

# **FREMONT ENVIRONMENTAL INC.**

January 18, 2022

Mr. Mike Hickey  
Colorado Oil and Gas Conservation Commission  
1120 Lincoln Street, Suite 801  
Denver, CO 80203

Subject:       **Wellhead Closure Data Submittal**  
                  Nordman Trust 41-20 (Wellhead)  
                  API # 05-039-06553  
                  NENE Sec. 20, T6S, R64W  
                  Elbert County, Colorado  
                  Facility #209648, Remediation #20820  
                  Fremont Project No. C021-086

Dear Mr. Hickey:

As you requested, Fremont Environmental Inc. (Fremont) personnel conducted wellhead closure activities for the Nordman Trust 41-20 wellhead location. Impacted soil was encountered adjacent to the former wellhead during abandonment activities. These soil impacts were left in place as documented in the attached Closure Report. Removal of impacts will be scheduled concurrently with the abandonment of associated flowline and facility equipment.

Groundwater was not encountered in the wellhead excavation.

Please contact me at (303) 956-8714 if you require any additional information. Fremont appreciates the opportunity to provide this service.

Sincerely,

**FREMONT ENVIRONMENTAL INC.**



Paul V. Henahan, P.E.  
Senior Consultant

Attachments:

Facility Closure Checklist  
Tables  
Figures  
Photos  
Laboratory Report

**1759 REDWING LANE, BROOMFIELD, CO 80020  
(303) 956-8714 (DIRECT)**

Wellhead Closure Checklist						
COGCC Rule 911.a.(4) Environmental Site Closure Assessment Field Form						
Additional attachments (optional):		Pit Closure		Tank Battery Closure		Flowline Closure
						Partially Buried Vault Closure
Site Name & COGCC Facility Number:		Date:				Remediation Project #:
Associated Wells:		Age of Site:				Number of Photos Attached:
Location: (GPS coordinates of wellhead or southeastern most wellhead for multiple)					Estimated Facility Size (acres):	
General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.)						
USCS Soil Type:				Estimated Depth to Groundwater:		
Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)						
Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)						
Wellhead(s)						
Well API						
Age						
Condition of surface around wellhead						
PID Readings						
Condition of subsurface (staining present)						
PID Readings						
Sample taken?						
Location/Sample ID#						
Photo Number(s)						
Other observations regarding wellheads:						
Summary						
Was impacted soil identified?						
No		Yes - less than 10 cubic yards		Yes - more than 10 cubic yards		
Total number of samples field screened:				Total number of samples collected:		
Highest PID Reading:				Total number of samples submitted to lab for analysis:		
If more than 10 cubic yards of impacted soil were observed:						
Vertical extent:				Estimated spill volume:		
Lateral extent:				Volume of soil removed:		
Is additional investigation required?						
Was groundwater encountered during the investigation?						
No		Yes - not impacted or in contact with impacted soils		Yes - groundwater impacted and/or in contact with impacted soils		
Measured depth to groundwater:				Was remedial groundwater removal conducted?      Yes      No		
Date Groundwater was encountered:				Commencement date of removal:		
Sheen on groundwater?		Yes      No		Volume of groundwater removed prior to sampling:		
Free product observed?		Yes      No		Volume of groundwater removed post sampling:		
Total number of samples collected:				Total Volume of groundwater removed:		
Total number of samples submitted to lab for analysis:						

TABLE 1  
SUMMARY OF ORGANIC (VOC AND TPH) SOIL CHEMISTRY DATA  
COLORADO OIL AND GAS CONSERVATION COMMISSION  
NORDMAN TRUST 41-20 (WELLHEAD), ELBERT COUNTY, COLORADO  
FREMONT PROJECT NO. C021-086

Sample	Depth (ft)	Date Sampled	Location	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- Benzene (mg/kg)	Xylenes (mg/kg)	1,2,4-Trimethyl- Benzene (mg/kg)	1,3,5- Trimethyl- Benzene (mg/kg)	Naphth- alene (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)
N Wall 6 Ft	6	12/17/2021	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.5	<50	<50
S Wall 6 Ft	6	12/17/2021	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.5	160	<50
E Wall 4 Ft	4	12/17/2021	Wall	<b>1.6</b>	<b>1.4</b>	<b>0.4</b>	9.1	<b>4.3</b>	<b>1.1</b>	<b>1.1</b>	<b>890</b>	<b>4500</b>	330
W Wall 4 Ft	4	12/17/2021	Wall	<b>0.0097</b>	<0.0050	<0.0050	<0.010	<b>0.054</b>	<b>0.039</b>	<b>0.027</b>	10	220	<50
Floor 8 Ft	8	12/17/2021	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
COGCC Table 915-1 Limits (Residential SSL)				1.2	490	5.8	58	30	27	2	500	500	500
COGCC Table 915-1 Limits (Protection of Groundwater SSL)				0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038	500	500	500

Bold faced values exceed the COGCC Table 915-1 concentrations

TABLE 2  
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBONS (PAH) SOIL CHEMISTRY DATA  
COLORADO OIL AND GAS CONSERVATION COMMISSION  
NORDMAN TRUST 41-20 (WELLHEAD), ELBERT COUNTY, COLORADO  
FREMONT PROJECT NO. C021-086

Sample	Depth (ft)	Date Sampled	Location	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo (b) fluoranthene (mg/kg)	Benzo (k) fluoranthene (mg/kg)	Benzo (a) pyrene (mg/kg)	Chrysene (mg/kg)	Dibenz (a,h) anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	1-Methyl - naphthalene (mg/kg)	2-Methyl- naphthalene (mg/kg)	Pyrene (mg/kg)
E Wall 4 Ft	4	12/17/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.2	<0.005	0.0284	1.07	<0.005	<0.005	<0.005	0.164
COGCC Table 915-1 Limits (Residential SSL)				360	1800	1.1	1.1	11	0.11	110	0.11	240	240	1.1	18	24	180
COGCC Table 915-1 Limits (Protection of Groundwater SSL)				0.55	5.8	0.011	0.3	2.9	0.24	9	0.096	8.9	0.54	0.98	0.006	0.019	1.3

