

Tank Battery Closure Checklist

COGCC Rule 911.a.(4) Environmental Site Closure Assessment Field Form

Additional attachments (optional):	<input type="checkbox"/>	Pit Closure	<input type="checkbox"/>	Wellhead Closure	<input type="checkbox"/>	Flowline Closure	<input checked="" type="checkbox"/>	Partially Buried Vault Closure
Site Name & COGCC Facility Number: BARNARD-64N65W 4SWNW Facility#:330172		Date: 10/13/2023						Remediation Project #: 28824
Associated Wells: Barnard 4-23 API:05-123-18550		Age of Site: 1994						Number of Photos Attached: 10
Location: (GPS coordinates of southeaster berm) 40.3465314, -104.6745146							Estimated Facility Size (acres): ~1 Acre	
General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.) Good housekeeping. General condition for all the on-site equipment looked fine. Waste management well maintained.								
USCS Soil Type: SP					Estimated Depth to Groundwater: >4'			
Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) None observed								
Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) None observed								
Tanks								
Tank Contents	OIL							
Size (barrels)	300							
Age	1994							
Construction Material	Steel							
Tank type (AST/DRU, etc.)	AST							
Visual Integrity of Tank	Good							
Condition of tank footprint	Good							
PID Readings	Highest PID 0.0ppm							
Soil impacts present at valves or hatches?	N/A							
PID Readings	N/A							
Sample taken? Location/ Sample ID#	Yes, see attached							
Photo Number(s)	See attached							
Other observations regarding tanks:								
Separators								
Separator size	Unknown							
Vertical or Horizontal	Horizontal							
Age	1994							
Soil impacts observed? If yes,	No							
PID Readings	High 0.4ppm							
Sample taken? Location/ Sample ID#	Yes, see attached							
Photo Number(s)	See attached							
Other observations regarding separators								
Third Party Equipment								
Type	Meter house							
Age	1994							

Third Party <i>Owner</i>														
Removal Date	Still present													
Sample taken? <i>Location/Container</i>	Yes, see attached													
PID Readings	High 0.0ppm													
Photo Number(s)	See attached													
Other Facility Equipment														
Equipment type	Flare	Flare												
Equipment <i>Condition</i>	Good	Good												
Age	1994	1994												
Soil impacts <i>Observed during</i>	N/A	N/A												
PID Readings	High 0.0ppm	High 0.0ppm												
Sample taken? <i>Location/Container</i>	Yes, see attached	Yes, see attached												
Photo Number(s)	See attached	See attached												
Other observations regarding other facility or third party equipment:														
Summary														
Was impacted soil identified? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - less than 10 cubic yards <input type="checkbox"/> Yes - more than 10 cubic yards														
Total number of samples field screened: 3					Total number of samples collected: 5									
Highest PID Reading: 562.5ppm (AST01 0.5 Feet)					Total number of samples submitted to lab for analysis: 2									
If more than 10 cubic yards of impacted soil were observed: NA														
Vertical extent:					Estimated spill volume:									
Lateral extent:					Volume of soil removed:									
Is additional investigation required?														
Was groundwater encountered during the investigation? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - not impacted or in contact with impacted soils <input type="checkbox"/> Yes - groundwater impacted and/or in contact with impacted soils														
Measured depth to groundwater:					Was remedial groundwater removal conducted? <input type="checkbox"/> Yes <input type="checkbox"/> No									
Date Groundwater was encountered:					Commencement date of removal:									
Sheen on groundwater? <input type="checkbox"/> Yes <input type="checkbox"/> No					Volume of groundwater removed prior to sampling:									
Free product observed? <input type="checkbox"/> Yes <input type="checkbox"/> 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:														

Buried or Partially Buried Vessel Closure Checklist

COGCC Rule 911.a.(4) Environmental Site Closure Assessment Field Form

Additional attachments (optional):		Pit Closure	X	Wellhead Closure		Flowline Closure		Tank Battery Closure
Site Name & COGCC Facility Number: BARNARD-64N65W 4SWNW Facility#:330172		Date: 10/13/2023						Remediation Project #: 28824
Associated Wells: <small>Barnard 4-23 API:05-123-18550</small>		Age of Site: 1994						Number of Photos Attached: 10
Location: (GPS coordinates of vault or southeastern tank berm for multiple)							40.3465314, -104.6745146	
Estimated Facility Size (acres): ~1 Acre								

General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.)

Good housekeeping. General condition for all the on-site equipment looked fine. Waste management well maintained.

USCS Soil Type: SP	Estimated Depth to Groundwater: >4'
---------------------------	---

Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)

None observed

Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)

None observed

Buried or Partially Buried Vessels

Tank Contents	Produced water								
Size (barrels)	100								
Age	1994								
Construction Material	concrete								
Visual Integrity of Tank	Good								
Condition of tank	Good								
PID Readings	Highest PID 4.5ppm								
Condition of dumpline	Good								
PID Readings	N/A								
Sample taken? Location/Sample ID#	Yes, see attached								
Photo Number(s)	See attached								

Other observations regarding partially buried vessels:

The western sidewall of PWV excavation was the tie-in point for the dumpline to the separator. Dumplines were pulled

Summary

Was impacted soil identified?	
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - less than 10 cubic yards <input type="checkbox"/> Yes - more than 10 cubic yards	
Total number of samples field screened: 4	Total number of samples collected: 5
Highest PID Reading: 4.5ppm (PWV Floor 4')	Total number of samples submitted to lab for analysis: 1
If more than 10 cubic yards of impacted soil were observed: NA	
Vertical extent:	Estimated spill volume:
Lateral extent:	Volume of soil removed:
Is additional investigation required?	
Was groundwater encountered during the investigation?	
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - not impacted or in contact with impacted soils <input type="checkbox"/> Yes - groundwater impacted and/or in contact with impacted soils	
Measured depth to groundwater:	Was remedial groundwater removal conducted? <input type="checkbox"/> Yes <input type="checkbox"/> No
Date Groundwater was encountered:	Commencement date of removal:
Sheen on groundwater? <input type="checkbox"/> Yes <input type="checkbox"/> No	Volume of groundwater removed prior to sampling:
Free product observed? <input type="checkbox"/> Yes <input type="checkbox"/> 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 VOLATILE ORGANIC SOIL CHEMISTRY DATA
NOBLE ENRGY INC.
BARNARD TANK, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-264

