

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

August 07, 2024

Paul Henchan

Fremont Environmental

PO Box 1289

Wellington, CO 80549

RE: Noble - Castor PC T1N-R58W-S36 L01

Work Order #2407392

Enclosed are the results of analyses for samples received by Summit Scientific on 07/30/24 19:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Jacob Wood For Paul Shrewsbury

President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PWV S - 5FT	2407392-01	Soil	07/29/24 14:55	07/30/24 19:00
PWV B - 6FT	2407392-02	Soil	07/29/24 15:00	07/30/24 19:00
AST01 - 0.5FT	2407392-03	Soil	07/30/24 14:20	07/30/24 19:00
AST02 - 0.5FT	2407392-04	Soil	07/30/24 14:25	07/30/24 19:00
AST03 - 0.5FT	2407392-05	Soil	07/30/24 14:30	07/30/24 19:00
AST04 - 0.5FT	2407392-06	Soil	07/30/24 14:35	07/30/24 19:00
SL01 - 6FT	2407392-07	Soil	07/30/24 16:55	07/30/24 19:00
SL02 - 3FT	2407392-08	Soil	07/30/24 17:00	07/30/24 19:00

Summit Scientific

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

Lab ID 2407392 Page 1 of 1

Client: Fremont Environmental		Project Manager: Paul Henehan		Company: <u>Noble</u>	
Address:		E-Mail: Fremont Distribution List		Project Name/Location:	
City/State/Zip:				AFE#:	
Phone: 303-261-6246		Project Name: <u>Castor PC T1N-R58W-536L01</u>		PO/Billing Codes: <u>UWREP-A2000-ABN</u>	
Sampler Name: Stanley Gilbert		Project Number:		Contact: <u>Mike Montoya</u>	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix		Analysis Requested							Special Instructions		
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEX, TMBs, Naph.	TPH	PAH (915)	EC, SAR, Ph, Boron	Metals (915)		TDS, Chloride, Sulfate	HOLD
1	DWV S-5Ft	7/29/24	14:55	2			X			X				X	X	X	X	X		
2	DWV B-6Ft	7/29/24	15:00	1			X			X				X	X	X	X	X		
3	AST01-0.5Ft	7/30/24	14:20	1			X			X				X	X	X	X	X		
4	AST02-0.5Ft		14:25	1			X			X				X	X	X	X	X		
5	AST03-0.5Ft		14:30	1			X			X				X	X	X	X	X		
6	AST04-0.5Ft		14:35	1			X			X				X	X	X	X	X		
7	SLO1-6Ft		16:55	1			X			X				X	X	X	X	X		
8	SLO2-3Ft		17:00	1			X			X				X	X	X	X	X		
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Relinquished by: <u>[Signature]</u>	Date/Time: <u>7/30/24 19:00</u>	Received by: <u>[Signature]</u>	Date/Time: <u>7/30/24 19:00</u>	TAT Business Days	Field DO	Notes:
				Same Day	Field EC	
Relinquished by:	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Standard	<input checked="" type="checkbox"/> Field Turb.	
Temperature Upon Receipt: <u>19.7</u>	Corrected Temperature	IR gun #: <u>2</u>	HNO3 lot #:			

S₂

Sample Receipt Checklist

S2 Work Order# 2407392

Client: Fremont

Client Project ID: Castor PC TIN-R58W-S36L01

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

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

Temp (°C) 19.7 Thermometer # 2

	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"/>	
If custody seals are present, are they intact? ⁽¹⁾	<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 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>no sample times</u>
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.				

Control Form #: SRC-001

AS
Custodian Printed Name

7/30/24
Date/Time



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Castor PC T1N-R58W-S36 L01
Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

PWV S - 5FT
2407392-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/29/24 14:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHH0018	08/01/24	08/01/24	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: **07/29/24 14:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0403	101 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0399	99.8 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0396	99.1 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/29/24 14:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHH0019	08/01/24	08/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **07/29/24 14:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	10.6	84.9 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Project Number: UWREP-A2000-ABN
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Reported:
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PWVS - 5FT
2407392-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **07/29/24 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHG0906	07/31/24	08/01/24	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: **07/29/24 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0137	41.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0190	57.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **07/29/24 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHG0916	07/31/24	08/01/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **07/29/24 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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PWVS - 5FT
2407392-01 (Soil)

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Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	8.53	0.181	mg/kg dry	1	BHG0921	07/31/24	08/01/24	EPA 6020B	
Barium	326	0.362	"	"	"	"	"	"	
Cadmium	0.257	0.181	"	"	"	"	"	"	
Copper	4.20	0.362	"	"	"	"	"	"	
Lead	12.4	0.181	"	"	"	"	"	"	
Nickel	2.91	0.362	"	"	"	"	"	"	
Silver	ND	0.0181	"	"	"	"	"	"	
Zinc	13.8	0.362	"	"	"	"	"	"	
Selenium	ND	0.236	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **07/29/24 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHG0936	07/31/24	08/07/24	EPA 7196A	