Bold faced values exceed the COGCC Table 915-1 concentrations  
Blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

TABLE 3  
SUMMARY OF INORGANIC SOIL CHEMISTRY DATA  
COLORADO OIL AND GAS CONSERVATION COMMISSION  
NORDMAN TRUST 41-20 (WELLHEAD), ELBERT COUNTY, COLORADO  
FREMONT PROJECT NO. C021-086

SAMPLE LOCATION	DATE SAMPLED	DEPTH ft	EC mmhos/cm	pH pH units	SAR units	BORON mg/L
N Wall 3 Ft	12/17/2021	3	0.49	8.11	0.914	0.0997
Table 915-1 Limits			<4	6-8.3	<6	2

Bold face values exceed the COGCC Limits

TABLE 4  
SUMMARY OF METALS SOIL CHEMISTRY DATA  
COLORADO OIL AND GAS CONSERVATION COMMISSION  
NORDMAN TRUST 41-20 (WELLHEAD), ELBERT COUNTY, COLORADO  
FREMONT PROJECT NO. C021-086

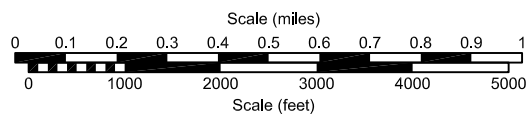
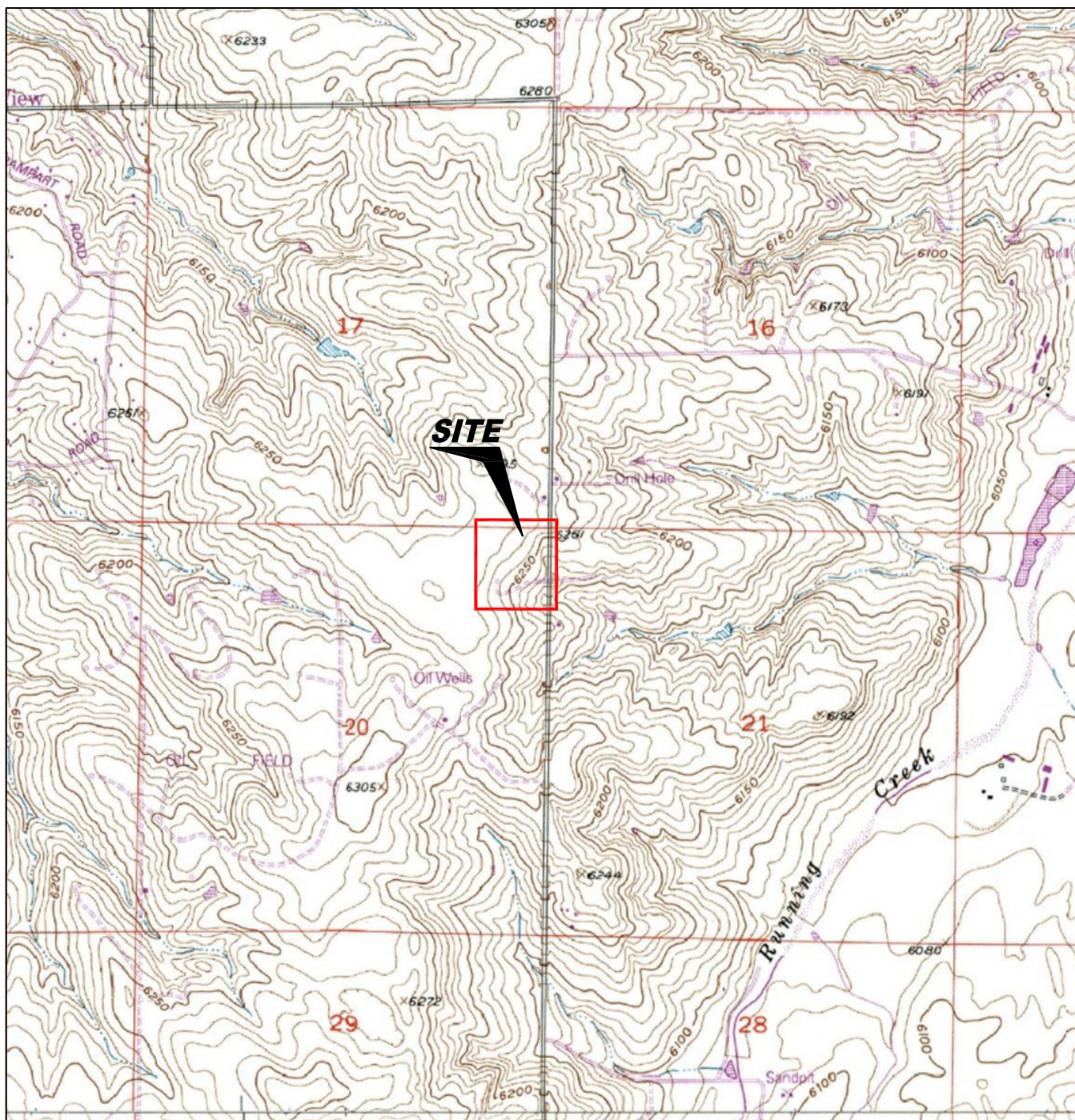
Sample	Depth (ft)	Date Sampled	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)	Chromium (mg/kg)
E Wall 4 Ft	4	12/17/2021	<b>2.86</b>	<b>134</b>	<0.248	10.7	7.3	10.2	0.902	0.0553	37.0	<0.3
COGCC Table 915-1 Limits (Residential SSL)			0.68	15000	71	3100	400	1500	390	390	23000	0.3
COGCC Table 915-1 Limits (Protection of Groundwater SSL)			0.29	82	0.38	46	14	26	0.26	0.8	370	0.00067

