

TABLE 1
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA
PDC ENERGY INC.
PHELPS 11-32 CHZ, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-233

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**		
Waste Char	8/22/2023	0.2	0.12	0.64	0.04	1.4	0.44	0.23	0.069	520	130	<50
N-2	8/23/2023	2	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
E-2	8/23/2023	2	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
W-2	8/23/2023	2	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
S-2	8/23/2023	2	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
F2-5	8/23/2023	5	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
MW-1 2 Ft	1/10/2024	2	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
MW-2 2 Ft	1/10/2024	2	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
MW-3 2 Ft	1/10/2024	2	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
MW-4 2 Ft	1/10/2024	2	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
MW-5 2 Ft	1/10/2024	2	<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)

* Indicates laboratory minimum detection limit in excess of SSL

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

NA - Not analyzed

Green shaded samples indicate this soil was removed during subsequent excavation

TABLE 2
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA
PDC ENERGY INC.
PHELPS 11-32 CHZ WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-233

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
Waste Char	8/22/2023	0.2	<0.00500	<0.00500	0.00590	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0283	<0.00500	<0.00500	0.208	0.250
N-2	8/23/2023	2	<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
E-2	8/23/2023	2	<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
W-2	8/23/2023	2	<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
S-2	8/23/2023	2	<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
F2-5	8/23/2023	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
MW-1 2 Ft	1/10/2024	2	<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
MW-2 2 Ft	1/10/2024	2	<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
MW-3 2 Ft	1/10/2024	2	<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
MW-4 2 Ft	1/10/2024	2	<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
MW-5 2 Ft	1/10/2024	2	<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 shaded samples indicate this soil was removed during subsequent excavation

TABLE 3
SUMMARY OF SOIL SUITABILITY FOR RECLAMATION
PDC ENERGY INC.
PHELPS 11-32 CHZ, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-233

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
Waste Char	8/22/2023	0.2	6.58	0.0119	12.6	0.146
N-2	8/23/2023	2	8.06	0.815	3.60	<0.0100
E-2	8/23/2023	2	6.45	9.78	7.78	0.0524
W-2	8/23/2023	2	7.73	1.13	3.97	<0.0100
S-2	8/23/2023	2	8.21	0.156	0.654	<0.0100
F2-5	8/23/2023	5	7.70	0.514	2.27	<0.0100
MW-1 2 Ft	1/10/2024	2	9.01	0.362	1.19	<2.00
MW-2 2 Ft	1/10/2024	2	7.51	0.097	0.318	<2.00
MW-3 2 Ft	1/10/2024	2	9.40	1.09	0.208	<2.00
MW-4 2 Ft	1/10/2024	2	9.10	0.189	0.783	<2.00
MW-5 2 Ft	1/10/2024	2	7.98	0.18	0.517	<2.00
BG N-W	1/3/2024	2	NA	0.111	0.397	NA
BG N-C	1/3/2024	2	NA	0.190	0.595	NA
BG N-E	1/3/2024	2	NA	0.188	0.542	NA
BG SE	1/3/2024	2	NA	0.454	3.68	NA
BG SW	1/3/2024	2	NA	1.49	4.07	NA
HA-S	4/11/2024	2	8.41	NA	NA	NA
HA-E	4/11/2024	2	7.98	NA	NA	NA

Bold faced values exceed the ECMC Table 915-1 concentrations

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

NA - Not analyzed

Green shaded samples indicate this soil was removed during subsequent excavation

TABLE 4
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
PDC ENERGY INC.
PHELPS SEPARATOR, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-233

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
Waste Char	8/22/2023	0.2	0.594	129	<0.200	<0.30	1.89	9.11	2.12	<0.260	0.0404	8.63
N-2	8/23/2023	2	0.916	51.5	<0.200	<0.30	2.20	4.80	2.31	<0.260	<0.0200	8.05
E-2	8/23/2023	2	0.767	142	<0.200	<0.30	2.28	9.20	2.49	<0.260	0.0554	9.73
W-2	8/23/2023	2	0.801	129	0.219	<0.30	2.89	8.74	2.41	<0.260	0.0535	10.3
S-2	8/23/2023	2	0.805	37.0	<0.200	<0.30	1.93	3.46	2.07	<0.260	<0.0200	7.78
F2-5	8/23/2023	5	0.949	43.6	<0.200	<0.30	2.4	3.74	1.56	<0.260	<0.0200	6.38
MW-1 2 Ft	1/10/2024	2	0.867	129	0.20	<0.30	2.41	9.86	2.46	<0.260	0.0587	10.3
MW-2 2 Ft	1/10/2024	2	0.717	103	0.23	<0.30	2.09	8.66	2.25	<0.260	0.0509	8.64
MW-3 2 Ft	1/10/2024	2	0.962	131	0.27	<0.30	4.06	4.68	2.33	0.416	0.0841	10.2
MW-4 2 Ft	1/10/2024	2	0.864	54.2	<0.200	<0.30	1.76	3.85	1.94	<0.260	<0.0200	8.15
MW-5 2 Ft	1/10/2024	2	0.885	136	<0.200	<0.30	2.18	11.1	2.76	<0.260	0.0864	10.2
BG N-W	1/3/2024	2	3.67	94.8	NA	NA	NA	NA	NA	<0.260	NA	NA
BG N-C	1/3/2024	2	4.95	138	NA	NA	NA	NA	NA	<0.260	NA	NA
BG N-E	1/3/2024	2	4.20	99.8	NA	NA	NA	NA	NA	0.293	NA	NA
BG SE	1/3/2024	2	2.27	92.0	NA	NA	NA	NA	NA	0.264	NA	NA
BG SW	1/3/2024	2	2.89	98.7	NA	NA	NA	NA	NA	<0.260	NA	NA
Highest Background Concentration			4.95	138.0						0.293		
125% of Highest Background Concentration			6.19	172.5						0.366		

Bold faced values exceed the COGCC 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 shaded samples indicate this soil was removed during subsequent excavation

TABLE 5
SUMMARY OF GROUNDWATER ELEVATION DATA AND ORGANIC CHEMISTRY DATA
PDC ENERGY INC.
PHELPS 11-32 CHZ, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-233