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

Date Sampled: **07/29/24 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	969	0.0500	mg/L dry	1	BHH0028	08/01/24	08/05/24	EPA 6020B	
Magnesium	62.7	0.0500	"	"	"	"	"	"	
Sodium	163	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **07/29/24 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.37	0.00100	units	1	BHH0127	08/06/24	08/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

PWVS - 5FT
2407392-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/29/24 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	71.5		%	1	BHG0919	07/31/24	08/01/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **07/29/24 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.415	0.0100	mmhos/cm	1	BHH0029	08/01/24	08/02/24	EPA 120.1	

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

Date Sampled: **07/29/24 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.03		pH Units	1	BHH0030	08/01/24	08/02/24	EPA 9045D	

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Project Number: UWREP-A2000-ABN
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Reported:
08/07/24 14:11

PWV B - 6FT
2407392-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/29/24 15:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHH0018	08/01/24	08/02/24	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: **07/29/24 15:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0427	107 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0398	99.4 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0387	96.7 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/29/24 15:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHH0019	08/01/24	08/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **07/29/24 15:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	10.1	81.0 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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08/07/24 14:11

PWV B - 6FT
2407392-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **07/29/24 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHG0906	07/31/24	08/01/24	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: **07/29/24 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0147	44.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0180	53.9 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **07/29/24 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHG0916	07/31/24	08/01/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **07/29/24 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

PWV B - 6FT
2407392-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	6.65	0.200	mg/kg dry	1	BHG0921	07/31/24	08/01/24	EPA 6020B	
Barium	193	0.400	"	"	"	"	"	"	
Cadmium	0.228	0.200	"	"	"	"	"	"	
Copper	4.41	0.400	"	"	"	"	"	"	
Lead	13.6	0.200	"	"	"	"	"	"	
Nickel	3.02	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	14.8	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **07/29/24 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHG0936	07/31/24	08/07/24	EPA 7196A	

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

Date Sampled: **07/29/24 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	646	0.0500	mg/L dry	1	BHH0028	08/01/24	08/05/24	EPA 6020B	
Magnesium	50.5	0.0500	"	"	"	"	"	"	
Sodium	110	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **07/29/24 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.12	0.00100	units	1	BHH0127	08/06/24	08/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Project: Noble - Castor PC T1N-R58W-S36 L01
 Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

PWV B - 6FT
2407392-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/29/24 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	71.6		%	1	BHG0919	07/31/24	08/01/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **07/29/24 15:00**

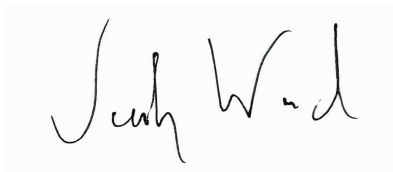
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.338	0.0100	mmhos/cm	1	BHH0029	08/01/24	08/02/24	EPA 120.1	

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

Date Sampled: **07/29/24 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.84		pH Units	1	BHH0030	08/01/24	08/02/24	EPA 9045D	

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

AST01 - 0.5FT
2407392-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/30/24 14:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BHH0018	08/01/24	08/02/24	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: **07/30/24 14:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	0.0476	119 %	50-150	"	"	"	"	"	
Surrogate: Toluene-d8	0.0421	105 %	50-150	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0403	101 %	50-150	"	"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/30/24 14:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	BHH0019	08/01/24	08/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **07/30/24 14:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl	9.60	76.8 %	30-150	"	"	"	"	"	

PAH by EPA Method 8270D SIM

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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

AST01 - 0.5FT
2407392-03 (Soil)

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PAH by EPA Method 8270D SIM

Date Sampled: **07/30/24 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHG0906	07/31/24	08/01/24	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: **07/30/24 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0155	46.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0169	50.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **07/30/24 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHG0916	07/31/24	08/01/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **07/30/24 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

AST01 - 0.5FT
2407392-03 (Soil)

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Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.47	0.200	mg/kg dry	1	BHG0921	07/31/24	08/01/24	EPA 6020B	
Barium	228	0.400	"	"	"	"	"	"	
Cadmium	0.286	0.200	"	"	"	"	"	"	
Copper	5.10	0.400	"	"	"	"	"	"	
Lead	14.0	0.200	"	"	"	"	"	"	
Nickel	2.98	0.400	"	"	"	"	"	"	
Silver	0.0309	0.0200	"	"	"	"	"	"	
Zinc	15.2	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **07/30/24 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHG0936	07/31/24	08/07/24	EPA 7196A	

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

Date Sampled: **07/30/24 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	94.5	0.0500	mg/L dry	1	BHH0028	08/01/24	08/05/24	EPA 6020B	
Magnesium	12.6	0.0500	"	"	"	"	"	"	
Sodium	183	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **07/30/24 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.69	0.00100	units	1	BHH0127	08/06/24	08/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/30/24 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - Castor PC T1N-R58W-S36 L01
 Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

AST01 - 0.5FT
2407392-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	73.2	%	1	BHG0919	07/31/24	08/01/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **07/30/24 14:20**


Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.18	0.0100	mmhos/cm	1	BHH0029	08/01/24	08/02/24	EPA 120.1	

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

Date Sampled: **07/30/24 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.83		pH Units	1	BHH0030	08/01/24	08/02/24	EPA 9045D	

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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

AST02 - 0.5FT
2407392-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/30/24 14:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BHH0018	08/01/24	08/02/24	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: **07/30/24 14:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	0.0413	103 %	50-150	"	"	"	"	"	
Surrogate: Toluene-d8	0.0413	103 %	50-150	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0380	95.1 %	50-150	"	"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/30/24 14:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	BHH0019	08/01/24	08/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **07/30/24 14:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl	14.2	113 %	30-150	"	"	"	"	"	

PAH by EPA Method 8270D SIM

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Project: Noble - Castor PC T1N-R58W-S36 L01
Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

AST02 - 0.5FT
2407392-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **07/30/24 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHG0906	07/31/24	08/01/24	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: **07/30/24 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0143	43.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0157	47.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **07/30/24 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHG0916	07/31/24	08/01/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **07/30/24 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

AST02 - 0.5FT
2407392-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.24	0.200	mg/kg dry	1	BHG0921	07/31/24	08/01/24	EPA 6020B	
Barium	251	0.400	"	"	"	"	"	"	
Cadmium	0.357	0.200	"	"	"	"	"	"	
Copper	5.15	0.400	"	"	"	"	"	"	
Lead	18.2	0.200	"	"	"	"	"	"	
Nickel	3.18	0.400	"	"	"	"	"	"	
Silver	0.0361	0.0200	"	"	"	"	"	"	
Zinc	17.3	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **07/30/24 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHG0936	07/31/24	08/07/24	EPA 7196A	

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

Date Sampled: **07/30/24 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	1230	0.0500	mg/L dry	1	BHH0028	08/01/24	08/05/24	EPA 6020B	
Magnesium	128	0.0500	"	"	"	"	"	"	
Sodium	202	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **07/30/24 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.47	0.00100	units	1	BHH0127	08/06/24	08/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/30/24 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

AST02 - 0.5FT
2407392-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	77.2	%	1	BHG0919	07/31/24	08/01/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **07/30/24 14:25**


Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.69	0.0100	mmhos/cm	1	BHH0029	08/01/24	08/02/24	EPA 120.1	

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

Date Sampled: **07/30/24 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.50		pH Units	1	BHH0030	08/01/24	08/02/24	EPA 9045D	

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Project Manager: Paul Henchan

Reported:
08/07/24 14:11

AST03 - 0.5FT
2407392-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/30/24 14:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BHH0018	08/01/24	08/02/24	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: **07/30/24 14:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	0.0430	107 %	50-150	"	"	"	"	"	
Surrogate: Toluene-d8	0.0429	107 %	50-150	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0415	104 %	50-150	"	"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/30/24 14:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	BHH0019	08/01/24	08/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **07/30/24 14:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl	11.9	95.2 %	30-150	"	"	"	"	"	

PAH by EPA Method 8270D SIM

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Project Number: UWREP-A2000-ABN
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08/07/24 14:11

AST03 - 0.5FT
2407392-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **07/30/24 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHG0906	07/31/24	08/01/24	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: **07/30/24 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0136	40.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0154	46.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **07/30/24 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHG0916	07/31/24	08/01/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **07/30/24 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

AST03 - 0.5FT
2407392-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	5.74	0.200	mg/kg dry	1	BHG0921	07/31/24	08/01/24	EPA 6020B	
Barium	265	0.400	"	"	"	"	"	"	
Cadmium	0.234	0.200	"	"	"	"	"	"	
Copper	4.93	0.400	"	"	"	"	"	"	
Lead	12.5	0.200	"	"	"	"	"	"	
Nickel	2.66	0.400	"	"	"	"	"	"	
Silver	0.0298	0.0200	"	"	"	"	"	"	
Zinc	13.7	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **07/30/24 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHG0936	07/31/24	08/07/24	EPA 7196A	

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

Date Sampled: **07/30/24 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	103	0.0500	mg/L dry	1	BHH0028	08/01/24	08/05/24	EPA 6020B	
Magnesium	13.0	0.0500	"	"	"	"	"	"	
Sodium	194	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **07/30/24 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.79	0.00100	units	1	BHH0127	08/06/24	08/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/30/24 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Castor PC T1N-R58W-S36 L01
 Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

AST03 - 0.5FT
2407392-05 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

% Solids	73.1	%	1	BHG0919	07/31/24	08/01/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **07/30/24 14:30**


Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.39	0.0100	mmhos/cm	1	BHH0029	08/01/24	08/02/24	EPA 120.1	

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

Date Sampled: **07/30/24 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.76		pH Units	1	BHH0030	08/01/24	08/02/24	EPA 9045D	

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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

AST04 - 0.5FT
2407392-06 (Soil)