Bold faced values exceed the COGCC Table 915-1 concentrations

Blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

NA- Not analyzed





USGS 7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 1  
**SITE LOCATION MAP**

**Colorado Oil & Gas Conservation Commission**  
**Nordman Trust 41-20**  
 NENE Sec. 20, T6S, R64W, 6th PM  
 Elbert County, Colorado

Project # <b>C021-086</b>	API # <b>05-039-06553</b>	Facility # <b>209648</b>
Date <b>1/18/22</b>	Reviewed By <b>EB</b>	Filename <b>21086T</b>







#### LEGEND

● WELLHEAD LOCATION   
 FORMER FORMER FACILITY   
 BUILDING BUILDING   
 - - - - - EXTENT OF EXCAVATION

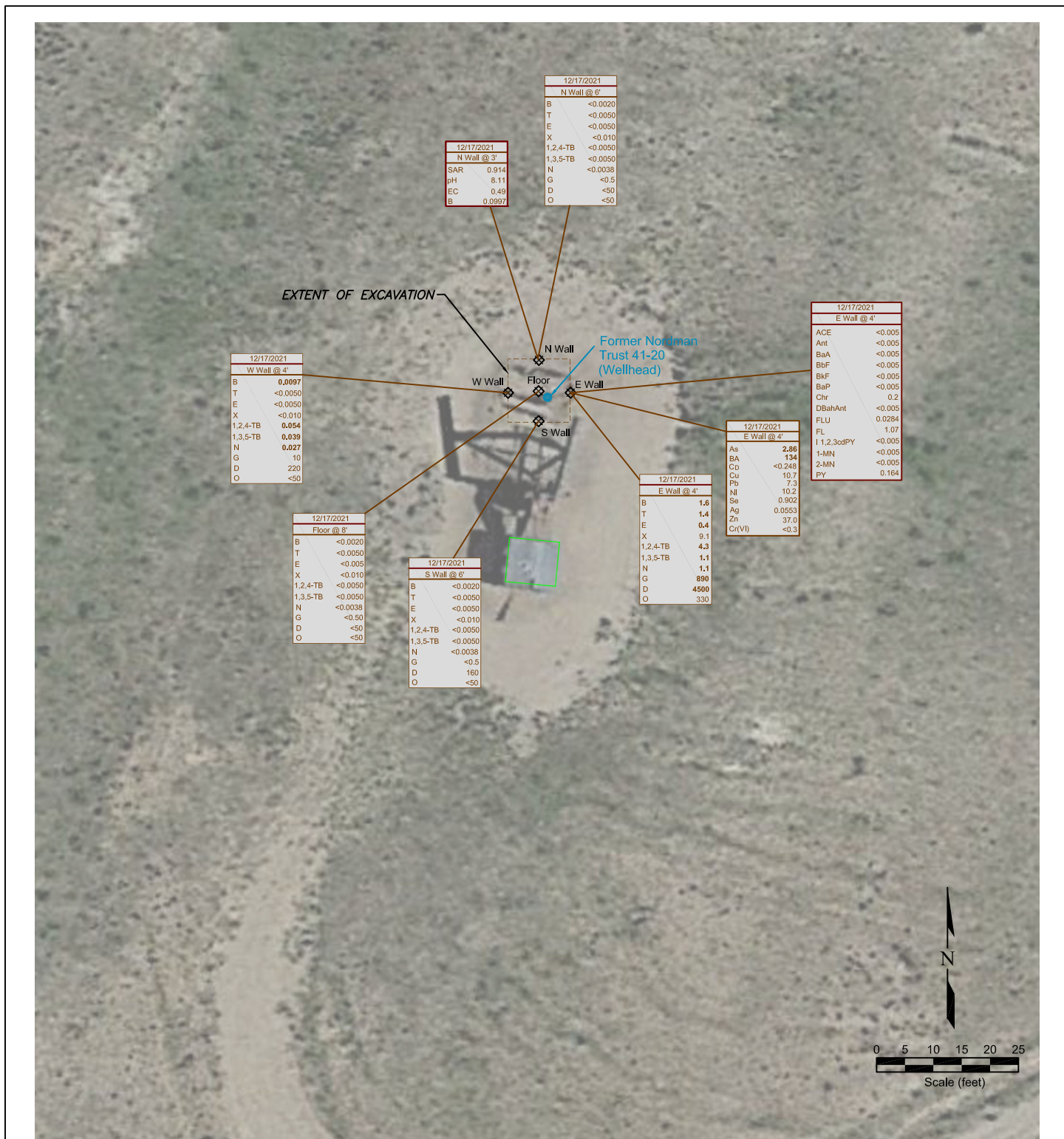
**Figure 2  
SITE MAP**

**Colorado Oil & Gas Conservation Commission**  
**Nordman Trust 41-20**  
 NENE Sec. 20, T6S, R64W, 6th PM  
 Elbert County, Colorado

Project No. <b>C021-086</b>	API # <b>05-039-06553</b>	Facility # <b>209648</b>
Date <b>1/18/22</b>	Reviewed By <b>EB</b>	Filename <b>21086Q</b>







# LEGEND

● WELLHEAD LOCATION  
● SOIL SAMPLE LOCATION  
FORMER FORMER FACILITY  
BUILDING BUILDING  
--- EXTENT OF EXCAVATION

12/17/2021 E Wall @ 4'	DATE SAMPLED SAMPLE ID and DEPTH (ft)	12/17/2021 N Wall @ 3'	DATE SAMPLED SAMPLE ID and DEPTH (ft)	12/17/2021 E Wall @ 4'	DATE SAMPLED SAMPLE ID and DEPTH (ft)
ACE	<0.005	B	<0.0020	As	2.86
Ant	<0.005	T	<0.0050	BA	134
BaA	<0.005	E	<0.0050	Cd	<0.249
BaP	<0.005	X	<0.010	Cu	10.7
BkF	<0.005	1,2,4-TB	<0.0050	Pb	7.3
BaP	<0.005	1,3,5-TB	<0.0050	Ni	10.2
Chr	0.2	N	<0.0038	Se	0.902
DBahAnt	<0.005	G	<0.5	Ag	0.0553
FLU	0.0284	D	<50	Zn	37.0
FL	1.07	O	<50	Cr(VI)	<0.3
1,1,2,3cdPY	<0.005				
1-MN	<0.005				
2-MN	<0.005				
PY	0.164				

