 25.7 ND 102 75-125

Matrix Spike Dup (BHF0282-MSD1)

Source: 2406083-01

Prepared & Analyzed: 06/11/24

Chromium, Hexavalent 27.1 0.30 mg/kg dry 26.7 ND 101 75-125 3.14 20

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Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

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 BHF0271 - General Preparation

Blank (BHF0271-BLK1)

Prepared: 06/10/24 Analyzed: 06/14/24

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

LCS (BHF0271-BS1)

Prepared: 06/10/24 Analyzed: 06/14/24

Calcium	5.49	0.0500	mg/L wet	5.00		110	70-130			
Magnesium	5.34	0.0500	"	5.00		107	70-130			
Sodium	5.35	0.0500	"	5.00		107	70-130			

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Broomfield CO, 80020

Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

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 BHF0191 - General Preparation

Duplicate (BHF0191-DUP1)	Source: 2406063-01			Prepared & Analyzed: 06/07/24							
% Solids	88.7		%		88.3				0.455		20

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Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

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 BHF0273 - General Preparation

Blank (BHF0273-BLK1)

Prepared: 06/10/24 Analyzed: 06/11/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BHF0273-BS1)

Prepared: 06/10/24 Analyzed: 06/11/24

Specific Conductance (EC) 0.157 0.0100 mmhos/cm 0.150 104 95-105

Duplicate (BHF0273-DUP1)

Source: 2406063-01

Prepared: 06/10/24 Analyzed: 06/11/24

Specific Conductance (EC) 0.431 0.0100 mmhos/cm 0.443 2.84 20

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

Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN
Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

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 BHF0272 - General Preparation

LCS (BHF0272-BS1)

Prepared: 06/10/24 Analyzed: 06/11/24

pH	9.19	pH Units	9.18	100	95-105
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Duplicate (BHF0272-DUP1)

Source: 2406063-01

Prepared: 06/10/24 Analyzed: 06/11/24

pH	7.38	pH Units	7.45	0.944	20
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Tasman Geosciences
6855 W. 119th Ave.
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Project: Noble - Novacek C28-27D

Project Number: UWRWE-A2709-ABN

Project Manager: Jacob Whritenour

Reported:
06/24/24 07:58

Notes and Definitions

- QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- QR-01 Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
- 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