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Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/30/24 14:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHH0018	08/01/24	08/02/24	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: **07/30/24 14:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0373	93.2 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0396	98.9 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0429	107 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/30/24 14:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHH0019	08/01/24	08/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **07/30/24 14:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	13.0	104 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

AST04 - 0.5FT
2407392-06 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **07/30/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHG0906	07/31/24	08/01/24	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: **07/30/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0158	47.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0151	45.4 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **07/30/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHG0916	07/31/24	08/01/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **07/30/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

AST04 - 0.5FT
2407392-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.98	0.200	mg/kg dry	1	BHG0921	07/31/24	08/01/24	EPA 6020B	
Barium	373	0.400	"	"	"	"	"	"	
Cadmium	0.311	0.200	"	"	"	"	"	"	
Copper	5.14	0.400	"	"	"	"	"	"	
Lead	20.5	0.200	"	"	"	"	"	"	
Nickel	2.94	0.400	"	"	"	"	"	"	
Silver	0.0298	0.0200	"	"	"	"	"	"	
Zinc	15.6	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **07/30/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHG0936	07/31/24	08/07/24	EPA 7196A	

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

Date Sampled: **07/30/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	118	0.0500	mg/L dry	1	BHH0028	08/01/24	08/05/24	EPA 6020B	
Magnesium	15.2	0.0500	"	"	"	"	"	"	
Sodium	88.7	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **07/30/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.04	0.00100	units	1	BHH0127	08/06/24	08/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/30/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Fremont Environmental
 PO Box 1289
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Project: Noble - Castor PC T1N-R58W-S36 L01
 Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

AST04 - 0.5FT
2407392-06 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	76.5	%	1	BHG0919	07/31/24	08/01/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **07/30/24 14:35**


Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.25	0.0100	mmhos/cm	1	BHH0029	08/01/24	08/02/24	EPA 120.1	

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

Date Sampled: **07/30/24 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.61		pH Units	1	BHH0030	08/01/24	08/02/24	EPA 9045D	

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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

SL01 - 6FT
2407392-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/30/24 16:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHH0018	08/01/24	08/02/24	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: **07/30/24 16:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0411	103 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0418	105 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0416	104 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/30/24 16:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHH0019	08/01/24	08/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **07/30/24 16:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	9.62	77.0 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Fremont Environmental
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Wellington CO, 80549

Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

SL01 - 6FT
2407392-07 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **07/30/24 16:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHG0906	07/31/24	08/01/24	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: **07/30/24 16:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0135	40.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0143	43.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **07/30/24 16:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHG0916	07/31/24	08/01/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **07/30/24 16:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Wellington CO, 80549

Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

SL01 - 6FT
2407392-07 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	4.34	0.200	mg/kg dry	1	BHG0921	07/31/24	08/01/24	EPA 6020B
Barium	215	0.400	"	"	"	"	"	"
Cadmium	0.231	0.200	"	"	"	"	"	"
Copper	4.84	0.400	"	"	"	"	"	"
Lead	11.6	0.200	"	"	"	"	"	"
Nickel	3.02	0.400	"	"	"	"	"	"
Silver	0.0222	0.0200	"	"	"	"	"	"
Zinc	14.8	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **07/30/24 16:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHG0936	07/31/24	08/07/24	EPA 7196A	

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

Date Sampled: **07/30/24 16:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	1080	0.0500	mg/L dry	1	BHH0028	08/01/24	08/05/24	EPA 6020B	
Magnesium	68.9	0.0500	"	"	"	"	"	"	
Sodium	49.6	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **07/30/24 16:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.395	0.00100	units	1	BHH0127	08/06/24	08/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/30/24 16:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - Castor PC T1N-R58W-S36 L01
 Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

SL01 - 6FT
2407392-07 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	75.6	%	1	BHG0919	07/31/24	08/01/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **07/30/24 16:55**


Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.344	0.0100	mmhos/cm	1	BHH0029	08/01/24	08/02/24	EPA 120.1	

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

Date Sampled: **07/30/24 16:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.33		pH Units	1	BHH0030	08/01/24	08/02/24	EPA 9045D	

Summit Scientific



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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

SL02 - 3FT
2407392-08 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/30/24 17:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BHH0018	08/01/24	08/02/24	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: **07/30/24 17:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	0.0338	84.5 %	50-150	"	"	"	"	"	
Surrogate: Toluene-d8	0.0404	101 %	50-150	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0410	102 %	50-150	"	"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/30/24 17:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	BHH0019	08/01/24	08/02/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **07/30/24 17:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl	11.4	91.5 %	30-150	"	"	"	"	"	

PAH by EPA Method 8270D SIM

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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

SL02 - 3FT
2407392-08 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **07/30/24 17:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHG0906	07/31/24	08/01/24	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: **07/30/24 17:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0142	42.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0164	49.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **07/30/24 17:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHG0916	07/31/24	08/01/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **07/30/24 17:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