Figure 3  
**SOIL CHEMISTRY MAP**  
December 17, 2021  
Colorado Oil & Gas Conservation Commission  
Nordman Trust 41-20  
NENE Sec. 20, T6S, R64W, 6th PM  
Elbert County, Colorado

Project No. <b>C021-086</b>	API # <b>05-039-06553</b>	Facility # <b>209648</b>	
Date <b>1/18/22</b>	Reviewed By <b>EB</b>	Filename <b>21086QQ</b>	



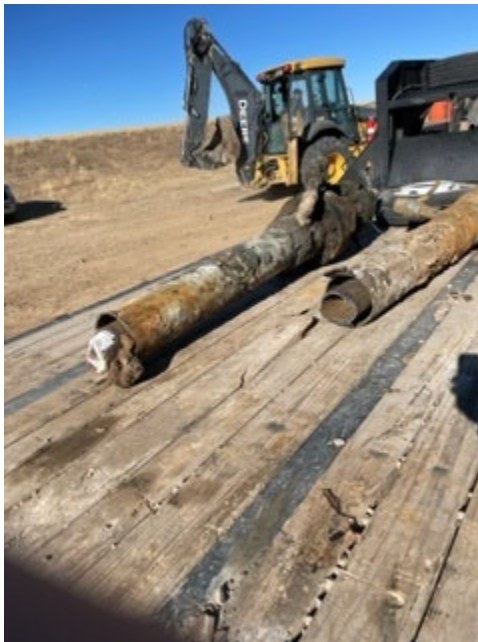
**1 – Nordman Trust 41-20 – wellhead excavation; south wall**



**2 – Nordman Trust 41-20 – wellhead excavation stockpile, looking north**



**3 – Nordman Trust 41-20 wellhead prior to cut and cap**



**4 – Nordman Trust 41-20 wellhead (left), following cut and cap**





5 – Nordman Trust 41-20 wellhead capped with nameplate

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

January 03, 2022

Paul Henchan

Fremont Environmental

PO Box 1289

Wellington, CO 80549

RE: COGCC - Nordman Trust 41-20

Work Order #2112335

Enclosed are the results of analyses for samples received by Summit Scientific on 12/17/21 17:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', with a stylized, cursive script.

Paul Shrewsbury

President





Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N Wall 3 ft	2112335-01	Soil	12/17/21 00:00	12/17/21 17:35
N Wall 6 ft	2112335-02	Soil	12/17/21 00:00	12/17/21 17:35
E Wall 4 ft	2112335-03	Soil	12/17/21 00:00	12/17/21 17:35
S Wall 6 ft	2112335-04	Soil	12/17/21 00:00	12/17/21 17:35
W Wall 4 ft	2112335-05	Soil	12/17/21 00:00	12/17/21 17:35
Floor 8 ft	2112335-06	Soil	12/17/21 00:00	12/17/21 17:35

Summit Scientific

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

# Summit Scientific

2112335

S<sub>2</sub>

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310 ♦ 303-374-5933 (f)

Page

of

Client: Fremont Environmental

Project Manager: Paul Henehan

Address: P.O Box 1289

E-Mail: paulh@fremontenv.com, ethanb@fremontenv.com, Jeffg@fremontenv.com

City/State/Zip: Wellington, CO 80549

Bill to: Fremont

Phone: 303-956-8714

Project Name: COGCC - Nordman Trust 41-20

Sampler Name: EB, JG

Project Number: CO21-086

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested								Special Instructions		
					HCl	HNO <sub>3</sub>	None	Other	Water	Soil	Air-Canister #	Other	BTEX/THBS	Naphthalene	GRO	DRO/PRO	SAR	EC	pH	Boron		PAH/15 metals	
1	N WALL 3FT	12/17/21		1			X			X													
2	N WALL 6FT			2																			
3	E WALL 4FT																						
4	S WALL 6FT																						
5	W WALL 4FT																						
6	FLOOR 8FT																						
7																							
8																							
9																							
10																							

Relinquished by: <u>Ethan Black</u>	Date/Time: <u>12/17/21</u>	Received by: <u>[Signature]</u>	Date/Time: <u>12-17-21 17:35</u>	Turn Around Time (Check)	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day <input type="checkbox"/>	72 hours <input type="checkbox"/> 24 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 hours <input type="checkbox"/> Sample Integrity: Temperature Upon Receipt: <u>3.7</u> Samples Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Relinquished by:	Date/Time:	Received by:	Date/Time:		
Relinquished by:	Date/Time:	Received by:	Date/Time:		

S<sub>2</sub>

## Sample Receipt Checklist

S2 Work Order# 2112335

Client: FREMONT ENV. Client Project ID: COGCC - NORMAN TRUSTShipped Via: ☒ H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: \_\_\_\_\_Matrix (check all that apply): ☒ Air ☒ Soil/Solid ☐ Water ☐ Other: \_\_\_\_\_  
(Describe)Temp (°C) 3.7

Thermometer ID: G86A9201901378

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ? 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"/>	
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact <sup>(1)</sup> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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) <sup>(1)</sup> ? Note the type of preservative in the Comments column – HCl, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Additional Comments (if any):

<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.Muri P  
Custodian Printed Name or Initials12-17-21  
Date/Time



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20  
Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

**N Wall 3 ft**  
**2112335-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0997	0.0100	mg/L	1	BEL0528	12/22/21	12/27/21	EPA 6020B	