Sample ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Xylenes (µg/L)	Naphthalene (µg/L)	1,2,4-Trimethyl-Benzene (µg/L)	1,3,5-Trimethyl-Benzene (µg/L)	TOC Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	LNAPL Thickness (ft)
ECMC Table 915-1 Limits		5.0	560	700	1400	140	67	67				
SEP GW	08/23/23	14	<1.0	<1.0	22	<1.0	4.7	<1.0	NM	NM	NM	NP
MW-1	01/12/24	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	96.03	6.70	89.33	NP
	04/11/24	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0		3.98	92.05	NP
MW-2	01/12/24	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	99.03	10.50	88.53	NP
	04/11/24	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0		8.24	90.79	NP
MW-3	01/12/24	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	100.00	11.46	88.54	NP
	04/11/24	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0		8.45	91.55	NP
MW-4	01/12/24	8.5	25	2.5	13	<1.0	<1.0	1.5	99.47	10.66	88.81	NP
	04/11/24	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0		8.23	91.24	NP
MW-5	01/12/24	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	99.61	10.58	89.03	NP
	04/11/24	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0		7.81	91.80	NP

Bold face values exceed the COGCC limits

Red highlighted 915-1 Limits indicate the referenced groundwater screening level

NP - No measurable LNAPL, NA - Not Analyzed, INA - Inaccessible, IW - Insufficient Water, DES - Destroyed

TABLE 6
SUMMARY OF INORGANIC GROUNDWATER CHEMISTRY DATA
PDC ENERGY INC.
PHELPS SEPARATOR, ADAMS COUNTY, COLORADO
FREMONT PROJECT NO. C023-233

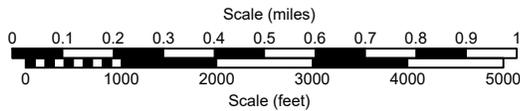
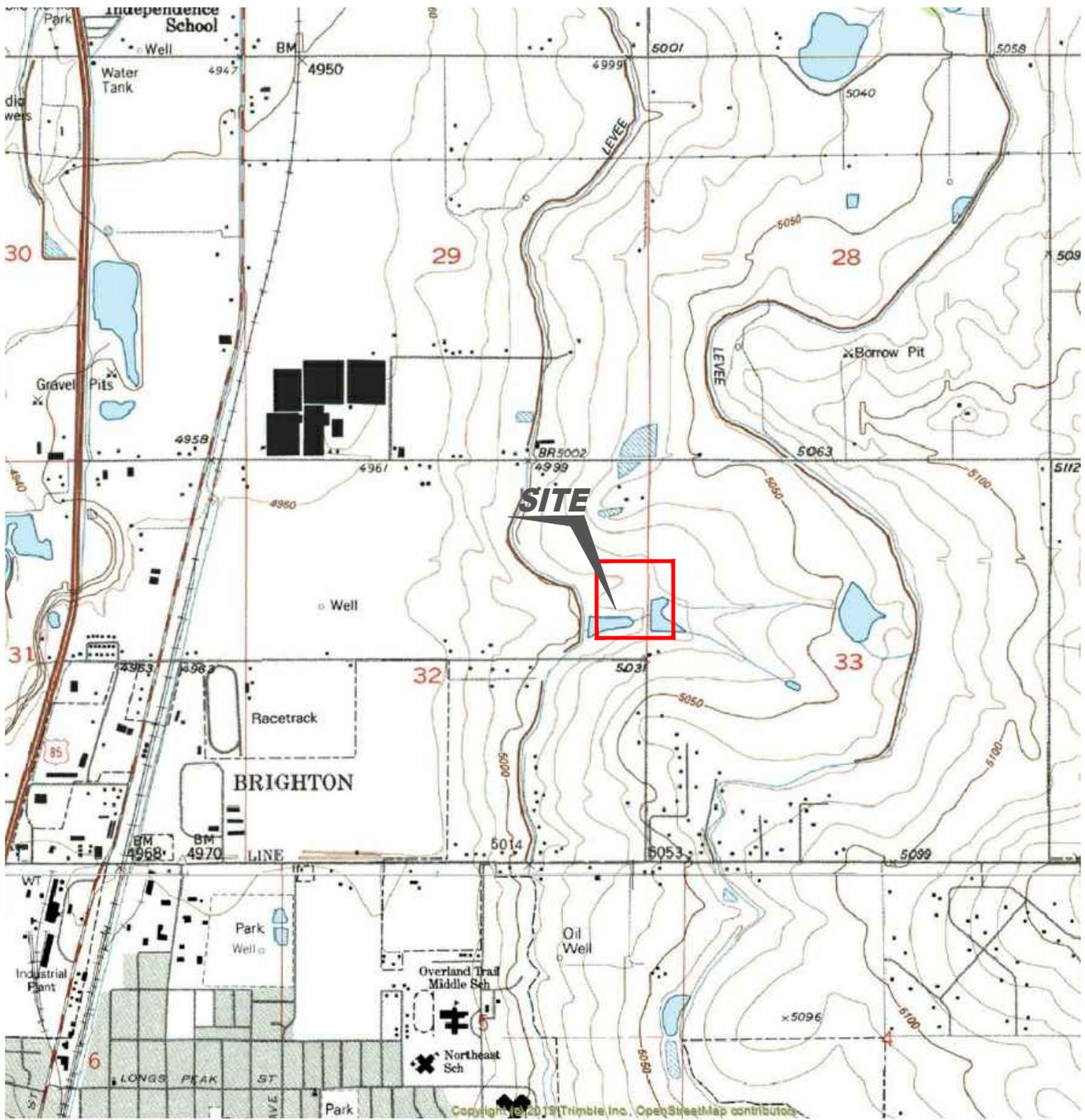
Sample ID	Sample Date	Total Dissolved Solids (mg/L)	Chloride Ion (mg/L)	Sulfate Ion (mg/L)
ECMC Table 915-1 Limits		<1.25 x local background	250 or <1.25 x local background	250 or <1.25 x local background
MW-1	01/12/24	924	208	172
	04/11/24	1350	244	232
MW-2	01/12/24	902	178	189
	04/11/24	1110	215	210
MW-3	01/12/24	1020	202	243
	04/11/24	1260	226	248
MW-4	01/12/24	870	191	182
	04/11/24	1160	227	217
MW-5	01/12/24	822	206	165
	04/11/24	1350	261	232

Bold face values exceed the COGCC limits

MW-1 is the upgradient well

Yellow highlighted 915-1 Limits indicate the referenced groundwater screening level

NP - No measurable LNAPL, NA - Not Analyzed, INA - Inaccessible, IW - Insufficient Water, DES - Destroyed