SL02 - 3FT
2407392-08 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	3.78	0.200	mg/kg dry	1	BHG0921	07/31/24	08/01/24	EPA 6020B
Barium	194	0.400	"	"	"	"	"	"
Cadmium	0.243	0.200	"	"	"	"	"	"
Copper	4.53	0.400	"	"	"	"	"	"
Lead	12.2	0.200	"	"	"	"	"	"
Nickel	3.08	0.400	"	"	"	"	"	"
Silver	0.0200	0.0200	"	"	"	"	"	"
Zinc	13.0	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **07/30/24 17:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHG0936	07/31/24	08/07/24	EPA 7196A	

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

Date Sampled: **07/30/24 17:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	1840	0.0500	mg/L dry	1	BHH0028	08/01/24	08/05/24	EPA 6020B	
Magnesium	112	0.0500	"	"	"	"	"	"	
Sodium	37.2	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **07/30/24 17:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.228	0.00100	units	1	BHH0127	08/06/24	08/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/30/24 17:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - Castor PC T1N-R58W-S36 L01
 Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

SL02 - 3FT
2407392-08 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

% Solids	77.4	%	1	BHG0919	07/31/24	08/01/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **07/30/24 17:00**


Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.312	0.0100	mmhos/cm	1	BHH0029	08/01/24	08/02/24	EPA 120.1	

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

Date Sampled: **07/30/24 17:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.32		pH Units	1	BHH0030	08/01/24	08/02/24	EPA 9045D	

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Project: Noble - Castor PC T1N-R58W-S36 L01
Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

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 BHH0018 - EPA 5030 Soil MS

Blank (BHH0018-BLK1)

Prepared & Analyzed: 08/01/24

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>	0.0396		"	0.0400		99.0	50-150			
<i>Surrogate: Toluene-d8</i>	0.0392		"	0.0400		98.1	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0406		"	0.0400		101	50-150			

LCS (BHH0018-BS1)

Prepared & Analyzed: 08/01/24

Benzene	0.0881	0.0020	mg/kg	0.100		88.1	70-130			
Toluene	0.115	0.0050	"	0.100		115	70-130			
Ethylbenzene	0.117	0.0050	"	0.100		117	70-130			
m,p-Xylene	0.232	0.010	"	0.200		116	70-130			
o-Xylene	0.112	0.0050	"	0.100		112	70-130			
1,2,4-Trimethylbenzene	0.108	0.0050	"	0.100		108	70-130			
1,3,5-Trimethylbenzene	0.109	0.0050	"	0.100		109	70-130			
Naphthalene	0.0857	0.0038	"	0.100		85.7	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0392		"	0.0400		98.0	50-150			
<i>Surrogate: Toluene-d8</i>	0.0416		"	0.0400		104	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0394		"	0.0400		98.6	50-150			

Matrix Spike (BHH0018-MS1)

Source: 2407389-01

Prepared & Analyzed: 08/01/24

Benzene	0.0923	0.0020	mg/kg	0.100	ND	92.3	70-130			
Toluene	0.117	0.0050	"	0.100	ND	117	70-130			
Ethylbenzene	0.112	0.0050	"	0.100	ND	112	70-130			
m,p-Xylene	0.225	0.010	"	0.200	ND	112	70-130			
o-Xylene	0.109	0.0050	"	0.100	ND	109	70-130			
1,2,4-Trimethylbenzene	0.101	0.0050	"	0.100	ND	101	70-130			
1,3,5-Trimethylbenzene	0.102	0.0050	"	0.100	ND	102	70-130			
Naphthalene	0.0865	0.0038	"	0.100	ND	86.5	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0433		"	0.0400		108	50-150			
<i>Surrogate: Toluene-d8</i>	0.0426		"	0.0400		106	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0386		"	0.0400		96.6	50-150			

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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

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 BHH0018 - EPA 5030 Soil MS

Matrix Spike Dup (BHH0018-MSD1)	Source: 2407389-01			Prepared & Analyzed: 08/01/24						
Benzene	0.0906	0.0020	mg/kg	0.100	ND	90.6	70-130	1.90	30	
Toluene	0.116	0.0050	"	0.100	ND	116	70-130	1.60	30	
Ethylbenzene	0.109	0.0050	"	0.100	ND	109	70-130	2.49	30	
m,p-Xylene	0.220	0.010	"	0.200	ND	110	70-130	2.32	30	
o-Xylene	0.104	0.0050	"	0.100	ND	104	70-130	5.18	30	
1,2,4-Trimethylbenzene	0.0963	0.0050	"	0.100	ND	96.3	70-130	4.54	30	
1,3,5-Trimethylbenzene	0.0988	0.0050	"	0.100	ND	98.8	70-130	3.26	30	
Naphthalene	0.0817	0.0038	"	0.100	ND	81.7	70-130	5.71	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0437</i>		<i>"</i>	<i>0.0400</i>		<i>109</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0417</i>		<i>"</i>	<i>0.0400</i>		<i>104</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0395</i>		<i>"</i>	<i>0.0400</i>		<i>98.8</i>	<i>50-150</i>			

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Project: Noble - Castor PC T1N-R58W-S36 L01
Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

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 BHH0019 - EPA 3550A

Blank (BHH0019-BLK1)