Sample ID	Sample Date	Depth (ft)	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)	Naphthalene (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)
ECMC Table 915-1 Limits (Residential SSL)			1.2	490	5.8	58	30	27	2	500**		
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038	500**		
AST 0.5'	10/13/2023	0.5'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
PWV FLOOR 4'	10/13/2023	4'	<0.0020	<0.0050	<0.0050	<0.010	0.0052	<0.0050	<0.0038	<0.50	<50	<50
SEP DL 3'	10/13/2023	3'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50

Bold faced values exceed the ECMC Table 915-1 concentrations

Red & blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

Green highlighted cells indicate soil removed via excavation

* Indicates laboratory minimum detection limit in excess of SSL

** Summation of GRO+DRO+ORO must be less than 500 mg/kg

NA - Not analyzed

TABLE 2
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA
NOBLE ENRGY INC.
BARNARD TANK, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-264

Sample ID	Sample Date	Depth (ft)	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo (a) Anthracene (mg/kg)	Benzo (a) Pyrene (mg/kg)	Benzo (b) Fluoranthene (mg/kg)	Benzo (k) Fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo (a,h) Anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno (1,2,3- cd) Pyrene (mg/kg)	Pyrene (mg/kg)	1-Methyl - Naphthalene (mg/kg)	2-Methyl- Naphthalene (mg/kg)
ECMC Table 915-1 Limits (Residential SSL)			360	1800	1.1	0.11	1.1	11	110	0.11	240	240	1.1	180	18	24
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.55	5.8	0.011	0.24	0.3	2.9	9	0.096	8.9	0.54	0.98	1.3	0.006	0.019
AST 0.5'	10/13/2023	0.5'	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
PWV FLOOR 4'	10/13/2023	4'	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
SEP DL 3'	10/13/2023	3'	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500

Bold faced values exceed the ECMC Table 915-1 concentrations

Red & blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

* Indicates laboratory minimum detection limit in excess of SSL

NA - Not analyzed

Green highlighted cells indicate soil removed via excavation

TABLE 3
SUMMARY OF SOIL SUITABILITY FOR RECLAMATION
NOBLE ENRGY INC.
BARNARD TANK, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-264

Sample ID	Sample Date	Depth (ft)	pH	EC (mmhos/cm)	SAR	Boron (mg/L)
ECMC Table 915-1 Soil Suitability Limits			6 - 8.3	<4	<6	2
Max. Background Concentration (or Concentration Range)			8.17	1.05	1.84	-
AST 0.5'	10/13/2023	0.5'	7.81	0.754	0.615	<2.00
PWV FLOOR 4'	10/13/2023	4'	8.18	0.361	0.614	<2.00
SEP DL 3'	10/13/2023	3'	7.88	0.635	1.46	<2.00
BKG01 0.5'	10/13/2023	0.5'	7.84	0.780	0.595	<2.00
BKG01 3'	10/13/2023	3'	7.79	1.02	1.84	<2.00
BKG01 4'	10/13/2023	4'	8.04	0.422	0.585	<2.00
BKG02 0.5'	10/13/2023	0.5'	7.75	0.926	0.477	<2.00
BKG02 3'	10/13/2023	3'	7.85	0.726	1.57	<2.00
BKG02 4'	10/13/2023	4'	8.07	0.487	0.725	<2.00
BKG03 0.5'	10/13/2023	0.5'	7.78	1.05	0.581	<2.00
BKG03 3'	10/13/2023	3'	8.03	0.248	0.930	<2.00
BKG03 4'	10/13/2023	4'	8.17	0.408	0.536	<2.00
BKG04 0.5'	10/13/2023	0.5'	7.81	0.624	0.384	<2.00
BKG04 3'	10/13/2023	3'	6.79	0.0574	0.0373	<2.00
BKG04 4'	10/13/2023	4'	8.11	0.407	0.610	<2.00
BKG05 0.5'	10/13/2023	0.5'	7.82	0.585	0.383	<2.00
BKG05 3'	10/13/2023	3'	5.55	0.230	0.0358	<2.00
BKG05 4'	10/13/2023	4'	8.03	0.503	0.826	<2.00

Bold faced, yellow highlighted values exceed the ECMC Table 915-1 concentrations

Green highlighted cells indicate soil removed via excavation

Orange highlighted cells exceed of the maximum background concentration, or concentration range

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

NA - Not analyzed

TABLE 4
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
NOBLE ENRGY INC.
BARNARD TANK, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-264

Sample ID	Sample Date	Depth (ft)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
ECMC Table 915-1 Limits (Residential SSL)			0.68	15000	71	0.3	3100	400	1500	390	390	23000
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
125% Max. Background Concentration			2.83	98.9	-	-	5.71	18.9	4.86	-	0.0589	39.4
AST 0.5'	10/13/2023	0.5'	1.73	48.0	<0.200	<0.30	3.84	6.28	2.60	<0.260	0.0269	17.9
PWV FLOOR 4'	10/13/2023	4'	1.73	55.1	<0.200	<0.30	3.38	6.31	2.78	<0.260	0.0290	14.5
SEP DL 3'	10/13/2023	3'	2.81	56.0	<0.200	<0.30	4.41	17.6	2.98	<0.260	0.0333	27.1
BKG01 0.5'	10/13/2023	0.5'	1.61	44.1	<0.200	<0.30	3.47	6.14	2.28	<0.260	0.0235	16.5
BKG01 3'	10/13/2023	3'	1.96	58.7	<0.200	<0.30	4.16	13.4	2.60	<0.260	0.0358	24.8
BKG01 4'	10/13/2023	4'	1.85	54.6	<0.200	<0.30	3.66	6.70	2.85	<0.260	0.0471	14.6
BKG02 0.5'	10/13/2023	0.5'	2.18	51.4	<0.200	<0.30	3.73	7.07	2.39	<0.260	0.0318	17.7
BKG02 3'	10/13/2023	3'	2.25	53.3	<0.200	<0.30	4.57	13.3	2.89	<0.260	0.0332	31.5
BKG02 4'	10/13/2023	4'	1.98	59.3	<0.200	<0.30	4.05	6.57	3.10	<0.260	0.0291	16.3
BKG03 0.5'	10/13/2023	0.5'	1.73	48.6	<0.200	<0.30	3.88	7.50	2.44	<0.260	0.0299	17.8
BKG03 3'	10/13/2023	3'	1.71	16.3	<0.200	<0.30	1.96	2.83	1.19	<0.260	<0.0200	6.82
BKG03 4'	10/13/2023	4'	1.77	54.7	<0.200	<0.30	3.47	6.34	2.64	<0.260	0.0281	14.5
BKG04 0.5'	10/13/2023	0.5'	1.47	41.5	<0.200	<0.30	3.25	10.3	2.14	<0.260	0.0212	15.0
BKG04 3'	10/13/2023	3'	1.59	62.0	<0.200	<0.30	3.69	6.33	3.30	<0.260	0.0348	15.4
BKG04 4'	10/13/2023	4'	2.26	79.1	<0.200	<0.30	3.43	6.52	3.23	<0.260	0.0274	15.9
BKG05 0.5'	10/13/2023	0.5'	1.86	48.8	<0.200	<0.30	4.03	15.1	2.65	<0.260	0.0276	19.3
BKG05 3'	10/13/2023	3'	1.72	75.3	<0.200	<0.30	4.57	6.77	3.89	<0.260	0.0314	16.6
BKG05 4'	10/13/2023	4'	2.18	70.4	<0.200	<0.30	3.67	6.60	3.30	<0.260	0.0316	17.3