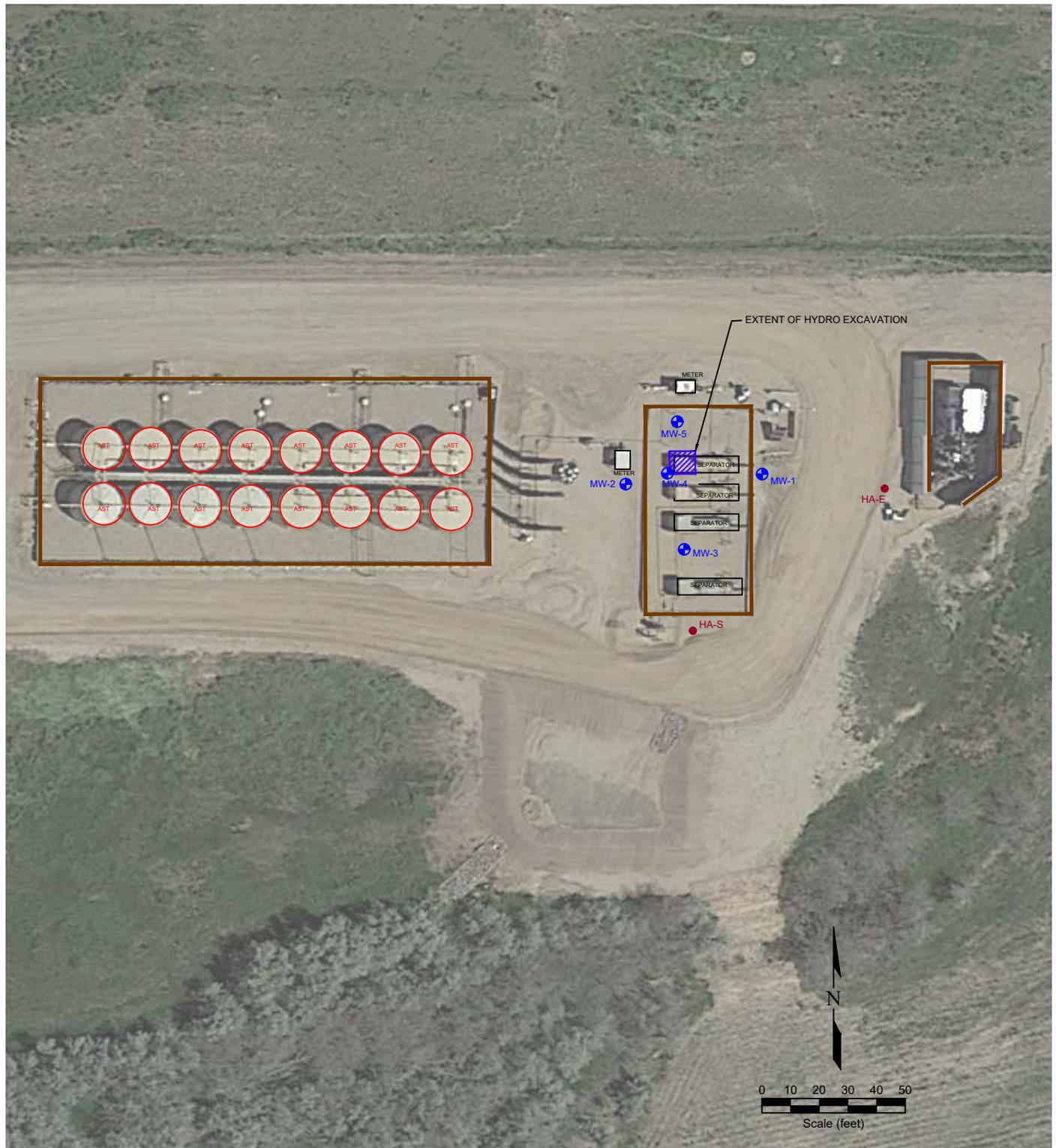
USGS 7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 1
SITE LOCATION MAP

PDC ENERGY, INC. ~ PHELPS 11-32CHZ
SENE Section 32, T1N, R66W, 6th PM
Weld County, Colorado
40.01110°, -104.79257°

Project No. C023-233	API #	Facility # 433548
Date 4/25/24	Remediation #	Filename 23233T





LEGEND

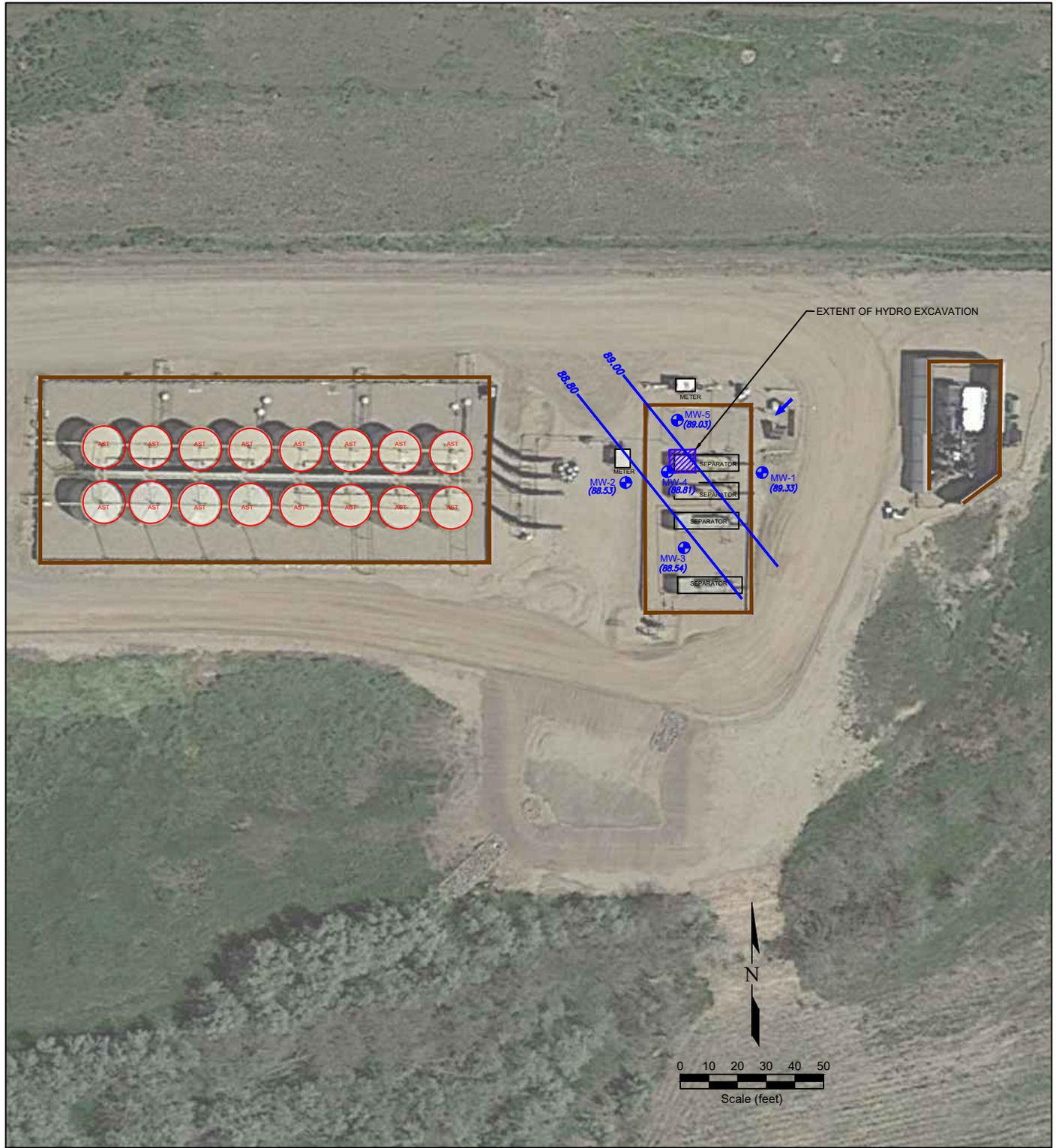
- HAND AUGURED SOIL BORING
- HYDROEXCAVATION
- ◻ FORMER FACILITY
- ▤ CONTAINMENT BERM
- ⊕ MONITORING WELL LOCATION
- ABOVE GROUND STORAGE TANK
- ▭ BUILDING
- ▬ CONTAINMENT WALL
- ▬ EXTENT OF EXCAVATION
- ▬ FENCE LINE