Prepared & Analyzed: 08/01/24

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	12.4		"	12.5		99.3	30-150				

LCS (BHH0019-BS1)

Prepared & Analyzed: 08/01/24

C10-C28 (DRO)	472	50	mg/kg	500		94.5	70-130				
Surrogate: <i>o</i> -Terphenyl	11.8		"	12.5		94.4	30-150				

Matrix Spike (BHH0019-MS1)

Source: 2407389-01

Prepared & Analyzed: 08/01/24

C10-C28 (DRO)	570	50	mg/kg	500	ND	114	70-130				
Surrogate: <i>o</i> -Terphenyl	13.9		"	12.5		111	30-150				

Matrix Spike Dup (BHH0019-MSD1)

Source: 2407389-01

Prepared & Analyzed: 08/01/24

C10-C28 (DRO)	498	50	mg/kg	500	ND	99.6	70-130	13.6	20		
Surrogate: <i>o</i> -Terphenyl	11.8		"	12.5		94.2	30-150				

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Project: Noble - Castor PC T1N-R58W-S36 L01
Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

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 BHG0906 - EPA 5030 Soil MS

Blank (BHG0906-BLK1)

Prepared & Analyzed: 07/31/24

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>	0.0273		"	0.0333		81.8	40-150			
<i>Surrogate: Fluoranthene-d10</i>	0.0239		"	0.0333		71.7	40-150			

LCS (BHG0906-BS1)

Prepared & Analyzed: 07/31/24

Acenaphthene	0.0257	0.00500	mg/kg	0.0333		77.1	31-137			
Anthracene	0.0237	0.00500	"	0.0333		71.0	30-120			
Benzo (a) anthracene	0.0263	0.00500	"	0.0333		78.8	30-120			
Benzo (a) pyrene	0.0241	0.00500	"	0.0333		72.3	30-120			
Benzo (b) fluoranthene	0.0240	0.00500	"	0.0333		72.0	30-120			
Benzo (k) fluoranthene	0.0241	0.00500	"	0.0333		72.4	30-120			
Chrysene	0.0261	0.00500	"	0.0333		78.4	30-120			
Dibenz (a,h) anthracene	0.0278	0.00500	"	0.0333		83.3	30-120			
Fluoranthene	0.0241	0.00500	"	0.0333		72.2	30-120			
Fluorene	0.0256	0.00500	"	0.0333		76.9	30-120			
Indeno (1,2,3-cd) pyrene	0.0390	0.00500	"	0.0333		117	30-120			
Pyrene	0.0310	0.00500	"	0.0333		92.9	35-142			
1-Methylnaphthalene	0.0181	0.00500	"	0.0333		54.2	35-142			
2-Methylnaphthalene	0.0178	0.00500	"	0.0333		53.4	35-142			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	0.0178		"	0.0333		53.4	40-150			
<i>Surrogate: Fluoranthene-d10</i>	0.0251		"	0.0333		75.2	40-150			

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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

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 BHG0906 - EPA 5030 Soil MS

Matrix Spike (BHG0906-MS1)	Source: 2407386-21			Prepared & Analyzed: 07/31/24								
Acenaphthene	0.0283	0.00500	mg/kg	0.0333	ND	85.0	31-137					
Anthracene	0.0280	0.00500	"	0.0333	ND	83.9	30-120					
Benzo (a) anthracene	0.0302	0.00500	"	0.0333	ND	90.6	30-120					
Benzo (a) pyrene	0.0277	0.00500	"	0.0333	ND	83.2	30-120					
Benzo (b) fluoranthene	0.0273	0.00500	"	0.0333	ND	81.9	30-120					
Benzo (k) fluoranthene	0.0273	0.00500	"	0.0333	ND	81.9	30-120					
Chrysene	0.0298	0.00500	"	0.0333	ND	89.3	30-120					
Dibenz (a,h) anthracene	0.0311	0.00500	"	0.0333	ND	93.4	30-120					
Fluoranthene	0.0278	0.00500	"	0.0333	ND	83.3	30-120					
Fluorene	0.0300	0.00500	"	0.0333	ND	89.9	30-120					
Indeno (1,2,3-cd) pyrene	0.0209	0.00500	"	0.0333	ND	62.6	30-120					
Pyrene	0.0340	0.00500	"	0.0333	ND	102	35-142					
1-Methylnaphthalene	0.0225	0.00500	"	0.0333	ND	67.4	15-130					
2-Methylnaphthalene	0.0185	0.00500	"	0.0333	ND	55.6	15-130					
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0259</i>		<i>"</i>	<i>0.0333</i>		<i>77.6</i>	<i>40-150</i>					
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0287</i>		<i>"</i>	<i>0.0333</i>		<i>86.2</i>	<i>40-150</i>					