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

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	41.3	0.0609	mg/L dry	1	BEL0584	12/27/21	12/28/21	EPA 6020B	
Magnesium	14.8	0.0609	"	"	"	"	"	"	
Sodium	26.9	0.0609	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.914	0.00100	units	1	BEL0628	12/29/21	12/29/21	Calculation	

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

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	82.2		%	1	BEL0558	12/27/21	12/27/21	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.490	0.0100	mmhos/cm	1	BEL0608	12/28/21	12/28/21	EPA 120.1	

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

Summit Scientific

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20  
Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

**N Wall 3 ft**  
**2112335-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>pH</b>	<b>8.11</b>			pH Units	1	BEL0607	12/28/21	12/28/21	EPA 9045D	

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PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

**N Wall 6 ft**  
**2112335-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEL0476	12/21/21	12/22/21	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: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		112 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		107 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BEL0477	12/21/21	12/22/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		87.7 %	30-150		"	"	"	"	

Summit Scientific

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PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

**E Wall 4 ft**  
**2112335-03 (Soil)**

**Summit Scientific**

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

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	1.6	0.020	mg/kg	10	BEL0476	12/21/21	12/22/21	EPA 8260B	
Toluene	1.4	0.50	"	100	"	"	"	"	
Ethylbenzene	0.40	0.0050	"	1	"	"	"	"	
Xylenes (total)	9.1	0.10	"	10	"	"	12/22/21	"	
1,2,4-Trimethylbenzene	4.3	0.050	"	"	"	"	12/22/21	"	
1,3,5-Trimethylbenzene	1.1	0.050	"	"	"	"	"	"	
Naphthalene	1.1	0.038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	890	5.0	"	"	"	"	12/22/21	"	

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		56.6 %	23-173		"	"	12/22/21	"	
Surrogate: Toluene-d8		2140 %	20-170		"	"	"	"	S-02
Surrogate: 4-Bromofluorobenzene		329 %	21-167		"	"	"	"	S-02

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	4500	50	mg/kg	1	BEL0477	12/21/21	12/22/21	EPA 8015M	
C28-C36 (ORO)	330	50	"	"	"	"	"	"	

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		139 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

**E Wall 4 ft**  
**2112335-03 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEL0530	12/23/21	12/27/21	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	"	"	"	"	"	"	
<b>Chrysene</b>	<b>0.200</b>	0.0500	"	10	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	1	"	"	"	"	
<b>Fluoranthene</b>	<b>0.0284</b>	0.00500	"	"	"	"	"	"	
<b>Fluorene</b>	<b>1.07</b>	0.0500	"	10	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	1	"	"	"	"	
<b>Pyrene</b>	<b>0.164</b>	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		83.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		55.3 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B**

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Arsenic</b>	<b>2.86</b>	0.248	mg/kg dry	1	BEL0522	12/22/21	12/27/21	EPA 6020B	
<b>Barium</b>	<b>134</b>	0.495	"	"	"	"	"	"	
Cadmium	ND	0.248	"	"	"	"	"	"	
<b>Copper</b>	<b>10.7</b>	0.495	"	"	"	"	"	"	
<b>Lead</b>	<b>7.30</b>	0.248	"	"	"	"	"	"	
<b>Nickel</b>	<b>10.2</b>	0.495	"	"	"	"	"	"	
<b>Selenium</b>	<b>0.902</b>	0.322	"	"	"	"	"	"	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

**E Wall 4 ft**  
**2112335-03 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Silver	0.0553	0.0248	mg/kg dry	1	BEL0522	12/22/21	12/27/21	EPA 6020B
Zinc	37.0	0.495	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEL0571	12/27/21	12/27/21	EPA 7196A	

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

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	80.8		%	1	BEL0558	12/27/21	12/27/21	Calculation	

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Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

**S Wall 6 ft**  
**2112335-04 (Soil)**

**Summit Scientific**

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

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEL0476	12/21/21	12/22/21	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: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		120 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		103 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	160	50	mg/kg	1	BEL0477	12/21/21	12/22/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		86.4 %	30-150		"	"	"	"	

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Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

**W Wall 4 ft**  
**2112335-05 (Soil)**

**Summit Scientific**

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

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>0.0097</b>	0.0020	mg/kg	1	BEL0476	12/21/21	12/22/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>0.054</b>	0.0050	"	"	"	"	"	"	
<b>1,3,5-Trimethylbenzene</b>	<b>0.039</b>	0.0050	"	"	"	"	"	"	
<b>Naphthalene</b>	<b>0.027</b>	0.0038	"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>10</b>	0.50	"	"	"	"	"	"	

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		99.0 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		116 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>C10-C28 (DRO)</b>	<b>220</b>	50	mg/kg	1	BEL0477	12/21/21	12/22/21	EPA 8015M	
<b>C28-C36 (ORO)</b>	ND	50	"	"	"	"	"	"	

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		73.2 %	30-150		"	"	"	"	

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Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

**Floor 8 ft**  
**2112335-06 (Soil)**

**Summit Scientific**

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

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEL0476	12/21/21	12/22/21	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: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		114 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BEL0477	12/21/21	12/22/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **12/17/21 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		79.9 %	30-150		"	"	"	"	

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Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

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

### Summit Scientific

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

#### Batch BEL0476 - EPA 5030 Soil MS

##### Blank (BEL0476-BLK1)

Prepared & Analyzed: 12/21/21

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	0.0447		"	0.0400		112	23-173			
Surrogate: Toluene-d8	0.0428		"	0.0400		107	20-170			
Surrogate: 4-Bromofluorobenzene	0.0409		"	0.0400		102	21-167			