**Figure 2
SITE MAP**

PDC ENERGY, INC. ~ PHELPS 11-32CHZ
 SENE Section 32, T1N, R66W, 6th PM
 Weld County, Colorado
 40.01110°, -104.79257°

Project No. C023-233	API #	Facility # 433548
Date 4/25/24	Remediation #	Filename 23233Q





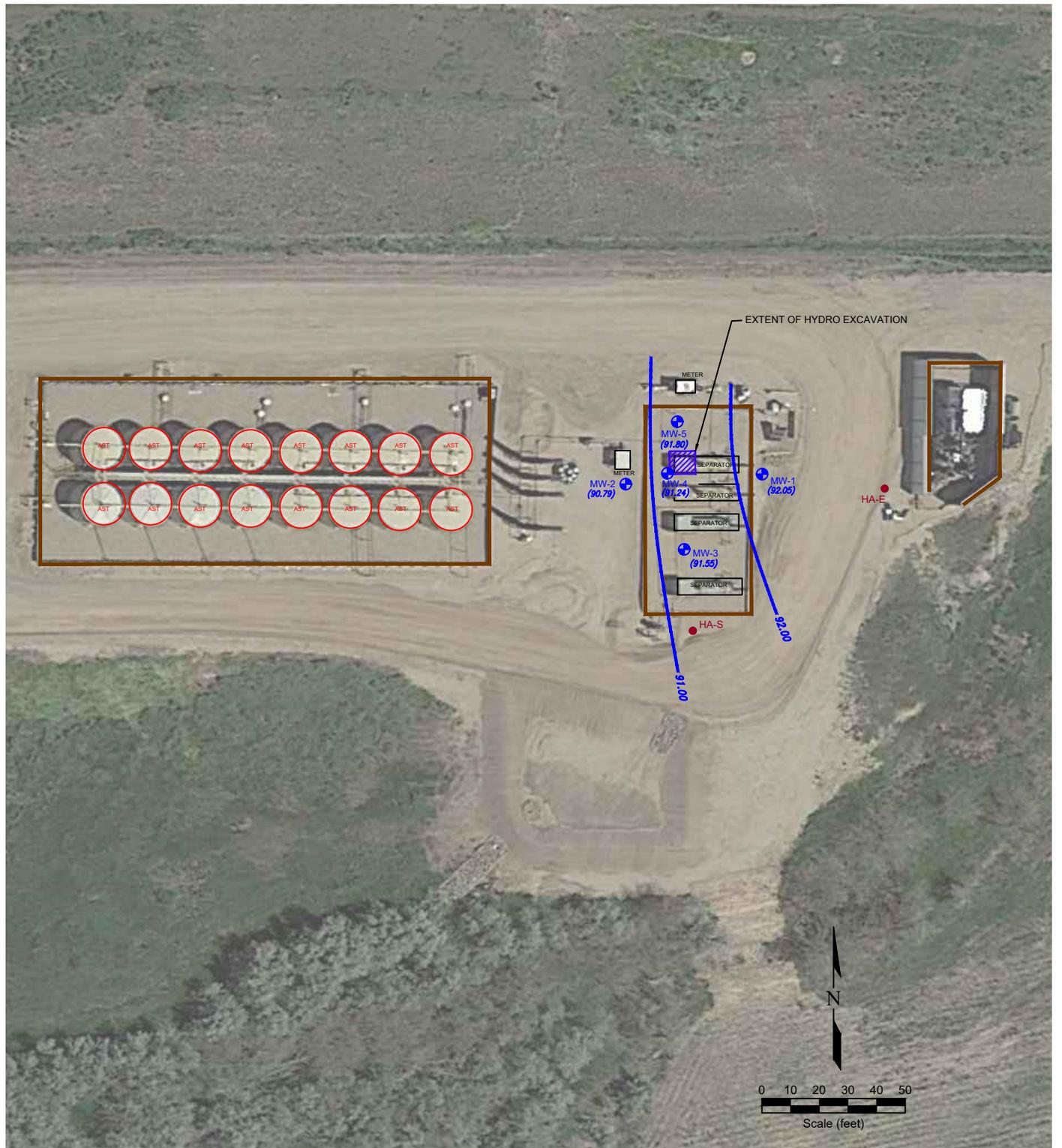
LEGEND

- MONITORING WELL LOCATION
- ▨ HYDROEXCAVATION
- FORMER FACILITY
- ▭ BUILDING
- ▭ CONTAINMENT BERM
- ▭ CONTAINMENT WALL
- ▭ EXTENT OF EXCAVATION
- ▭ FENCE LINE
- ABOVE GROUND STORAGE TANK
- GROUND WATER ELEVATION (ft above arbitrary datum)
- NOT MEASURED
- WATER TABLE CONTOUR
- GROUND WATER FLOW DIRECTION