Matrix Spike Dup (BHG0906-MSD1)	Source: 2407386-21			Prepared & Analyzed: 07/31/24								
Acenaphthene	0.0330	0.00500	mg/kg	0.0333	ND	99.1	31-137	15.3	30			
Anthracene	0.0326	0.00500	"	0.0333	ND	97.7	30-120	15.2	30			
Benzo (a) anthracene	0.0352	0.00500	"	0.0333	ND	106	30-120	15.4	30			
Benzo (a) pyrene	0.0320	0.00500	"	0.0333	ND	96.0	30-120	14.2	30			
Benzo (b) fluoranthene	0.0319	0.00500	"	0.0333	ND	95.6	30-120	15.4	30			
Benzo (k) fluoranthene	0.0315	0.00500	"	0.0333	ND	94.6	30-120	14.4	30			
Chrysene	0.0344	0.00500	"	0.0333	ND	103	30-120	14.5	30			
Dibenz (a,h) anthracene	0.0357	0.00500	"	0.0333	ND	107	30-120	13.6	30			
Fluoranthene	0.0326	0.00500	"	0.0333	ND	97.9	30-120	16.2	30			
Fluorene	0.0326	0.00500	"	0.0333	ND	97.8	30-120	8.35	30			
Indeno (1,2,3-cd) pyrene	0.0399	0.00500	"	0.0333	ND	120	30-120	62.7	30			QR-02
Pyrene	0.0388	0.00500	"	0.0333	ND	116	35-142	13.1	30			
1-Methylnaphthalene	0.0258	0.00500	"	0.0333	ND	77.3	15-130	13.6	50			
2-Methylnaphthalene	0.0256	0.00500	"	0.0333	ND	76.7	15-130	31.9	50			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0273</i>		<i>"</i>	<i>0.0333</i>		<i>81.8</i>	<i>40-150</i>					
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0341</i>		<i>"</i>	<i>0.0333</i>		<i>102</i>	<i>40-150</i>					

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Fremont Environmental
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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

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 BHG0916 - EPA 3050B

Blank (BHG0916-BLK1)

Prepared: 07/31/24 Analyzed: 08/01/24

Boron ND 2.00 mg/L

LCS (BHG0916-BS1)

Prepared: 07/31/24 Analyzed: 08/01/24

Boron 4.95 2.00 mg/L 5.00 99.1 80-120

Duplicate (BHG0916-DUP1)

Source: 2407367-01

Prepared: 07/31/24 Analyzed: 08/01/24

Boron 0.463 2.00 mg/L 0.355 26.4 20 QR-01

Matrix Spike (BHG0916-MS1)

Source: 2407367-01

Prepared: 07/31/24 Analyzed: 08/01/24

Boron 5.29 2.00 mg/L 5.05 0.355 97.8 75-125

Matrix Spike Dup (BHG0916-MSD1)

Source: 2407367-01

Prepared: 07/31/24 Analyzed: 08/01/24

Boron 5.52 2.00 mg/L 5.05 0.355 102 75-125 4.17 25

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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHG0921 - EPA 3050B

Blank (BHG0921-BLK1)

Prepared: 07/31/24 Analyzed: 08/01/24

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 (BHG0921-BS1)

Prepared: 07/31/24 Analyzed: 08/01/24

Arsenic	37.5	0.200	mg/kg wet	39.1	96.1	80-120
Barium	37.5	0.400	"	39.1	96.0	80-120
Cadmium	1.88	0.200	"	1.95	96.1	80-120
Copper	38.7	0.400	"	39.1	99.0	80-120
Lead	18.5	0.200	"	19.5	94.7	80-120
Nickel	38.8	0.400	"	39.1	99.4	80-120
Silver	1.90	0.0200	"	1.95	97.2	80-120
Zinc	38.4	0.400	"	39.1	98.3	80-120
Selenium	4.39	0.260	"	3.91	112	80-120

Duplicate (BHG0921-DUP1)

Source: 2407387-26

Prepared: 07/31/24 Analyzed: 08/01/24

Arsenic	2.41	0.200	mg/kg dry	2.23	7.75	20
Barium	67.2	0.400	"	65.7	2.17	20
Cadmium	0.0963	0.200	"	0.0937	2.74	20
Copper	2.92	0.400	"	2.89	0.901	20
Lead	4.61	0.200	"	4.28	7.43	20
Nickel	3.86	0.400	"	3.44	11.6	20
Silver	0.0201	0.0200	"	0.0214	6.14	20
Zinc	13.3	0.400	"	12.5	6.85	20
Selenium	ND	0.260	"	ND		20

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

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 BHG0921 - EPA 3050B

Matrix Spike (BHG0921-MS1)	Source: 2407387-26			Prepared: 07/31/24		Analyzed: 08/01/24					
Arsenic	38.9	0.200	mg/kg dry	39.5	2.23	93.0	75-125				
Barium	105	0.400	"	39.5	65.7	98.6	75-125				
Cadmium	1.75	0.200	"	1.97	0.0937	83.9	75-125				
Copper	25.5	0.400	"	39.5	2.89	57.3	75-125				QM-05
Lead	22.8	0.200	"	19.7	4.28	93.7	75-125				
Nickel	26.6	0.400	"	39.5	3.44	58.8	75-125				QM-05
Silver	1.64	0.0200	"	1.97	0.0214	81.9	75-125				
Zinc	36.9	0.400	"	39.5	12.5	62.0	75-125				QM-05
Selenium	3.90	0.260	"	3.95	ND	98.9	75-125				

