

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

November 13, 2024

Paul Henchan  
Fremont Environmental  
PO Box 1289  
Wellington, CO 80549  
RE: PDC - Gus LD Pad  
Work Order #2411152

Enclosed are the results of analyses for samples received by Summit Scientific on 11/08/24 17:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Natalie Tessier For Paul Shrewsbury  
President



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
11/13/24 13:34

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BG-NE-ON 2FT	2411152-01	Soil	11/08/24 00:00	11/08/24 17:00
BG-NW-ON 2FT	2411152-02	Soil	11/08/24 00:00	11/08/24 17:00
BG-NN-ON 2FT	2411152-03	Soil	11/08/24 00:00	11/08/24 17:00
BG-SE-ON 1FT	2411152-04	Soil	11/08/24 00:00	11/08/24 17:00
BG-SW-ON 1FT	2411152-05	Soil	11/08/24 00:00	11/08/24 17:00
SS-01(2) 1FT	2411152-06	Soil	11/08/24 00:00	11/08/24 17:00
SS-01(2) 2FT	2411152-07	Soil	11/08/24 00:00	11/08/24 17:00

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S<sub>2</sub>

241152

4653 Table Mountain Drive ♦ Golden, Colorado 80403  
303-277-9310

Page 1 of 1

Client: Fremont Environmental Inc. Project Manager: Paul Henehan  
Address: E-Mail: PDC  
City/State/Zip: Project Name: GUS LD PAD  
Phone: Project Number:  
Sampler Name: HENEHAN

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested								Special Instructions				
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	GBTEXN+TMBS	DRO,RRO	PAHs	pH, EC, SAR	Boron	915-1 metals	Arsenic	BTEXN + TMBS		TDS, Cl, Su			
1	BG-NE-ON 2 FT	11/8/24		2			✓			✓						✓	✓	✓							
2	BG-NW-ON 2 FT	↓		↓																					
3	BG-NN-ON 2 FT																								
4	BG-SE-ON 1 FT																								
5	BG-SW-ON 1 FT																								
6	SS-01(2) 1 FT																								
7	SS-01(2) 2 FT																								
8																									
9																									
10																									

  

Relinquished by: <u>DA/RE</u> Date/Time: <u>11/8/24 1700</u>	Received by: <u>[Signature]</u> Date/Time: <u>11/8/24 1700</u>	Turn Around Time (Check): Same Day <input type="checkbox"/> 72 hours <input type="checkbox"/> 24 hours <input type="checkbox"/> Standard <input type="checkbox"/> <u>48 hours</u> <input checked="" type="checkbox"/>	Notes:
Relinquished by: _____ Date/Time: _____	Received by: _____ Date/Time: _____	Sample Integrity: Temperature Upon Receipt: <u>5.9</u> Samples Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Relinquished by: _____ Date/Time: _____	Received by: _____ Date/Time: _____		





Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
11/13/24 13:34

**BG-NE-ON 2FT**  
**2411152-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BHK0570	11/12/24	11/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	<b>6.12</b>	0.200		mg/kg dry	1	BHK0488	11/11/24	11/12/24	EPA 6020B	
Barium	<b>12.3</b>	0.400		"	"	"	"	"	"	
Cadmium	ND	0.200		"	"	"	"	"	"	
Copper	<b>8.08</b>	0.400		"	"	"	"	"	"	
Lead	<b>11.7</b>	0.200		"	"	"	"	"	"	
Nickel	<b>4.54</b>	0.400		"	"	"	"	"	"	
Silver	<b>0.0221</b>	0.0200		"	"	"	"	"	"	
Zinc	<b>16.7</b>	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BHK0474	11/11/24	11/11/24	EPA 7196A	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Calcium	<b>22.3</b>	0.0500		mg/L dry	1	BHK0452	11/08/24	11/11/24	EPA 6020B	
Magnesium	<b>8.90</b>	0.0500		"	"	"	"	"	"	
Sodium	<b>156</b>	0.0500		"	"	"	"	"	"	

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
 Project Manager: Paul Henchan

**Reported:**  
 11/13/24 13:34

**BG-NE-ON 2FT**  
**2411152-01 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	7.06	0.00100	units	1	BHK0593	11/12/24	11/12/24	Calculation	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	82.6		%	1	BHK0492	11/11/24	11/11/24	Calculation	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.03	0.0100	mmhos/cm	1	BHK0454	11/08/24	11/11/24	EPA 120.1	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.19		pH Units	1	BHK0455	11/08/24	11/11/24	EPA 9045D	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
11/13/24 13:34