Bold faced values exceed the ECMC Table 915-1 concentrations

Red & blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

Orange highlighted cells exceed 125% of the maximum background concentration

* Indicates laboratory minimum detection limit in excess of SSL

Green highlighted cells indicate soil removed via excavation

NA - Not analyzed

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

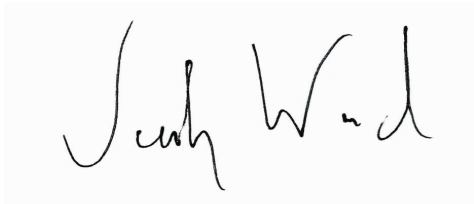
303.277.9310

October 26, 2023

Paul Henehan
Fremont Environmental
PO Box 1289
Wellington, CO 80549
RE: Noble - Bernard Tank
Work Order #2310294

Enclosed are the results of analyses for samples received by Summit Scientific on 10/16/23 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Jacob Wood For Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

ANALYTICAL REPORT FOR SAMPLES

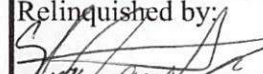

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AST 0.5'	2310294-01	Soil	10/13/23 12:03	10/16/23 16:30
PWV FLOOR 4'	2310294-02	Soil	10/13/23 12:08	10/16/23 16:30
SEP DL 3'	2310294-03	Soil	10/13/23 11:54	10/16/23 16:30
BKG01 0.5'	2310294-04	Soil	10/13/23 12:20	10/16/23 16:30
BKG01 3'	2310294-05	Soil	10/13/23 12:25	10/16/23 16:30
BKG01 4'	2310294-06	Soil	10/13/23 12:30	10/16/23 16:30
BKG02 0.5'	2310294-07	Soil	10/13/23 12:35	10/16/23 16:30
BKG02 3'	2310294-08	Soil	10/13/23 12:40	10/16/23 16:30
BKG02 4'	2310294-09	Soil	10/13/23 12:45	10/16/23 16:30
BKG03 0.5'	2310294-10	Soil	10/13/23 12:50	10/16/23 16:30
BKG03 3'	2310294-11	Soil	10/13/23 12:55	10/16/23 16:30
BKG03 4'	2310294-12	Soil	10/13/23 13:00	10/16/23 16:30
BKG04 0.5'	2310294-13	Soil	10/13/23 13:05	10/16/23 16:30
BKG04 3'	2310294-14	Soil	10/13/23 13:10	10/16/23 16:30
BKG04 4'	2310294-15	Soil	10/13/23 13:15	10/16/23 16:30
BKG05 0.5'	2310294-16	Soil	10/13/23 13:20	10/16/23 16:30
BKG05 3'	2310294-17	Soil	10/13/23 13:25	10/16/23 16:30
BKG05 4'	2310294-18	Soil	10/13/23 13:30	10/16/23 16:30

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.

Send Data To:		Send Invoice To:	
Client: Fremont Environmental		Company: Noble	
Address:		Project Name/Location: Bernard TANK	
City/State/Zip:		AFE#:	
Phone: 303-261-6246		PO/Billing Codes: UWRWE-A3126-ABN	
Sampler Name: Stanley Gilbert		Contact: Mike Montoya	
Project Name: Bernard Tank		Project Number:	

					Preservative				Matrix				Analysis Requested								Special Instructions	
ID	Sample Description	Date Sampled	Time Sampled	# of containers	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	AST 0.5'	10/13/23	12:03	2			X			X			X	X	X	X	X					
2	PWV Floor 4'		12:08	1						X			X	X	X	X	X					
3	SEP DL 3'		11:54	1						X			X	X	X	X	X					
4	BKG01 0.5'		12:20	1						X						X	X					
5	BKG01 3'		12:25	1						X												
6	BKG01 4'		12:30	1						X												
7	BKG02 0.5'		12:35	1						X												
8	BKG02 3'		12:40	1						X												
9	BKG02 4'		12:45	1						X												
10	BKG03 0.5'		12:50	1						X												
11	BKG03 3'		12:55	1						X												
12	BKG03 4'		13:00	1						X												
13	BKG04 0.5'		13:05	1						X												
14	BKG04 3'		13:10	1						X												
15	BKG04 4'		13:15	1						X												

Relinquished by: 	Date/Time: 10/13/23 17:40	Received by: Summit North	Date/Time: 10/13/23 17:40	TAT Business Days	Field DO	Notes:
Relinquished by: 52	Date/Time: 10/16/23 1630	Received by: 	Date/Time: 10/16/23 1630	Same Day	Field EC	
				1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Standard	Field Turb.	
Temperature Upon Receipt: 7.3	Corrected Temperature: 6	IR gun #: 1	HNO3 lot #:			

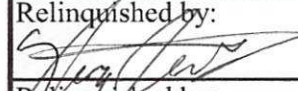
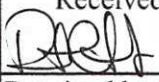



4653 Table Mountain Drive
Golden, CO 80403
303-277-9310

Lab ID	Page 2 of 2
23102942	

Send Data To:		Send Invoice To:	
Client: Fremont Environmental	Project Manager: Paul Henehan	Company: Noble	
Address:	E-Mail: Fremont Distribution List	Project Name/Location: Bernard Tank	
City/State/Zip:		AFE#:	
Phone: 303-261-6246	Project Name: Bernard TANK	PO/Billing Codes: UWRWE-A3126-ABN	
Sampler Name: Stanley Gilbert	Project Number:	Contact: Mike Montoya	