Figure 3
INFERRED GROUNDWATER CONTOUR MAP
 January 12, 2024
PDC ENERGY, INC. ~ PHELPS 11-32CHZ
 SENE Section 32, T1N, R66W, 6th PM
 Weld County, Colorado
 40.01110°, -104.79257°

Project No. C023-233	API #	Facility # 433548
Date 1/24/24	Remediation #	Filename 23233Q





LEGEND

- HAND AUGURED SOIL BORING
- ⊕ MONITORING WELL LOCATION
- ⊗ HYDROEXCAVATION
- ABOVE GROUND STORAGE TANK
- FORMER FACILITY
- ▭ BUILDING
- ||||| CONTAINMENT BERM
- ▭ CONTAINMENT WALL
- EXTENT OF EXCAVATION
- FENCE LINE
- GROUND WATER ELEVATION (ft above arbitrary datum)
NOT MEASURED
- WATER TABLE CONTOUR
- GROUND WATER FLOW DIRECTION

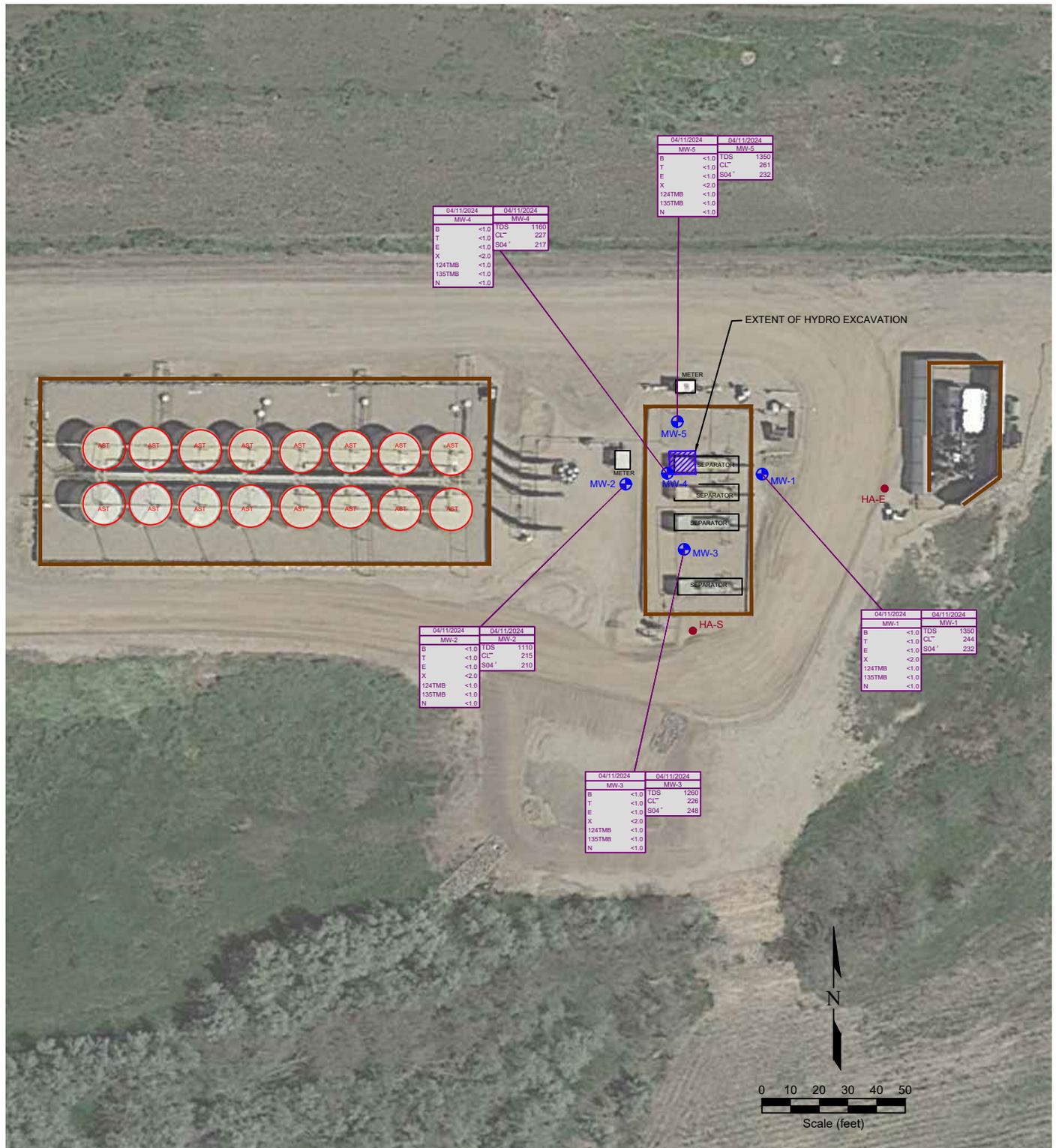
Figure 5

INFERRED GROUNDWATER CONTOUR MAP
April 11, 2024

PDC ENERGY, INC. ~ PHELPS 11-32CHZ
SENE Section 32, T1N, R66W, 6th PM
Weld County, Colorado
40.01110°, -104.79257°

Project No. C023-233	API #	Facility # 433548
Date 4/25/24	Remediation #	Filename 23233Q