**BG-NW-ON 2FT**  
**2411152-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHK0570	11/12/24	11/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Arsenic</b>	<b>4.68</b>	0.200	mg/kg dry	1	BHK0488	11/11/24	11/12/24	EPA 6020B	
<b>Barium</b>	<b>9.42</b>	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
<b>Copper</b>	<b>5.16</b>	0.400	"	"	"	"	"	"	
<b>Lead</b>	<b>5.78</b>	0.200	"	"	"	"	"	"	
<b>Nickel</b>	<b>5.48</b>	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
<b>Zinc</b>	<b>17.0</b>	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHK0474	11/11/24	11/11/24	EPA 7196A	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Calcium</b>	<b>28.7</b>	0.0500	mg/L dry	1	BHK0452	11/08/24	11/11/24	EPA 6020B	
<b>Magnesium</b>	<b>12.9</b>	0.0500	"	"	"	"	"	"	
<b>Sodium</b>	<b>258</b>	0.0500	"	"	"	"	"	"	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
11/13/24 13:34

**BG-NW-ON 2FT**  
**2411152-02 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	10.1	0.00100	units	1	BHK0593	11/12/24	11/12/24	Calculation	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	83.0		%	1	BHK0492	11/11/24	11/11/24	Calculation	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.65	0.0100	mmhos/cm	1	BHK0454	11/08/24	11/11/24	EPA 120.1	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.31		pH Units	1	BHK0455	11/08/24	11/11/24	EPA 9045D	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
11/13/24 13:34

**BG-NN-ON 2FT**  
**2411152-03 (Soil)**

**Summit Scientific**

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHK0570	11/12/24	11/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	3.98	0.200	mg/kg dry	1	BHK0488	11/11/24	11/12/24	EPA 6020B	
Barium	62.9	0.400	"	"	"	"	"	"	
Cadmium	0.406	0.200	"	"	"	"	"	"	
Copper	9.39	0.400	"	"	"	"	"	"	
Lead	15.0	0.200	"	"	"	"	"	"	
Nickel	7.51	0.400	"	"	"	"	"	"	
Silver	0.0397	0.0200	"	"	"	"	"	"	
Zinc	28.9	0.400	"	"	"	"	"	"	
Selenium	0.396	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHK0474	11/11/24	11/11/24	EPA 7196A	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	6.26	0.0500	mg/L dry	1	BHK0452	11/08/24	11/11/24	EPA 6020B	
Magnesium	2.85	0.0500	"	"	"	"	"	"	
Sodium	209	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
11/13/24 13:34

**BG-NN-ON 2FT**  
**2411152-03 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	17.4	0.00100	units	1	BHK0593	11/12/24	11/12/24	Calculation	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	82.6		%	1	BHK0492	11/11/24	11/11/24	Calculation	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.26	0.0100	mmhos/cm	1	BHK0454	11/08/24	11/11/24	EPA 120.1	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.03		pH Units	1	BHK0455	11/08/24	11/11/24	EPA 9045D	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
11/13/24 13:34

**BG-SE-ON 1FT**  
**2411152-04 (Soil)**

**Summit Scientific**

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHK0570	11/12/24	11/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	5.12	0.200	mg/kg dry	1	BHK0488	11/11/24	11/12/24	EPA 6020B	
Barium	70.4	0.400	"	"	"	"	"	"	
Cadmium	0.362	0.200	"	"	"	"	"	"	
Copper	19.5	0.400	"	"	"	"	"	"	
Lead	11.2	0.200	"	"	"	"	"	"	
Nickel	7.19	0.400	"	"	"	"	"	"	
Silver	0.0356	0.0200	"	"	"	"	"	"	
Zinc	27.3	0.400	"	"	"	"	"	"	
Selenium	0.274	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHK0474	11/11/24	11/11/24	EPA 7196A	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	40.3	0.0500	mg/L dry	1	BHK0452	11/08/24	11/11/24	EPA 6020B	
Magnesium	8.89	0.0500	"	"	"	"	"	"	
Sodium	324	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
11/13/24 13:34

**BG-SE-ON 1FT**  
**2411152-04 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	12.0	0.00100	units	1	BHK0593	11/12/24	11/12/24	Calculation	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.0		%	1	BHK0492	11/11/24	11/11/24	Calculation	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.00	0.0100	mmhos/cm	1	BHK0454	11/08/24	11/11/24	EPA 120.1	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.31		pH Units	1	BHK0455	11/08/24	11/11/24	EPA 9045D	