					Preservative				Matrix				Analysis Requested						Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	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	BK605 0.5'	10/13/23	13:20	1			X			X						X	X		
2	BK605 3'	I	13:25	I			I			I						I	I		
3	BK605 4'	I	13:30	I			I			I						I	I		
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

Relinquished by: 	Date/Time: 10/13/23 17:40	Received by: Summit North	Date/Time: 10/13/23 17:40	TAT Business Days	Field DO	Notes:
Relinquished by: SL	Date/Time: 10/16/23 1630	Received by: 	Date/Time: 10/16/23 1630	Same Day	Field EC	
				1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
				Standard	X Field Turb.	
Temperature Upon Receipt: 7.3	Corrected Temperature: 	IR gun #: 1	HNO3 lot #:			

S₂

2/2

Sample Receipt Checklist

S2 Work Order# 2310294

Client: FreemontClient Project ID: Bernard TankShipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) 7.3Thermometer # 1

	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on JCE
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"/>	no time stamps
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				

AS
Custodian Printed Name

10/16/23
Date/Time



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

AST 0.5'
2310294-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/13/23 12:03**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BGJ0676	10/17/23	10/18/23	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: **10/13/23 12:03**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	0.0430	108 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0370	92.5 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0359	89.8 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/13/23 12:03**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	BGJ0677	10/17/23	10/18/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/13/23 12:03**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl	11.8	94.6 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

AST 0.5'
2310294-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/13/23 12:03**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGJ0660	10/17/23	10/18/23	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: **10/13/23 12:03**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0297	89.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0190	56.9 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 12:03**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 12:03**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

AST 0.5'
2310294-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.73	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/25/23	EPA 6020B
Barium	48.0	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	3.84	0.400	"	"	"	"	"	"
Lead	6.28	0.200	"	"	"	"	"	"
Nickel	2.60	0.400	"	"	"	"	"	"
Silver	0.0269	0.0200	"	"	"	"	"	"
Zinc	17.9	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 12:03**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 12:03**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	59.7	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	26.5	0.0500	"	"	"	"	"	"	
Sodium	22.7	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/13/23 12:03**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.615	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

AST 0.5'
2310294-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 12:03**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.3		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 12:03**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.754	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 12:03**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.81		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

PWV FLOOR 4'
2310294-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/13/23 12:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BGJ0676	10/17/23	10/18/23	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	0.0052	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/13/23 12:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0426	107 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0373	93.2 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0360	90.1 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/13/23 12:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BGJ0677	10/17/23	10/18/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/13/23 12:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	15.7	126 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

PWV FLOOR 4'
2310294-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/13/23 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGJ0660	10/17/23	10/18/23	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: **10/13/23 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0267	80.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0168	50.4 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

PWV FLOOR 4'
2310294-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.73	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/25/23	EPA 6020B
Barium	55.1	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	3.38	0.400	"	"	"	"	"	"
Lead	6.31	0.200	"	"	"	"	"	"
Nickel	2.78	0.400	"	"	"	"	"	"
Silver	0.0290	0.0200	"	"	"	"	"	"
Zinc	14.5	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	32.8	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	11.3	0.0500	"	"	"	"	"	"	
Sodium	16.0	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/13/23 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.614	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

PWV FLOOR 4'
2310294-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.9		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.361	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.18		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

SEP DL 3'
2310294-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/13/23 11:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BGJ0676	10/17/23	10/18/23	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: **10/13/23 11:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0419	105 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0380	95.0 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0358	89.6 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/13/23 11:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BGJ0677	10/17/23	10/18/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/13/23 11:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	16.3	131 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

SEP DL 3'
2310294-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/13/23 11:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGJ0660	10/17/23	10/18/23	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: **10/13/23 11:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0230	69.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0148	44.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 11:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 11:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henehan

Reported:
10/26/23 12:05

SEP DL 3'
2310294-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	2.81	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/25/23	EPA 6020B
Barium	56.0	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	4.41	0.400	"	"	"	"	"	"
Lead	17.6	0.200	"	"	"	"	"	"
Nickel	2.98	0.400	"	"	"	"	"	"
Silver	0.0333	0.0200	"	"	"	"	"	"
Zinc	27.1	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 11:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 11:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	43.7	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	14.9	0.0500	"	"	"	"	"	"	
Sodium	43.9	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/13/23 11:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.46	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