##### LCS (BEL0476-BS1)

Prepared & Analyzed: 12/21/21

Benzene	0.0616	0.0020	mg/kg	0.0750		82.1	70-130			
Toluene	0.0699	0.0050	"	0.0750		93.2	70-130			
Ethylbenzene	0.0638	0.0050	"	0.0750		85.0	70-130			
m,p-Xylene	0.129	0.010	"	0.150		86.0	70-130			
o-Xylene	0.0667	0.0050	"	0.0750		88.9	70-130			
1,2,4-Trimethylbenzene	0.0678	0.0050	"	0.0750		90.4	70-130			
1,3,5-Trimethylbenzene	0.0668	0.0050	"	0.0750		89.1	70-130			
Naphthalene	0.0676	0.0038	"	0.0750		90.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0455		"	0.0400		114	23-173			
Surrogate: Toluene-d8	0.0415		"	0.0400		104	20-170			
Surrogate: 4-Bromofluorobenzene	0.0402		"	0.0400		100	21-167			

##### Matrix Spike (BEL0476-MS1)

Source: 2112069-02

Prepared & Analyzed: 12/21/21

Benzene	0.0604	0.0020	mg/kg	0.0750	ND	80.6	70-130			
Toluene	0.0682	0.0050	"	0.0750	ND	91.0	70-130			
Ethylbenzene	0.0626	0.0050	"	0.0750	ND	83.4	70-130			
m,p-Xylene	0.127	0.010	"	0.150	ND	84.7	70-130			
o-Xylene	0.0656	0.0050	"	0.0750	ND	87.5	70-130			
1,2,4-Trimethylbenzene	0.0674	0.0050	"	0.0750	ND	89.8	70-130			
1,3,5-Trimethylbenzene	0.0660	0.0050	"	0.0750	ND	88.0	70-130			
Naphthalene	0.0710	0.0038	"	0.0750	ND	94.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0433		"	0.0400		108	23-173			
Surrogate: Toluene-d8	0.0410		"	0.0400		103	20-170			
Surrogate: 4-Bromofluorobenzene	0.0400		"	0.0400		100	21-167			

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

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

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

**Batch BEL0476 - EPA 5030 Soil MS**

**Matrix Spike Dup (BEL0476-MSD1)**

**Source: 2112069-02**

Prepared: 12/21/21 Analyzed: 12/22/21

Benzene	0.0575	0.0020	mg/kg	0.0750	ND	76.7	70-130	4.94	30	
Toluene	0.0637	0.0050	"	0.0750	ND	84.9	70-130	6.91	30	
Ethylbenzene	0.0567	0.0050	"	0.0750	ND	75.6	70-130	9.81	30	
m,p-Xylene	0.116	0.010	"	0.150	ND	77.3	70-130	9.16	30	
o-Xylene	0.0603	0.0050	"	0.0750	ND	80.4	70-130	8.43	30	
1,2,4-Trimethylbenzene	0.0620	0.0050	"	0.0750	ND	82.6	70-130	8.30	30	
1,3,5-Trimethylbenzene	0.0603	0.0050	"	0.0750	ND	80.4	70-130	9.07	30	
Naphthalene	0.0702	0.0038	"	0.0750	ND	93.6	70-130	1.10	30	
Surrogate: 1,2-Dichloroethane-d4	0.0449		"	0.0400		112	23-173			
Surrogate: Toluene-d8	0.0409		"	0.0400		102	20-170			
Surrogate: 4-Bromofluorobenzene	0.0404		"	0.0400		101	21-167			

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20  
Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

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

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

**Batch BEL0477 - EPA 3550A**

**Blank (BEL0477-BLK1)**

Prepared & Analyzed: 12/21/21

C10-C28 (DRO)	ND	50	mg/kg
C28-C36 (ORO)	ND	50	"

**LCS (BEL0477-BS1)**

Prepared & Analyzed: 12/21/21

C10-C28 (DRO)	400	50	mg/kg	500	80.0	70-130
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**Matrix Spike (BEL0477-MS1)**

Source: 2112069-02

Prepared & Analyzed: 12/21/21

C10-C28 (DRO)	470	50	mg/kg	500	23.2	89.5	70-130
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**Matrix Spike Dup (BEL0477-MSD1)**

Source: 2112069-02

Prepared & Analyzed: 12/21/21

C10-C28 (DRO)	450	50	mg/kg	500	23.2	85.5	70-130	4.34	20
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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20  
Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

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

### Summit Scientific

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

#### Batch BEL0530 - EPA 5030 Soil MS

##### Blank (BEL0530-BLK1)

Prepared: 12/23/21 Analyzed: 12/27/21

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	0.0348		"	0.0333		104	40-150			
Surrogate: Fluoranthene-d10	0.0272		"	0.0333		81.6	40-150			

##### LCS (BEL0530-BS1)

Prepared: 12/23/21 Analyzed: 12/27/21

Acenaphthene	0.0336	0.00500	mg/kg	0.0333	101	31-137
Anthracene	0.0358	0.00500	"	0.0333	107	30-120
Benzo (a) anthracene	0.0312	0.00500	"	0.0333	93.6	30-120
Benzo (a) pyrene	0.0297	0.00500	"	0.0333	89.2	30-120
Benzo (b) fluoranthene	0.0346	0.00500	"	0.0333	104	30-120
Benzo (k) fluoranthene	0.0374	0.00500	"	0.0333	112	30-120
Chrysene	0.0340	0.00500	"	0.0333	102	30-120
Dibenz (a,h) anthracene	0.0201	0.00500	"	0.0333	60.2	30-120
Fluoranthene	0.0321	0.00500	"	0.0333	96.3	30-120
Fluorene	0.0363	0.00500	"	0.0333	109	30-120
Indeno (1,2,3-cd) pyrene	0.0221	0.00500	"	0.0333	66.2	30-120
Pyrene	0.0234	0.00500	"	0.0333	70.2	35-142
1-Methylnaphthalene	0.0307	0.00500	"	0.0333	92.0	35-142
2-Methylnaphthalene	0.0196	0.00500	"	0.0333	58.9	35-142
Surrogate: 2-Methylnaphthalene-d10	0.0347		"	0.0333	104	40-150
Surrogate: Fluoranthene-d10	0.0310		"	0.0333	93.1	40-150