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Fremont Environmental  
PO Box 1289  
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Project: PDC - Gus LD Pad

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
11/13/24 13:34

**BG-SW-ON 1FT**  
**2411152-05 (Soil)**

**Summit Scientific**

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHK0570	11/12/24	11/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.62	0.200	mg/kg dry	1	BHK0488	11/11/24	11/12/24	EPA 6020B	
Barium	61.2	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	5.54	0.400	"	"	"	"	"	"	
Lead	5.05	0.200	"	"	"	"	"	"	
Nickel	5.07	0.400	"	"	"	"	"	"	
Silver	0.0223	0.0200	"	"	"	"	"	"	
Zinc	16.6	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHK0474	11/11/24	11/11/24	EPA 7196A	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	22.3	0.0500	mg/L dry	1	BHK0452	11/08/24	11/11/24	EPA 6020B	
Magnesium	2.44	0.0500	"	"	"	"	"	"	
Sodium	155	0.0500	"	"	"	"	"	"	

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
 Project Manager: Paul Henchan

**Reported:**  
 11/13/24 13:34

**BG-SW-ON 1FT  
 2411152-05 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	8.32	0.00100	units	1	BHK0593	11/12/24	11/12/24	Calculation	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	85.5		%	1	BHK0492	11/11/24	11/11/24	Calculation	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.01	0.0100	mmhos/cm	1	BHK0454	11/08/24	11/11/24	EPA 120.1	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.39		pH Units	1	BHK0455	11/08/24	11/11/24	EPA 9045D	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
11/13/24 13:34

**SS-01(2) 1FT  
2411152-06 (Soil)**

**Summit Scientific**

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHK0570	11/12/24	11/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	<b>2.59</b>	0.200	mg/kg dry	1	BHK0488	11/11/24	11/12/24	EPA 6020B	
Barium	<b>167</b>	0.400	"	"	"	"	"	"	
Cadmium	<b>0.212</b>	0.200	"	"	"	"	"	"	
Copper	<b>5.91</b>	0.400	"	"	"	"	"	"	
Lead	<b>6.58</b>	0.200	"	"	"	"	"	"	
Nickel	<b>4.70</b>	0.400	"	"	"	"	"	"	
Silver	<b>0.0486</b>	0.0200	"	"	"	"	"	"	
Zinc	<b>19.8</b>	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHK0474	11/11/24	11/11/24	EPA 7196A	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	<b>38.1</b>	0.0500	mg/L dry	1	BHK0452	11/08/24	11/11/24	EPA 6020B	
Magnesium	<b>9.76</b>	0.0500	"	"	"	"	"	"	
Sodium	<b>70.8</b>	0.0500	"	"	"	"	"	"	

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Fremont Environmental  
 PO Box 1289  
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Project: PDC - Gus LD Pad

Project Number: [none]  
 Project Manager: Paul Henchan

**Reported:**  
 11/13/24 13:34

**SS-01(2) 1FT  
 2411152-06 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.65	0.00100	units	1	BHK0593	11/12/24	11/12/24	Calculation	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.5		%	1	BHK0492	11/11/24	11/11/24	Calculation	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.684	0.0100	mmhos/cm	1	BHK0454	11/08/24	11/11/24	EPA 120.1	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.82		pH Units	1	BHK0455	11/08/24	11/11/24	EPA 9045D	

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PO Box 1289  
Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
11/13/24 13:34

**SS-01(2) 2FT**  
**2411152-07 (Soil)**

**Summit Scientific**

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHK0570	11/12/24	11/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	3.17	0.200	mg/kg dry	1	BHK0488	11/11/24	11/12/24	EPA 6020B	
Barium	61.1	0.400	"	"	"	"	"	"	
Cadmium	0.422	0.200	"	"	"	"	"	"	
Copper	8.30	0.400	"	"	"	"	"	"	
Lead	11.3	0.200	"	"	"	"	"	"	
Nickel	7.85	0.400	"	"	"	"	"	"	
Silver	0.0339	0.0200	"	"	"	"	"	"	
Zinc	27.4	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHK0474	11/11/24	11/11/24	EPA 7196A	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	19.6	0.0500	mg/L dry	1	BHK0452	11/08/24	11/11/24	EPA 6020B	
Magnesium	5.07	0.0500	"	"	"	"	"	"	
Sodium	101	0.0500	"	"	"	"	"	"	

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Fremont Environmental  
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 Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
 Project Manager: Paul Henchan