LEGEND

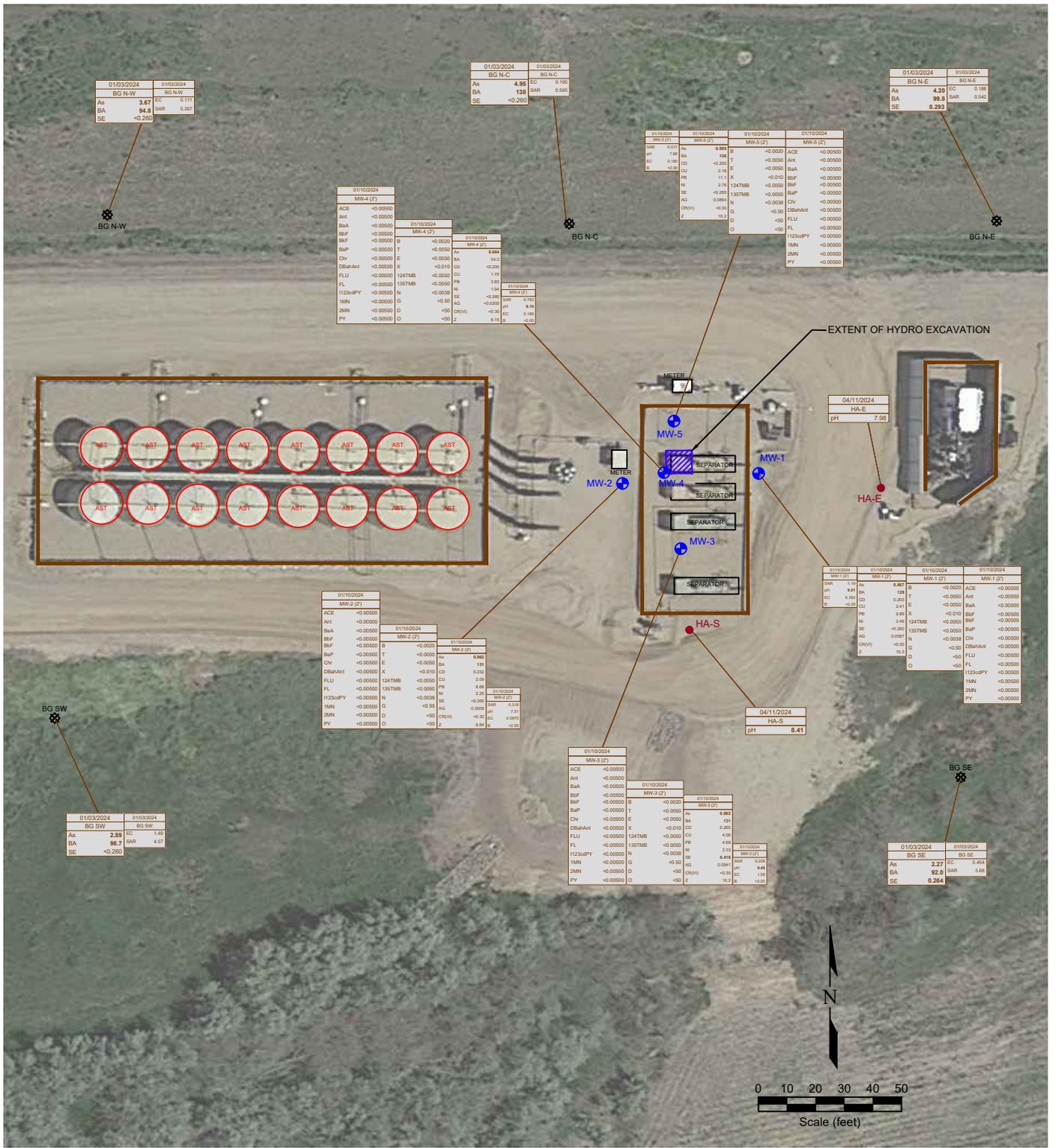
● HAND AUGURED SOIL BORING	▨ HYDROEXCAVATION	▭ FORMER FACILITY	▭ CONTAINMENT BERM
● MONITORING WELL LOCATION	○ ABOVE GROUND STORAGE TANK	▭ BUILDING	▭ CONTAINMENT WALL
		▭ EXTENT OF EXCAVATION	▭ FENCE LINE

<table border="1"> <thead> <tr><th>04/11/2024</th><th>DATE SAMPLED</th></tr> </thead> <tbody> <tr><td>MW-1</td><td>SAMPLE ID</td></tr> <tr><td>B</td><td><1.0 BENZENE (ug/L)</td></tr> <tr><td>T</td><td><1.0 TOLUENE (ug/L)</td></tr> <tr><td>E</td><td><1.0 ETHYLBENZENE (ug/L)</td></tr> <tr><td>X</td><td><2.0 TOTAL XYLENES (ug/L)</td></tr> <tr><td>124TMB</td><td><1.0 1,2,4-TRIMETHYLBENZENE (ug/L)</td></tr> <tr><td>135TMB</td><td><1.0 1,3,5-TRIMETHYLBENZENE (ug/L)</td></tr> <tr><td>N</td><td><1.0 NAPHTHALENE (ug/L)</td></tr> </tbody> </table>	04/11/2024	DATE SAMPLED	MW-1	SAMPLE ID	B	<1.0 BENZENE (ug/L)	T	<1.0 TOLUENE (ug/L)	E	<1.0 ETHYLBENZENE (ug/L)	X	<2.0 TOTAL XYLENES (ug/L)	124TMB	<1.0 1,2,4-TRIMETHYLBENZENE (ug/L)	135TMB	<1.0 1,3,5-TRIMETHYLBENZENE (ug/L)	N	<1.0 NAPHTHALENE (ug/L)	<table border="1"> <thead> <tr><th>04/11/2024</th><th>DATE SAMPLED</th></tr> </thead> <tbody> <tr><td>MW-1</td><td>SAMPLE ID</td></tr> <tr><td>TDS</td><td>924 TOTAL DISSOLVED SOLIDS (mg/L)</td></tr> <tr><td>CL⁻</td><td>208 CHLORIDE ION (mg/L)</td></tr> <tr><td>SO4⁻²</td><td>172 SULFATE ION (mg/L)</td></tr> </tbody> </table>	04/11/2024	DATE SAMPLED	MW-1	SAMPLE ID	TDS	924 TOTAL DISSOLVED SOLIDS (mg/L)	CL ⁻	208 CHLORIDE ION (mg/L)	SO4 ⁻²	172 SULFATE ION (mg/L)
04/11/2024	DATE SAMPLED																												
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X	<2.0 TOTAL XYLENES (ug/L)																												
124TMB	<1.0 1,2,4-TRIMETHYLBENZENE (ug/L)																												
135TMB	<1.0 1,3,5-TRIMETHYLBENZENE (ug/L)																												
N	<1.0 NAPHTHALENE (ug/L)																												
04/11/2024	DATE SAMPLED																												
MW-1	SAMPLE ID																												
TDS	924 TOTAL DISSOLVED SOLIDS (mg/L)																												
CL ⁻	208 CHLORIDE ION (mg/L)																												
SO4 ⁻²	172 SULFATE ION (mg/L)																												

Figure 6
GROUNDWATER CHEMISTRY MAP

PDC ENERGY, INC. ~ PHELPS 11-32CHZ
SENE Section 32, T1N, R66W, 6th PM
Weld County, Colorado
40.01110°, -104.79257°

Project No. C023-233	API #	Facility # 433548	
Date 4/25/24	Remediation #	Filename 23233Q	