SEP DL 3'
2310294-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 11:54**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	87.7			%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 11:54**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.635	0.0100		mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 11:54**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.88			pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG01 0.5'
2310294-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 12:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 12:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.61	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/25/23	EPA 6020B	
Barium	44.1	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.47	0.400	"	"	"	"	"	"	
Lead	6.14	0.200	"	"	"	"	"	"	
Nickel	2.28	0.400	"	"	"	"	"	"	
Silver	0.0235	0.0200	"	"	"	"	"	"	
Zinc	16.5	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 12:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 12:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	55.3	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	28.8	0.0500	"	"	"	"	"	"	
Sodium	21.9	0.0500	"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG01 0.5'
2310294-04 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.595	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.3		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.780	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.84		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG01 3'
2310294-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 12:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 12:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.96	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/25/23	EPA 6020B	
Barium	58.7	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	4.16	0.400	"	"	"	"	"	"	
Lead	13.4	0.200	"	"	"	"	"	"	
Nickel	2.60	0.400	"	"	"	"	"	"	
Silver	0.0358	0.0200	"	"	"	"	"	"	
Zinc	24.8	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 12:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 12:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	72.7	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	28.2	0.0500	"	"	"	"	"	"	
Sodium	73.1	0.0500	"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG01 3'
2310294-05 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.84	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.1		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.02	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.79		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG01 4'
2310294-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 12:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 12:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.85	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/25/23	EPA 6020B	
Barium	54.6	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.66	0.400	"	"	"	"	"	"	
Lead	6.70	0.200	"	"	"	"	"	"	
Nickel	2.85	0.400	"	"	"	"	"	"	
Silver	0.0471	0.0200	"	"	"	"	"	"	
Zinc	14.6	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 12:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 12:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	39.2	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	11.9	0.0500	"	"	"	"	"	"	
Sodium	16.3	0.0500	"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG01 4'
2310294-06 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.585	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	85.8		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.422	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.04		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG02 0.5'
2310294-07 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 12:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 12:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	2.18	0.200		mg/kg dry	1	BGJ0879	10/23/23	10/25/23	EPA 6020B	
Barium	51.4	0.400		"	"	"	"	"	"	
Cadmium	ND	0.200		"	"	"	"	"	"	
Copper	3.73	0.400		"	"	"	"	"	"	
Lead	7.07	0.200		"	"	"	"	"	"	
Nickel	2.39	0.400		"	"	"	"	"	"	
Silver	0.0318	0.0200		"	"	"	"	"	"	
Zinc	17.7	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 12:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 12:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Calcium	76.3	0.0500		mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	33.1	0.0500		"	"	"	"	"	"	
Sodium	19.8	0.0500		"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG02 0.5'
2310294-07 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.477	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.4		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.926	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.75		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG02 3'
2310294-08 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 12:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 12:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	2.25	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/25/23	EPA 6020B	
Barium	53.3	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	4.57	0.400	"	"	"	"	"	"	
Lead	13.3	0.200	"	"	"	"	"	"	
Nickel	2.89	0.400	"	"	"	"	"	"	
Silver	0.0332	0.0200	"	"	"	"	"	"	
Zinc	31.5	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 12:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 12:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	52.1	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	18.9	0.0500	"	"	"	"	"	"	
Sodium	51.9	0.0500	"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG02 3'
2310294-08 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.57	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.7		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.726	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.85		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG02 4'
2310294-09 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 12:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 12:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.98	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/25/23	EPA 6020B	
Barium	59.3	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	4.05	0.400	"	"	"	"	"	"	
Lead	6.57	0.200	"	"	"	"	"	"	
Nickel	3.10	0.400	"	"	"	"	"	"	
Silver	0.0291	0.0200	"	"	"	"	"	"	
Zinc	16.3	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 12:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 12:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	40.7	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	13.9	0.0500	"	"	"	"	"	"	
Sodium	21.0	0.0500	"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG02 4'
2310294-09 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.725	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.6		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.487	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.07		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG03 0.5'
2310294-10 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 12:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 12:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	1.73	0.200		mg/kg dry	1	BGJ0879	10/23/23	10/26/23	EPA 6020B	
Barium	48.6	0.400		"	"	"	"	"	"	
Cadmium	ND	0.200		"	"	"	"	"	"	
Copper	3.88	0.400		"	"	"	"	"	"	
Lead	7.50	0.200		"	"	"	"	"	"	
Nickel	2.44	0.400		"	"	"	"	"	"	
Silver	0.0299	0.0200		"	"	"	"	"	"	
Zinc	17.8	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 12:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 12:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Calcium	80.6	0.0500		mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	40.5	0.0500		"	"	"	"	"	"	
Sodium	25.6	0.0500		"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG03 0.5'
2310294-10 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 12:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.581	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 12:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.1		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 12:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.05	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 12:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.78		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG03 3'
2310294-11 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 12:55**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 12:55**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.71	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/26/23	EPA 6020B	
Barium	16.3	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.96	0.400	"	"	"	"	"	"	
Lead	2.83	0.200	"	"	"	"	"	"	
Nickel	1.19	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	6.82	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 12:55**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 12:55**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	18.3	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	6.12	0.0500	"	"	"	"	"	"	
Sodium	18.0	0.0500	"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG03 3'
2310294-11 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 12:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.930	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 12:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.7		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 12:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.248	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 12:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.03		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG03 4'
2310294-12 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 13:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 13:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.77	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/26/23	EPA 6020B	
Barium	54.7	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.47	0.400	"	"	"	"	"	"	
Lead	6.34	0.200	"	"	"	"	"	"	
Nickel	2.64	0.400	"	"	"	"	"	"	
Silver	0.0281	0.0200	"	"	"	"	"	"	
Zinc	14.5	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 13:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 13:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	36.7	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	10.9	0.0500	"	"	"	"	"	"	
Sodium	14.4	0.0500	"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG03 4'
2310294-12 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.536	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.0		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.408	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.17		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG04 0.5'
2310294-13 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 13:05**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 13:05**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.47	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/26/23	EPA 6020B	
Barium	41.5	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.25	0.400	"	"	"	"	"	"	
Lead	10.3	0.200	"	"	"	"	"	"	
Nickel	2.14	0.400	"	"	"	"	"	"	
Silver	0.0212	0.0200	"	"	"	"	"	"	
Zinc	15.0	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 13:05**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 13:05**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	51.0	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	20.9	0.0500	"	"	"	"	"	"	
Sodium	12.9	0.0500	"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG04 0.5'
2310294-13 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.384	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.3		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.624	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.81		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG04 3'
2310294-14 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 13:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 13:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.59	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/26/23	EPA 6020B	
Barium	62.0	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.69	0.400	"	"	"	"	"	"	
Lead	6.33	0.200	"	"	"	"	"	"	
Nickel	3.30	0.400	"	"	"	"	"	"	
Silver	0.0348	0.0200	"	"	"	"	"	"	
Zinc	15.4	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 13:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 13:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	299	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	98.4	0.0500	"	"	"	"	"	"	
Sodium	2.91	0.0500	"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG04 3'
2310294-14 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 13:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0373	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 13:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.4		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 13:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0574	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 13:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.79		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG04 4'
2310294-15 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 13:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 13:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	2.26	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/26/23	EPA 6020B	
Barium	79.1	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.43	0.400	"	"	"	"	"	"	
Lead	6.52	0.200	"	"	"	"	"	"	
Nickel	3.23	0.400	"	"	"	"	"	"	
Silver	0.0274	0.0200	"	"	"	"	"	"	
Zinc	15.9	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 13:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 13:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	35.0	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	11.2	0.0500	"	"	"	"	"	"	
Sodium	16.2	0.0500	"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG04 4'
2310294-15 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 13:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.610	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 13:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.2		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 13:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.407	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 13:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.11		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG05 0.5'
2310294-16 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 13:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 13:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	1.86	0.200		mg/kg dry	1	BGJ0879	10/23/23	10/26/23	EPA 6020B	
Barium	48.8	0.400		"	"	"	"	"	"	
Cadmium	ND	0.200		"	"	"	"	"	"	
Copper	4.03	0.400		"	"	"	"	"	"	
Lead	15.1	0.200		"	"	"	"	"	"	
Nickel	2.65	0.400		"	"	"	"	"	"	
Silver	0.0276	0.0200		"	"	"	"	"	"	
Zinc	19.3	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 13:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 13:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Calcium	48.0	0.0500		mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	19.0	0.0500		"	"	"	"	"	"	
Sodium	12.4	0.0500		"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG05 0.5'
2310294-16 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.383	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.2		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.585	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.82		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG05 3'
2310294-17 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 13:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 13:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.72	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/26/23	EPA 6020B	
Barium	75.3	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	4.57	0.400	"	"	"	"	"	"	
Lead	6.77	0.200	"	"	"	"	"	"	
Nickel	3.89	0.400	"	"	"	"	"	"	
Silver	0.0314	0.0200	"	"	"	"	"	"	
Zinc	16.6	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 13:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 13:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	316	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	88.2	0.0500	"	"	"	"	"	"	
Sodium	2.79	0.0500	"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG05 3'
2310294-17 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 13:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0358	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 13:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.7		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 13:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.230	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 13:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	5.55		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG05 4'
2310294-18 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/13/23 13:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BGJ0874	10/23/23	10/24/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/13/23 13:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	2.18	0.200	mg/kg dry	1	BGJ0879	10/23/23	10/26/23	EPA 6020B	
Barium	70.4	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.67	0.400	"	"	"	"	"	"	
Lead	6.60	0.200	"	"	"	"	"	"	
Nickel	3.30	0.400	"	"	"	"	"	"	
Silver	0.0316	0.0200	"	"	"	"	"	"	
Zinc	17.3	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/13/23 13:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGJ0883	10/23/23	10/23/23	EPA 7196A	