**Reported:**  
 11/13/24 13:34

**SS-01(2) 2FT**  
**2411152-07 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	5.26	0.00100	units	1	BHK0593	11/12/24	11/12/24	Calculation	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	83.5		%	1	BHK0492	11/11/24	11/11/24	Calculation	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.634	0.0100	mmhos/cm	1	BHK0454	11/08/24	11/11/24	EPA 120.1	

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

Date Sampled: **11/08/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.10		pH Units	1	BHK0455	11/08/24	11/11/24	EPA 9045D	

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
 Project Manager: Paul Henchan

**Reported:**  
 11/13/24 13:34

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

**Summit Scientific**

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

**Batch BHK0570 - EPA 3050B**

**Blank (BHK0570-BLK1)**

Prepared: 11/12/24 Analyzed: 11/13/24

Boron ND 2.00 mg/L

**LCS (BHK0570-BS1)**

Prepared: 11/12/24 Analyzed: 11/13/24

Boron 4.77 2.00 mg/L 5.00 95.3 80-120

**Duplicate (BHK0570-DUP1)**

Source: 2411102-01

Prepared: 11/12/24 Analyzed: 11/13/24

Boron 0.150 2.00 mg/L 0.188 22.3 20 QR-01

**Matrix Spike (BHK0570-MS1)**

Source: 2411102-01

Prepared: 11/12/24 Analyzed: 11/13/24

Boron 5.03 2.00 mg/L 4.99 0.188 97.0 75-125

**Matrix Spike Dup (BHK0570-MSD1)**

Source: 2411102-01

Prepared: 11/12/24 Analyzed: 11/13/24

Boron 4.99 2.00 mg/L 4.99 0.188 96.2 75-125 0.762 25

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
11/13/24 13:34

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

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

**Batch BHK0488 - EPA 3050B**

**Blank (BHK0488-BLK1)**

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

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

**LCS (BHK0488-BS1)**

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

Arsenic	41.0	0.200	mg/kg wet	40.7	101	80-120
Barium	41.9	0.400	"	40.7	103	80-120
Cadmium	1.94	0.200	"	2.03	95.5	80-120
Copper	38.5	0.400	"	40.7	94.8	80-120
Lead	19.6	0.200	"	20.3	96.3	80-120
Nickel	38.6	0.400	"	40.7	94.9	80-120
Silver	1.68	0.0200	"	2.03	82.8	80-120
Zinc	38.0	0.400	"	40.7	93.4	80-120
Selenium	4.22	0.260	"	4.07	104	80-120

**Duplicate (BHK0488-DUP1)**

Source: 2410575-01

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

Arsenic	2.44	0.200	mg/kg dry	2.70	10.4	20
Barium	97.8	0.400	"	109	10.9	20
Cadmium	0.181	0.200	"	0.242	28.9	20
Copper	2.51	0.400	"	2.43	3.42	20
Lead	4.36	0.200	"	4.84	10.5	20
Nickel	2.17	0.400	"	2.22	2.00	20
Silver	0.0144	0.0200	"	0.0167	14.6	20
Zinc	10.8	0.400	"	10.9	1.25	20
Selenium	ND	0.260	"	ND		20

QR-01

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
 Project Manager: Paul Henchan

**Reported:**  
 11/13/24 13:34

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

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

**Batch BHK0488 - EPA 3050B**

**Matrix Spike (BHK0488-MS1)**

Source: 2410575-01

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

Arsenic	43.4	0.200	mg/kg dry	42.3	2.70	96.1	75-125			
Barium	147	0.400	"	42.3	109	90.4	75-125			
Cadmium	2.28	0.200	"	2.12	0.242	96.5	75-125			
Copper	31.1	0.400	"	42.3	2.43	67.8	75-125			QM-05
Lead	24.4	0.200	"	21.2	4.84	92.2	75-125			
Nickel	31.2	0.400	"	42.3	2.22	68.4	75-125			QM-05
Silver	1.78	0.0200	"	2.12	0.0167	83.3	75-125			
Zinc	39.7	0.400	"	42.3	10.9	68.1	75-125			QM-05
Selenium	3.69	0.260	"	4.23	ND	87.2	75-125			