Matrix Spike Dup (BHG0921-MSD1)	Source: 2407387-26			Prepared: 07/31/24		Analyzed: 08/01/24					
Arsenic	40.1	0.200	mg/kg dry	40.7	2.23	93.1	75-125	2.97	25		
Barium	98.0	0.400	"	40.7	65.7	79.3	75-125	6.56	25		
Cadmium	1.78	0.200	"	2.03	0.0937	82.9	75-125	1.76	25		
Copper	27.8	0.400	"	40.7	2.89	61.3	75-125	8.70	25		QM-05
Lead	22.2	0.200	"	20.3	4.28	88.0	75-125	2.65	25		
Nickel	28.7	0.400	"	40.7	3.44	62.1	75-125	7.51	25		QM-05
Silver	1.67	0.0200	"	2.03	0.0214	80.8	75-125	1.82	25		
Zinc	37.9	0.400	"	40.7	12.5	62.5	75-125	2.61	25		QM-05
Selenium	3.96	0.260	"	4.07	ND	97.4	75-125	1.54	25		

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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

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 BHG0936 - 3060A Mod

Blank (BHG0936-BLK1)

Prepared: 07/31/24 Analyzed: 08/07/24

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BHG0936-BS1)

Prepared: 07/31/24 Analyzed: 08/07/24

Chromium, Hexavalent 24.5 0.30 mg/kg wet 25.0 98.0 80-120

Duplicate (BHG0936-DUP1)

Source: 2407389-01

Prepared: 07/31/24 Analyzed: 08/07/24

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BHG0936-MS1)

Source: 2407389-01

Prepared: 07/31/24 Analyzed: 08/07/24

Chromium, Hexavalent 26.5 0.30 mg/kg dry 26.2 ND 101 75-125

Matrix Spike Dup (BHG0936-MSD1)

Source: 2407389-01

Prepared: 07/31/24 Analyzed: 08/07/24

Chromium, Hexavalent 26.1 0.30 mg/kg dry 26.2 ND 99.6 75-125 1.40 20

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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

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 BHH0028 - General Preparation

Blank (BHH0028-BLK1)

Prepared: 08/01/24 Analyzed: 08/05/24

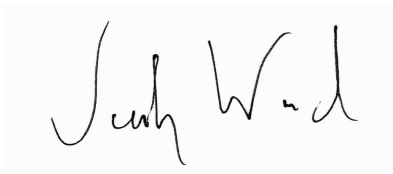
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							

LCS (BHH0028-BS1)

Prepared: 08/01/24 Analyzed: 08/05/24

Calcium	5.62	0.0500	mg/L wet	5.00	112	70-130				
Magnesium	5.46	0.0500	"	5.00	109	70-130				
Sodium	5.75	0.0500	"	5.00	115	70-130				

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 PO Box 1289
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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

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 BHG0919 - General Preparation

Duplicate (BHG0919-DUP1)

Source: 2407386-29

Prepared: 07/31/24 Analyzed: 08/01/24

% Solids	86.7		%		87.0			0.347	20	
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Project: Noble - Castor PC T1N-R58W-S36 L01
 Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

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 BHH0029 - General Preparation

Blank (BHH0029-BLK1)

Prepared: 08/01/24 Analyzed: 08/02/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BHH0029-BS1)

Prepared: 08/01/24 Analyzed: 08/02/24

Specific Conductance (EC) 0.158 0.0100 mmhos/cm 0.150 105 95-105

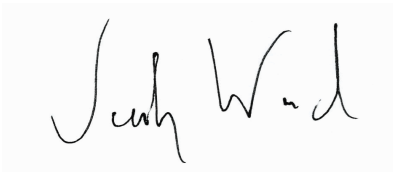
Duplicate (BHH0029-DUP1)

Source: 2407389-01

Prepared: 08/01/24 Analyzed: 08/02/24

Specific Conductance (EC) 0.312 0.0100 mmhos/cm 0.323 3.53 20

Summit Scientific



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Fremont Environmental
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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
 Project Manager: Paul Henchan

Reported:
 08/07/24 14:11

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 BHH0030 - General Preparation

LCS (BHH0030-BS1)

Prepared: 08/01/24 Analyzed: 08/02/24

pH	9.08		pH Units	9.18		98.9	95-105			
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Duplicate (BHH0030-DUP1)

Source: 2407389-01

Prepared: 08/01/24 Analyzed: 08/02/24

pH	8.25		pH Units	8.37		1.44	20			
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Summit Scientific



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PO Box 1289
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Project: Noble - Castor PC T1N-R58W-S36 L01

Project Number: UWREP-A2000-ABN
Project Manager: Paul Henchan

Reported:
08/07/24 14:11

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-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The associated LCS and/or LCSD were within acceptance limits, therefore the data are considered valid.
- 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