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

Date Sampled: **10/13/23 13:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	43.7	0.0500	mg/L dry	1	BGJ0841	10/20/23	10/24/23	EPA 6020B	
Magnesium	14.6	0.0500	"	"	"	"	"	"	
Sodium	24.7	0.0500	"	"	"	"	"	"	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

BKG05 4'
2310294-18 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/13/23 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.826	0.00100	units	1	BGJ0978	10/25/23	10/25/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/13/23 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.8		%	1	BGJ0940	10/24/23	10/24/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/13/23 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.503	0.0100	mmhos/cm	1	BGJ0897	10/23/23	10/23/23	EPA 120.1	

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

Date Sampled: **10/13/23 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.03		pH Units	1	BGJ0896	10/23/23	10/23/23	EPA 9045D	

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

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 BGJ0676 - EPA 5030 Soil MS

Blank (BGJ0676-BLK1)

Prepared & Analyzed: 10/17/23

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	0.0472		"	0.0400		118	50-150			
Surrogate: Toluene-d8	0.0385		"	0.0400		96.3	50-150			
Surrogate: 4-Bromofluorobenzene	0.0378		"	0.0400		94.6	50-150			

LCS (BGJ0676-BS1)

Prepared & Analyzed: 10/17/23

Benzene	0.144	0.0020	mg/kg	0.150		96.0	70-130			
Toluene	0.132	0.0050	"	0.150		88.1	70-130			
Ethylbenzene	0.150	0.0050	"	0.150		100	70-130			
m,p-Xylene	0.302	0.010	"	0.300		101	70-130			
o-Xylene	0.145	0.0050	"	0.150		96.3	70-130			
1,2,4-Trimethylbenzene	0.148	0.0050	"	0.150		98.4	70-130			
1,3,5-Trimethylbenzene	0.151	0.0050	"	0.150		101	70-130			
Naphthalene	0.116	0.0038	"	0.150		77.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0424		"	0.0400		106	50-150			
Surrogate: Toluene-d8	0.0373		"	0.0400		93.3	50-150			
Surrogate: 4-Bromofluorobenzene	0.0385		"	0.0400		96.2	50-150			

Matrix Spike (BGJ0676-MS1)

Source: 2310251-01

Prepared & Analyzed: 10/17/23

Benzene	0.162	0.0020	mg/kg	0.150	ND	108	70-130			
Toluene	0.150	0.0050	"	0.150	ND	100	70-130			
Ethylbenzene	0.172	0.0050	"	0.150	ND	115	70-130			
m,p-Xylene	0.345	0.010	"	0.300	ND	115	70-130			
o-Xylene	0.163	0.0050	"	0.150	ND	109	70-130			
1,2,4-Trimethylbenzene	0.163	0.0050	"	0.150	ND	109	70-130			
1,3,5-Trimethylbenzene	0.165	0.0050	"	0.150	ND	110	70-130			
Naphthalene	0.136	0.0038	"	0.150	ND	90.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0412		"	0.0400		103	50-150			
Surrogate: Toluene-d8	0.0370		"	0.0400		92.6	50-150			
Surrogate: 4-Bromofluorobenzene	0.0398		"	0.0400		99.6	50-150			

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

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 BGJ0676 - EPA 5030 Soil MS

Matrix Spike Dup (BGJ0676-MSD1)		Source: 2310251-01			Prepared & Analyzed: 10/17/23					
Benzene	0.158	0.0020	mg/kg	0.150	ND	105	70-130	2.44	30	
Toluene	0.147	0.0050	"	0.150	ND	98.0	70-130	2.28	30	
Ethylbenzene	0.158	0.0050	"	0.150	ND	105	70-130	8.40	30	
m,p-Xylene	0.319	0.010	"	0.300	ND	106	70-130	7.66	30	
o-Xylene	0.150	0.0050	"	0.150	ND	100	70-130	8.15	30	
1,2,4-Trimethylbenzene	0.148	0.0050	"	0.150	ND	98.8	70-130	9.56	30	
1,3,5-Trimethylbenzene	0.152	0.0050	"	0.150	ND	101	70-130	8.35	30	
Naphthalene	0.134	0.0038	"	0.150	ND	89.6	70-130	1.29	30	
Surrogate: 1,2-Dichloroethane-d4		0.0436	"	0.0400		109	50-150			
Surrogate: Toluene-d8		0.0388	"	0.0400		97.1	50-150			
Surrogate: 4-Bromofluorobenzene		0.0397	"	0.0400		99.3	50-150			

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

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 BGJ0677 - EPA 3550A

Blank (BGJ0677-BLK1)

Prepared: 10/17/23 Analyzed: 10/18/23

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	9.60		"	12.5		76.8	30-150			

LCS (BGJ0677-BS1)

Prepared: 10/17/23 Analyzed: 10/18/23

C10-C28 (DRO)	495	50	mg/kg	500		99.1	70-130			
Surrogate: o-Terphenyl	17.9		"	12.5		143	30-150			

Matrix Spike (BGJ0677-MS1)

Source: 2310251-01

Prepared: 10/17/23 Analyzed: 10/18/23

C10-C28 (DRO)	498	50	mg/kg	500	ND	99.6	70-130			
Surrogate: o-Terphenyl	13.8		"	12.5		111	30-150			