**Matrix Spike Dup (BHK0488-MSD1)**

Source: 2410575-01

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

Arsenic	42.2	0.200	mg/kg dry	40.7	2.70	97.2	75-125	2.75	25	
Barium	120	0.400	"	40.7	109	27.5	75-125	20.2	25	QM-05
Cadmium	2.19	0.200	"	2.03	0.242	95.9	75-125	4.11	25	
Copper	31.6	0.400	"	40.7	2.43	71.8	75-125	1.58	25	QM-05
Lead	23.0	0.200	"	20.3	4.84	89.4	75-125	5.60	25	
Nickel	31.7	0.400	"	40.7	2.22	72.4	75-125	1.53	25	QM-05
Silver	1.70	0.0200	"	2.03	0.0167	82.8	75-125	4.48	25	
Zinc	38.9	0.400	"	40.7	10.9	68.9	75-125	2.06	25	QM-05
Selenium	3.47	0.260	"	4.07	ND	85.4	75-125	6.06	25	

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
 Project Manager: Paul Henchan

**Reported:**  
 11/13/24 13:34

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

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

**Batch BHK0474 - 3060A Mod**

**Blank (BHK0474-BLK1)**

Prepared & Analyzed: 11/11/24

Chromium, Hexavalent      ND      0.30 mg/kg wet

**LCS (BHK0474-BS1)**

Prepared & Analyzed: 11/11/24

Chromium, Hexavalent      25.6      0.30 mg/kg wet      25.0      103      80-120

**Duplicate (BHK0474-DUP1)**

**Source: 2410559-01**

Prepared & Analyzed: 11/11/24

Chromium, Hexavalent      ND      0.30 mg/kg dry      ND      20

**Matrix Spike (BHK0474-MS1)**

**Source: 2410559-01**

Prepared & Analyzed: 11/11/24

Chromium, Hexavalent      28.7      0.30 mg/kg dry      27.4      ND      105      75-125

**Matrix Spike Dup (BHK0474-MSD1)**

**Source: 2410559-01**

Prepared & Analyzed: 11/11/24

Chromium, Hexavalent      27.5      0.30 mg/kg dry      27.4      ND      100      75-125      4.30      20

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
 Project Manager: Paul Henchan

**Reported:**  
 11/13/24 13:34

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

**Summit Scientific**

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

**Batch BHK0452 - General Preparation**

**Blank (BHK0452-BLK1)**

Prepared: 11/08/24 Analyzed: 11/11/24

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

**LCS (BHK0452-BS1)**

Prepared: 11/08/24 Analyzed: 11/11/24

Calcium	4.97	0.0500	mg/L wet	5.00		99.3	70-130			
Magnesium	4.75	0.0500	"	5.00		94.9	70-130			
Sodium	4.58	0.0500	"	5.00		91.6	70-130			

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
 Project Manager: Paul Henchan

**Reported:**  
 11/13/24 13:34

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

**Summit Scientific**

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

**Batch BHK0492 - General Preparation**

**Duplicate (BHK0492-DUP1)**

**Source: 2411072-01**

Prepared & Analyzed: 11/11/24

% Solids	77.9		%		75.9			2.64	20	
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Fremont Environmental  
 PO Box 1289  
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Project: PDC - Gus LD Pad

Project Number: [none]  
 Project Manager: Paul Henchan

**Reported:**  
 11/13/24 13:34

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

**Summit Scientific**

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

**Batch BHK0454 - General Preparation**

**Blank (BHK0454-BLK1)**

Prepared: 11/08/24 Analyzed: 11/11/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BHK0454-BS1)**

Prepared: 11/08/24 Analyzed: 11/11/24

Specific Conductance (EC) 0.156 0.0100 mmhos/cm 0.150 104 95-105

**Duplicate (BHK0454-DUP1)**

**Source: 2410629-01**

Prepared: 11/08/24 Analyzed: 11/11/24

Specific Conductance (EC) 1.02 0.0100 mmhos/cm 1.00 1.68 20

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
 Project Manager: Paul Henchan

**Reported:**  
 11/13/24 13:34

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

**Summit Scientific**

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

**Batch BHK0455 - General Preparation**

**LCS (BHK0455-BS1)**

Prepared: 11/08/24 Analyzed: 11/11/24

pH	9.19	pH Units	9.18	100	95-105
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**Duplicate (BHK0455-DUP1)**

Source: 2410629-01

Prepared: 11/08/24 Analyzed: 11/11/24

pH	8.48	pH Units	8.51	0.353	20
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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: PDC - Gus LD Pad

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
11/13/24 13:34

### Notes and Definitions

- QR-01      Analyses are not controlled on RPD values from sample concentrations below the reporting limit. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values.
- QM-05      The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values.
- DET        Analyte DETECTED
- ND        Analyte NOT DETECTED at or above the reporting limit
- NR        Not Reported
- dry        Sample results reported on a dry weight basis
- RPD        Relative Percent Difference