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

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

### Summit Scientific

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

#### Batch BEL0530 - EPA 5030 Soil MS

Matrix Spike (BEL0530-MS1)			Source: 2112324-01		Prepared: 12/23/21		Analyzed: 12/27/21			
Acenaphthene	0.0199	0.00500	mg/kg	0.0333	ND	59.8	31-137			
Anthracene	0.0181	0.00500	"	0.0333	ND	54.4	30-120			
Benzo (a) anthracene	0.0221	0.00500	"	0.0333	0.0113	32.6	30-120			
Benzo (a) pyrene	0.0279	0.00500	"	0.0333	ND	83.7	30-120			
Benzo (b) fluoranthene	0.0292	0.00500	"	0.0333	ND	87.7	30-120			
Benzo (k) fluoranthene	0.0282	0.00500	"	0.0333	ND	84.5	30-120			
Chrysene	0.0320	0.00500	"	0.0333	0.0237	24.9	30-120			QM-07
Dibenz (a,h) anthracene	0.0247	0.00500	"	0.0333	ND	74.1	30-120			
Fluoranthene	0.0180	0.00500	"	0.0333	0.0105	22.4	30-120			QM-07
Fluorene	0.0210	0.00500	"	0.0333	ND	63.0	30-120			
Indeno (1,2,3-cd) pyrene	0.0324	0.00500	"	0.0333	ND	97.2	30-120			
Pyrene	0.0691	0.00500	"	0.0333	0.0546	43.4	35-142			
1-Methylnaphthalene	0.0387	0.00500	"	0.0333	0.0157	69.1	15-130			
2-Methylnaphthalene	0.0368	0.00500	"	0.0333	ND	110	15-130			
Surrogate: 2-Methylnaphthalene-d10	0.0181		"	0.0333		54.3	40-150			
Surrogate: Fluoranthene-d10	0.0152		"	0.0333		45.7	40-150			

Matrix Spike Dup (BEL0530-MSD1)			Source: 2112324-01		Prepared: 12/23/21		Analyzed: 12/27/21			
Acenaphthene	0.0233	0.00500	mg/kg	0.0333	ND	70.0	31-137	15.7	30	
Anthracene	0.0223	0.00500	"	0.0333	ND	67.0	30-120	20.8	30	
Benzo (a) anthracene	0.0207	0.00500	"	0.0333	0.0113	28.2	30-120	6.75	30	QM-07
Benzo (a) pyrene	0.0269	0.00500	"	0.0333	ND	80.8	30-120	3.53	30	
Benzo (b) fluoranthene	0.0243	0.00500	"	0.0333	ND	72.8	30-120	18.5	30	
Benzo (k) fluoranthene	0.0269	0.00500	"	0.0333	ND	80.8	30-120	4.47	30	
Chrysene	0.0268	0.00500	"	0.0333	0.0237	9.13	30-120	17.8	30	QM-07
Dibenz (a,h) anthracene	0.0213	0.00500	"	0.0333	ND	63.9	30-120	14.7	30	
Fluoranthene	0.0191	0.00500	"	0.0333	0.0105	25.8	30-120	6.11	30	QM-07
Fluorene	0.0245	0.00500	"	0.0333	ND	73.6	30-120	15.4	30	
Indeno (1,2,3-cd) pyrene	0.0268	0.00500	"	0.0333	ND	80.5	30-120	18.8	30	
Pyrene	0.0543	0.00500	"	0.0333	0.0546	NR	35-142	23.9	30	QM-07
1-Methylnaphthalene	0.0402	0.00500	"	0.0333	0.0157	73.4	15-130	3.67	50	
2-Methylnaphthalene	0.0386	0.00500	"	0.0333	ND	116	15-130	4.81	50	
Surrogate: 2-Methylnaphthalene-d10	0.0223		"	0.0333		67.0	40-150			
Surrogate: Fluoranthene-d10	0.0145		"	0.0333		43.5	40-150			

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

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

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

**Batch BEL0528 - EPA 3050B**

**Blank (BEL0528-BLK1)**

Prepared: 12/22/21 Analyzed: 12/27/21

Boron ND 0.0100 mg/L

**LCS (BEL0528-BS1)**

Prepared: 12/22/21 Analyzed: 12/27/21

Boron 5.36 0.0100 mg/L 5.00 107 80-120

**Duplicate (BEL0528-DUP1)**

**Source: 2112324-01**

Prepared: 12/22/21 Analyzed: 12/27/21

Boron 0.163 0.0100 mg/L 0.188 14.1 20

**Matrix Spike (BEL0528-MS1)**

**Source: 2112324-01**

Prepared: 12/22/21 Analyzed: 12/27/21

Boron 5.26 0.0100 mg/L 5.00 0.188 102 75-125

**Matrix Spike Dup (BEL0528-MSD1)**

**Source: 2112324-01**

Prepared: 12/22/21 Analyzed: 12/27/21

Boron 5.38 0.0100 mg/L 5.00 0.188 104 75-125 2.16 25

Summit Scientific

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PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20  
Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

**Total Metals by EPA 6020B - Quality Control**  
**Summit Scientific**

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

**Batch BEL0522 - EPA 3050B**

**Blank (BEL0522-BLK1)**

Prepared: 12/22/21 Analyzed: 12/26/21

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	"
Selenium	ND	0.260	"
Silver	ND	0.0200	"
Zinc	ND	0.400	"

**LCS (BEL0522-BS1)**

Prepared: 12/22/21 Analyzed: 12/26/21

Arsenic	40.0	0.200	mg/kg wet	40.0	99.9	80-120
Barium	37.7	0.400	"	40.0	94.3	80-120
Cadmium	1.98	0.200	"	2.00	99.1	80-120
Copper	36.8	0.400	"	40.0	92.1	80-120
Lead	18.0	0.200	"	20.0	89.9	80-120
Nickel	36.1	0.400	"	40.0	90.4	80-120
Selenium	3.85	0.260	"	4.00	96.1	80-120
Silver	1.90	0.0200	"	2.00	95.0	80-120
Zinc	41.8	0.400	"	40.0	105	80-120