Matrix Spike Dup (BGJ0677-MSD1)

Source: 2310251-01

Prepared: 10/17/23 Analyzed: 10/18/23

C10-C28 (DRO)	528	50	mg/kg	500	ND	106	70-130	5.86	20	
Surrogate: o-Terphenyl	13.0		"	12.5		104	30-150			

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: Noble - Bernard Tank
Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BGJ0660 - EPA 5030 Soil MS

Blank (BGJ0660-BLK1)

Prepared & Analyzed: 10/17/23

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	0.0390		"	0.0333		117		40-150			
Surrogate: Fluoranthene-d10	0.0250		"	0.0333		75.1		40-150			

LCS (BGJ0660-BS1)

Prepared & Analyzed: 10/17/23

Acenaphthene	0.0261	0.00500	mg/kg	0.0333		78.4		31-137			
Anthracene	0.0255	0.00500	"	0.0333		76.4		30-120			
Benzo (a) anthracene	0.0100	0.00500	"	0.0333		30.1		30-120			
Benzo (a) pyrene	0.0236	0.00500	"	0.0333		70.8		30-120			
Benzo (b) fluoranthene	0.0237	0.00500	"	0.0333		71.2		30-120			
Benzo (k) fluoranthene	0.0266	0.00500	"	0.0333		79.7		30-120			
Chrysene	0.0245	0.00500	"	0.0333		73.4		30-120			
Dibenz (a,h) anthracene	0.0237	0.00500	"	0.0333		71.0		30-120			
Fluoranthene	0.0259	0.00500	"	0.0333		77.7		30-120			
Fluorene	0.0260	0.00500	"	0.0333		78.1		30-120			
Indeno (1,2,3-cd) pyrene	0.0241	0.00500	"	0.0333		72.3		30-120			
Pyrene	0.0253	0.00500	"	0.0333		75.9		35-142			
1-Methylnaphthalene	0.0199	0.00500	"	0.0333		59.7		35-142			
2-Methylnaphthalene	0.0241	0.00500	"	0.0333		72.4		35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0245		"	0.0333		73.5		40-150			
Surrogate: Fluoranthene-d10	0.0259		"	0.0333		77.8		40-150			

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: Noble - Bernard Tank
Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BGJ0660 - EPA 5030 Soil MS

Matrix Spike (BGJ0660-MS1)

Source: 2310255-01

Prepared & Analyzed: 10/17/23

Acenaphthene	0.0208	0.00500	mg/kg	0.0333	ND	62.4	31-137		
Anthracene	0.0190	0.00500	"	0.0333	ND	57.1	30-120		
Benzo (a) anthracene	0.0158	0.00500	"	0.0333	ND	47.4	30-120		
Benzo (a) pyrene	0.0163	0.00500	"	0.0333	ND	48.8	30-120		
Benzo (b) fluoranthene	0.0160	0.00500	"	0.0333	ND	47.9	30-120		
Benzo (k) fluoranthene	0.0181	0.00500	"	0.0333	ND	54.3	30-120		
Chrysene	0.0207	0.00500	"	0.0333	ND	62.0	30-120		
Dibenz (a,h) anthracene	0.0158	0.00500	"	0.0333	ND	47.5	30-120		
Fluoranthene	0.0187	0.00500	"	0.0333	ND	56.1	30-120		
Fluorene	0.0193	0.00500	"	0.0333	ND	58.0	30-120		
Indeno (1,2,3-cd) pyrene	0.0216	0.00500	"	0.0333	ND	64.9	30-120		
Pyrene	0.0217	0.00500	"	0.0333	ND	65.2	35-142		
1-Methylnaphthalene	0.0164	0.00500	"	0.0333	ND	49.1	15-130		
2-Methylnaphthalene	0.0170	0.00500	"	0.0333	ND	50.9	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0206		"	0.0333		61.8	40-150		
Surrogate: Fluoranthene-d10	0.0187		"	0.0333		56.1	40-150		

Matrix Spike Dup (BGJ0660-MSD1)

Source: 2310255-01

Prepared & Analyzed: 10/17/23

Acenaphthene	0.0203	0.00500	mg/kg	0.0333	ND	60.8	31-137	2.59	30
Anthracene	0.0185	0.00500	"	0.0333	ND	55.6	30-120	2.62	30
Benzo (a) anthracene	0.0166	0.00500	"	0.0333	ND	49.9	30-120	5.15	30
Benzo (a) pyrene	0.0176	0.00500	"	0.0333	ND	52.9	30-120	8.06	30
Benzo (b) fluoranthene	0.0183	0.00500	"	0.0333	ND	54.8	30-120	13.6	30
Benzo (k) fluoranthene	0.0200	0.00500	"	0.0333	ND	60.0	30-120	9.93	30
Chrysene	0.0205	0.00500	"	0.0333	ND	61.4	30-120	1.01	30
Dibenz (a,h) anthracene	0.0161	0.00500	"	0.0333	ND	48.2	30-120	1.47	30
Fluoranthene	0.0197	0.00500	"	0.0333	ND	59.1	30-120	5.22	30
Fluorene	0.0205	0.00500	"	0.0333	ND	61.5	30-120	5.97	30
Indeno (1,2,3-cd) pyrene	0.0218	0.00500	"	0.0333	ND	65.4	30-120	0.800	30
Pyrene	0.0209	0.00500	"	0.0333	ND	62.7	35-142	3.89	30
1-Methylnaphthalene	0.0165	0.00500	"	0.0333	ND	49.4	15-130	0.587	50
2-Methylnaphthalene	0.0159	0.00500	"	0.0333	ND	47.6	15-130	6.86	50
Surrogate: 2-Methylnaphthalene-d10	0.0206		"	0.0333		61.7	40-150		
Surrogate: Fluoranthene-d10	0.0198		"	0.0333		59.3	40-150		

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

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 BGJ0874 - EPA 3050B

Blank (BGJ0874-BLK1)

Prepared: 10/23/23 Analyzed: 10/24/23

Boron ND 2.00 mg/L

LCS (BGJ0874-BS1)

Prepared: 10/23/23 Analyzed: 10/24/23

Boron 4.08 2.00 mg/L 5.00 81.6 80-120

Duplicate (BGJ0874-DUP1)

Source: 2310294-01

Prepared: 10/23/23 Analyzed: 10/24/23

Boron 0.136 2.00 mg/L 0.159 15.1 20

Matrix Spike (BGJ0874-MS1)