LEGEND

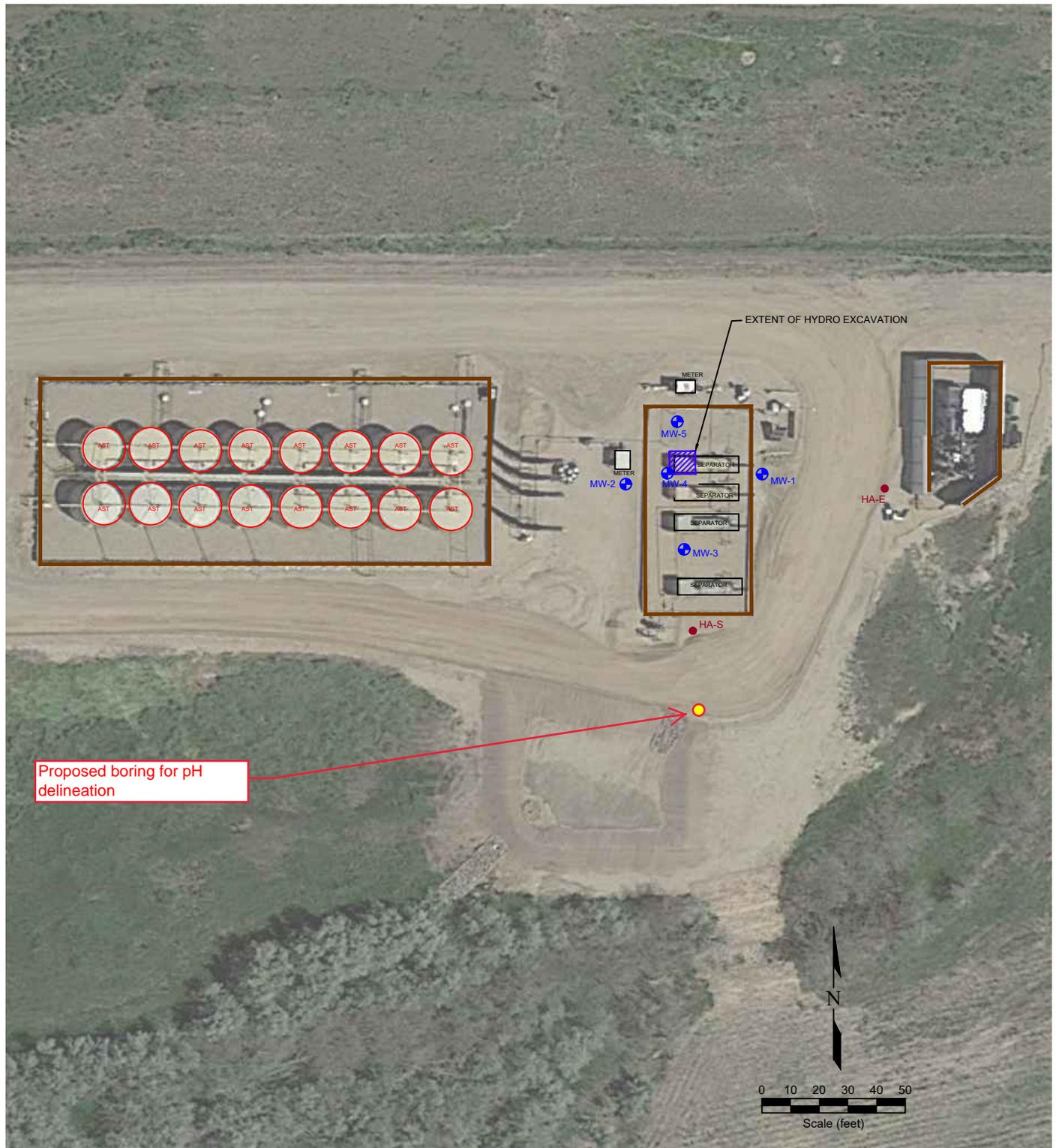
- HAND AUGURED SOIL BORING
- HYDROEXCAVATION
- FORMER FACILITY
- ▭ FORMER FACILITY
- ▬ CONTAINMENT BERM
- MONITORING WELL LOCATION
- ABOVE GROUND STORAGE TANK
- ▬ CONTAINMENT WALL
- ▭ BUILDING
- ▬ EXTENT OF EXCAVATION
- ⊗ SOIL SAMPLE LOCATION
- ▬ FENCE LINE

DATE SAMPLED	SAMPLE ID & DEPTH (ft)	DATE SAMPLED	SAMPLE ID & DEPTH (ft)
01/10/2024	MW-1 (2)	01/10/2024	MW-1 (2)
ACE	<0.0050	ACE	<0.0050
Ant	<0.0050	Ant	<0.0050
BAA	<0.0050	BAA	<0.0050
BBF	<0.0050	BBF	<0.0050
Chv	<0.0050	Chv	<0.0050
DBaAnt	<0.0050	DBaAnt	<0.0050
FLU	<0.0050	FLU	<0.0050
1123aPPY	<0.0050	1123aPPY	<0.0050
1MN	<0.0050	1MN	<0.0050
2MN	<0.0050	2MN	<0.0050
PY	<0.0050	PY	<0.0050

Figure 7
SOIL CHEMISTRY MAP
PDC ENERGY, INC. ~ PHELPS 11-32CHZ
SENE Section 32, T1N, R66W, 6th PM
Weld County, Colorado
40.01110°, -104.79257°

Project No. C023-233	API #	Facility # 433548
Date 4/25/24	Remediation #	Filename 23233Q

REMONT ENVIRONMENTAL



Proposed boring for pH delineation

LEGEND

- HAND ALIGNED SOIL BORING
- HYDROEXCAVATION
- ◻ FORMER FACILITY
- ▤ CONTAINMENT BERM
- MONITORING WELL LOCATION
- ABOVE GROUND STORAGE TANK
- ▭ BUILDING
- ▬ CONTAINMENT WALL
- ▬ EXTENT OF EXCAVATION
- ▬ FENCE LINE

Figure 8
PROPOSED BORING MAP

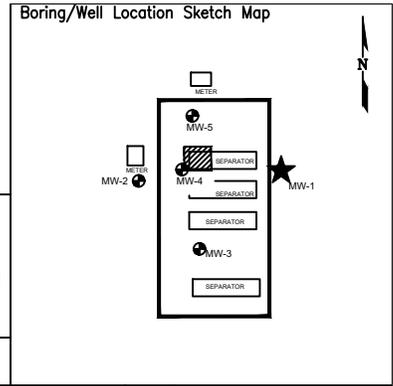
PDC ENERGY, INC. ~ PHELPS 11-32CHZ
 SENE Section 32, T1N, R66W, 6th PM
 Weld County, Colorado
 40.01110°, -104.79257°