**Duplicate (BEL0522-DUP1)**

Source: 2111526-01

Prepared: 12/22/21 Analyzed: 12/26/21

Arsenic	0.682	0.231	mg/kg dry	0.589	14.7	20
Barium	61.5	0.462	"	56.7	8.17	20
Cadmium	0.103	0.231	"	0.0899	13.6	20
Copper	7.53	0.462	"	6.62	12.8	20
Lead	4.54	0.231	"	4.61	1.54	20
Nickel	2.91	0.462	"	2.43	17.7	20
Selenium	0.383	0.301	"	0.393	2.42	20
Silver	0.0808	0.0231	"	0.0483	50.2	20
Zinc	20.0	0.462	"	18.2	9.57	20

QR-03

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Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

**Total Metals by EPA 6020B - Quality Control**  
**Summit Scientific**

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

**Batch BEL0522 - EPA 3050B**

**Matrix Spike (BEL0522-MS1)**

Source: 2111526-01

Prepared: 12/22/21 Analyzed: 12/26/21

Arsenic	47.3	0.231	mg/kg dry	46.2	0.589	101	75-125			
Barium	146	0.462	"	46.2	56.7	193	75-125			QR-03
Cadmium	2.46	0.231	"	2.31	0.0899	103	75-125			
Copper	60.2	0.462	"	46.2	6.62	116	75-125			
Lead	26.8	0.231	"	23.1	4.61	95.8	75-125			
Nickel	46.2	0.462	"	46.2	2.43	94.6	75-125			
Selenium	4.49	0.301	"	4.62	0.393	88.7	75-125			
Silver	2.18	0.0231	"	2.31	0.0483	92.2	75-125			
Zinc	78.1	0.462	"	46.2	18.2	130	75-125			QR-03

**Matrix Spike Dup (BEL0522-MSD1)**

Source: 2111526-01

Prepared: 12/22/21 Analyzed: 12/26/21

Arsenic	47.0	0.231	mg/kg dry	46.2	0.589	100	75-125	0.679	25	
Barium	156	0.462	"	46.2	56.7	214	75-125	6.54	25	QR-03
Cadmium	2.38	0.231	"	2.31	0.0899	99.2	75-125	3.22	25	
Copper	50.5	0.462	"	46.2	6.62	95.0	75-125	17.4	25	
Lead	25.7	0.231	"	23.1	4.61	91.0	75-125	4.24	25	
Nickel	45.5	0.462	"	46.2	2.43	93.1	75-125	1.51	25	
Selenium	4.61	0.301	"	4.62	0.393	91.2	75-125	2.56	25	
Silver	2.12	0.0231	"	2.31	0.0483	89.8	75-125	2.58	25	
Zinc	74.6	0.462	"	46.2	18.2	122	75-125	4.66	25	

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Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20  
Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

**Hexavalent Chromium by EPA Method 7196 - Quality Control**  
**Summit Scientific**

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

**Batch BEL0571 - 3060A Mod**

**Blank (BEL0571-BLK1)**

Prepared & Analyzed: 12/27/21

Chromium, Hexavalent ND 0.30 mg/kg wet

**LCS (BEL0571-BS1)**

Prepared & Analyzed: 12/27/21

Chromium, Hexavalent 26.0 0.30 mg/kg wet 25.0 104 80-120

**Duplicate (BEL0571-DUP1)**

**Source: 2112325-02**

Prepared & Analyzed: 12/27/21

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

**Matrix Spike (BEL0571-MS1)**

**Source: 2112325-02**

Prepared & Analyzed: 12/27/21

Chromium, Hexavalent 30.8 0.30 mg/kg dry 26.3 ND 117 75-125

**Matrix Spike Dup (BEL0571-MSD1)**

**Source: 2112325-02**

Prepared & Analyzed: 12/27/21

Chromium, Hexavalent 27.9 0.30 mg/kg dry 26.3 ND 106 75-125 9.66 20

Summit Scientific

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Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

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

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

**Batch BEL0584 - General Preparation**

**Blank (BEL0584-BLK1)**

Prepared: 12/27/21 Analyzed: 12/28/21

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

**LCS (BEL0584-BS1)**

Prepared: 12/27/21 Analyzed: 12/28/21

Calcium	4.88	0.0500	mg/L wet	5.00	97.6	70-130
Magnesium	4.94	0.0500	"	5.00	98.9	70-130
Sodium	5.01	0.0500	"	5.00	100	70-130

Summit Scientific

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Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

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

**Summit Scientific**

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

**Batch BEL0558 - General Preparation**

**Duplicate (BEL0558-DUP1)**

**Source: 2112335-01**

**Prepared & Analyzed: 12/27/21**

% Solids	81.7	%		82.2		0.524	20
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Summit Scientific

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PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

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

**Summit Scientific**

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

**Batch BEL0608 - General Preparation**

**Blank (BEL0608-BLK1)**

Prepared & Analyzed: 12/28/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BEL0608-BS1)**

Prepared & Analyzed: 12/28/21

Specific Conductance (EC) 0.143 0.0100 mmhos/cm 0.150 95.2 95-105

**Duplicate (BEL0608-DUP1)**

**Source: 2112333-04**

Prepared & Analyzed: 12/28/21

Specific Conductance (EC) 0.222 0.0100 mmhos/cm 0.230 3.37 20

Summit Scientific

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PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

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

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

**Batch BEL0607 - General Preparation**

**LCS (BEL0607-BS1)**

Prepared & Analyzed: 12/28/21

pH	9.09	pH Units	9.18	99.0	95-105
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**Duplicate (BEL0607-DUP1)**

**Source: 2112333-04**

Prepared & Analyzed: 12/28/21

pH	7.65	pH Units	7.66	0.131	20
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Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: COGCC - Nordman Trust 41-20

Project Number: C021-086  
Project Manager: Paul Henchan

**Reported:**  
01/03/22 13:48

### Notes and Definitions

S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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