Source: 2310294-01

Prepared: 10/23/23 Analyzed: 10/24/23

Boron 4.06 2.00 mg/L 5.00 0.159 78.0 75-125

Matrix Spike Dup (BGJ0874-MSD1)

Source: 2310294-01

Prepared: 10/23/23 Analyzed: 10/24/23

Boron 4.19 2.00 mg/L 5.00 0.159 80.6 75-125 3.14 25

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

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 BGJ0879 - EPA 3050B

Blank (BGJ0879-BLK1)

Prepared: 10/23/23 Analyzed: 10/25/23

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 (BGJ0879-BS1)

Prepared: 10/23/23 Analyzed: 10/25/23

Arsenic	42.7	0.200	mg/kg wet	40.0	107	80-120
Barium	42.3	0.400	"	40.0	106	80-120
Cadmium	1.81	0.200	"	2.00	90.4	80-120
Copper	36.9	0.400	"	40.0	92.4	80-120
Lead	19.1	0.200	"	20.0	95.4	80-120
Nickel	37.1	0.400	"	40.0	92.7	80-120
Silver	1.82	0.0200	"	2.00	90.9	80-120
Zinc	36.0	0.400	"	40.0	90.1	80-120
Selenium	4.08	0.260	"	4.00	102	80-120


Duplicate (BGJ0879-DUP1)

Source: 2310294-01

Prepared: 10/23/23 Analyzed: 10/25/23

Arsenic	1.74	0.200	mg/kg dry	1.73	0.992	20
Barium	49.0	0.400	"	48.0	2.13	20
Cadmium	0.135	0.200	"	0.134	0.623	20
Copper	3.88	0.400	"	3.84	0.870	20
Lead	6.31	0.200	"	6.28	0.460	20
Nickel	2.54	0.400	"	2.60	2.17	20
Silver	0.0256	0.0200	"	0.0269	4.80	20
Zinc	17.6	0.400	"	17.9	1.90	20
Selenium	ND	0.260	"	ND		20

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

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 BGJ0879 - EPA 3050B

Matrix Spike (BGJ0879-MS1)		Source: 2310294-01			Prepared: 10/23/23 Analyzed: 10/25/23					
Arsenic	45.5	0.200	mg/kg dry	42.0	1.73	104	75-125			
Barium	89.7	0.400	"	42.0	48.0	99.5	75-125			
Cadmium	2.01	0.200	"	2.10	0.134	89.6	75-125			
Copper	31.4	0.400	"	42.0	3.84	65.7	75-125			QM-05
Lead	27.5	0.200	"	21.0	6.28	101	75-125			
Nickel	31.1	0.400	"	42.0	2.60	67.9	75-125			QM-05
Silver	1.88	0.0200	"	2.10	0.0269	88.1	75-125			
Zinc	45.6	0.400	"	42.0	17.9	66.1	75-125			QM-05
Selenium	6.29	0.260	"	4.20	ND	150	75-125			QM-05

Matrix Spike Dup (BGJ0879-MSD1)		Source: 2310294-01			Prepared: 10/23/23 Analyzed: 10/25/23					
Arsenic	46.9	0.200	mg/kg dry	42.0	1.73	108	75-125	3.03	25	
Barium	90.5	0.400	"	42.0	48.0	101	75-125	0.901	25	
Cadmium	2.06	0.200	"	2.10	0.134	91.9	75-125	2.33	25	
Copper	31.9	0.400	"	42.0	3.84	66.8	75-125	1.43	25	QM-05
Lead	28.1	0.200	"	21.0	6.28	104	75-125	1.84	25	
Nickel	31.5	0.400	"	42.0	2.60	69.0	75-125	1.39	25	QM-05
Silver	1.93	0.0200	"	2.10	0.0269	90.7	75-125	2.80	25	
Zinc	46.1	0.400	"	42.0	17.9	67.1	75-125	0.935	25	QM-05
Selenium	6.77	0.260	"	4.20	ND	161	75-125	7.28	25	QM-05

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

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 BGJ0883 - 3060A Mod

Blank (BGJ0883-BLK1)

Prepared & Analyzed: 10/23/23

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BGJ0883-BS1)

Prepared & Analyzed: 10/23/23

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

Duplicate (BGJ0883-DUP1)

Source: 2310294-01

Prepared & Analyzed: 10/23/23

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BGJ0883-MS1)

Source: 2310294-01

Prepared & Analyzed: 10/23/23

Chromium, Hexavalent 24.4 0.30 mg/kg dry 26.2 ND 93.0 75-125

Matrix Spike Dup (BGJ0883-MSD1)

Source: 2310294-01

Prepared & Analyzed: 10/23/23

Chromium, Hexavalent 24.1 0.30 mg/kg dry 26.2 ND 92.0 75-125 1.08 20

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

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

Summit Scientific

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

Batch BGJ0841 - General Preparation

Blank (BGJ0841-BLK1)

Prepared: 10/20/23 Analyzed: 10/24/23

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

LCS (BGJ0841-BS1)

Prepared: 10/20/23 Analyzed: 10/24/23

Calcium	5.44	0.0500	mg/L wet	5.00	109	70-130
Magnesium	5.22	0.0500	"	5.00	104	70-130
Sodium	5.71	0.0500	"	5.00	114	70-130

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

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 BGJ0940 - General Preparation

Duplicate (BGJ0940-DUP1)

Source: 2310294-01

Prepared & Analyzed: 10/24/23

% Solids	95.3	%	95.3	0.00183	20
----------	------	---	------	---------	----

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

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 BGJ0897 - General Preparation

Blank (BGJ0897-BLK1)

Prepared & Analyzed: 10/23/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGJ0897-BS1)

Prepared & Analyzed: 10/23/23

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

Duplicate (BGJ0897-DUP1)

Source: 2310116-05

Prepared & Analyzed: 10/23/23

Specific Conductance (EC) 0.811 0.0100 mmhos/cm 0.806 0.693 20

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

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

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

Batch BGJ0896 - General Preparation

LCS (BGJ0896-BS1)

Prepared & Analyzed: 10/23/23

pH	9.15	pH Units	9.18	99.7	95-105
----	------	----------	------	------	--------

Duplicate (BGJ0896-DUP1)

Source: 2310294-01

Prepared & Analyzed: 10/23/23

pH	7.89	pH Units	7.81	1.02	20
----	------	----------	------	------	----

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: Noble - Bernard Tank

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/26/23 12:05

Notes and Definitions

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