Project No. C023-233	API #	Facility # 433548
Date 4/25/24	Remediation #	Filename 23233Q





BORING/WELL CONSTRUCTION LOG



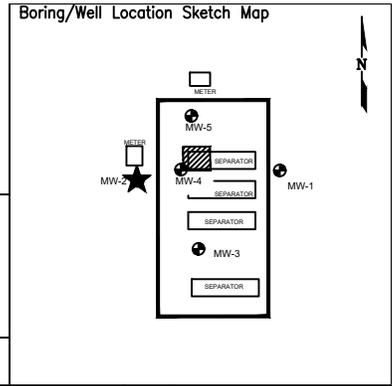
Page 1 of 1

Boring/Well No. MW-1	Total Depth 10'	Location PDC Energy, Inc. PHELPS 11-32CHZ SENE Section 32, T1N, R66W, 6th PM Weld County, Colorado	
Project No./Name CO23-233 / PDC Phelps 11-32CHZ		Approved By	
Drilling Contractor/Driller Drill Pro /		Geologist/Office Paul Henehan / Fremont Environmental, Inc.	
Drilling Equipment/Method Hand Angered		Size/Type of Bit 2.5" direct push	Sampling Method direct push
Well Installed? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Casing Mtrl./Dia. PVC 1"	Screen: Type Slotted Mtrl. PVC Length 8' Dia. 1" Slot Size 0.010"
Elevation of: (ft. above datum)	Ground Surface 96.03	Top of Well Casing 4.54	Top of Screen Bottom of Screen Ground Water Surface/Date Measured 6.71 1/10/2024

DEPTH (feet)	WELL CONSTRUCTION	LITHOLOGY		Penetration Rate (blows/6")	Recovery (%)	Sample Interval (feet)	PID Values (ppm)
		GRAPHIC LOG	VISUAL DESCRIPTION				
5			Sandy silt, moderate plasticity, brown, moist, no stain, no odor Sandy silt, moderate plasticity, brown, moist, no stain, no odor Sandy silt, moderate plasticity, brown, moist, no stain, no odor				0 0 0
10			TD 10'				
15							
20							



BORING/WELL CONSTRUCTION LOG



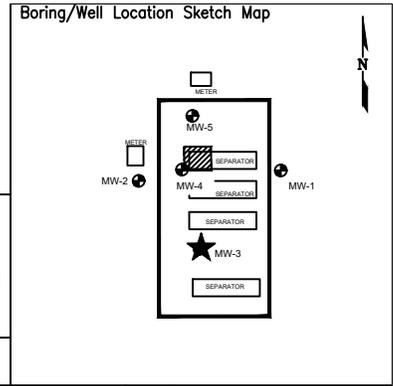
Page 1 of 1

Boring/Well No. MW-2		Total Depth 11'	Location PDC Energy, Inc. PHELPS 11-32CHZ SENE Section 32, T1N, R66W, 6th PM Weld County, Colorado			
Project No./Name CO23-233 / PDC Phelps 11-32CHZ		Drilling Contractor/Driller Drill Pro /				
Geologist/Office Paul Henehan / Fremont Environmental, Inc.		Approved By				
Drilling Equipment/Method Hand Angered		Size/Type of Bit 2.5" direct push	Sampling Method direct push	Start/Finish Date 1/10/2024		
Well Installed? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Casing Mtrl./Dia. PVC 1"	Screen: Type Slotted Mtrl. PVC Length 10' Dia. 1" Slot Size 0.010"			
Elevation of: (ft. above datum)	Ground Surface 99.03	Top of Well Casing 1.54	Top of Screen -	Bottom of Screen -	Ground Water Surface/Date Measured 10.95 1/10/2024	

DEPTH (feet)	WELL CONSTRUCTION		LITHOLOGY		Penetration Rate (blows/6")	Recovery (%)	Sample Interval (feet)	PID Values (ppm)
			GRAPHIC LOG	VISUAL DESCRIPTION				
	Bentonite	1" Blank	SM	Sandy silt, moderate plasticity, brown, moist, no stain, no odor				0
5	#10-20 Silica Sand	1" Screen		Sandy silt, moderate plasticity, brown, moist, no stain, no odor				0
10				Sandy silt, moderate plasticity, brown, moist, no stain, no odor				0
15								
20								
				TD 11'				



BORING/WELL CONSTRUCTION LOG



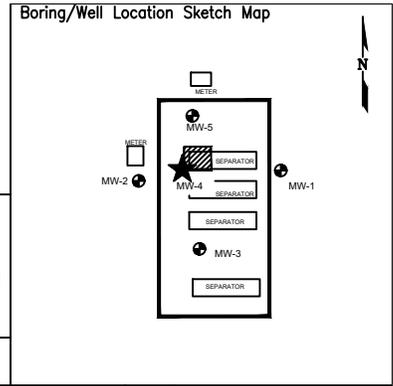
Page 1 of 1

Boring/Well No. MW-3		Total Depth 10'	Location PDC Energy, Inc. PHELPS 11-32CHZ SENE Section 32, T1N, R66W, 6th PM Weld County, Colorado			
Project No./Name CO23-233 / PDC Phelps 11-32CHZ		Drilling Contractor/Driller Drill Pro /				
Geologist/Office Paul Henehan / Fremont Environmental, Inc.		Approved By				
Drilling Equipment/Method Hand Angered		Size/Type of Bit 2.5" direct push	Sampling Method direct push	Start/Finish Date 1/10/2024		
Well Installed? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Casing Mtrl./Dia. PVC 1"	Screen: Type Slotted Mtrl. PVC Length 8' Dia. 1" Slot Size 0.010"				
Elevation of: (ft. above datum)	Ground Surface 0.57	Top of Well Casing 100	Top of Screen .	Bottom of Screen .	Ground Water Surface/Date Measured 11.46 1/10/2024	

DEPTH (feet)	WELL CONSTRUCTION	LITHOLOGY		Penetration Rate (blows/6")	Recovery (%)	Sample Interval (feet)	PID Values (ppm)
		GRAPHIC LOG	VISUAL DESCRIPTION				
			Fill (sand, gravel) stain, no odor Sandy silt, brown, moist, no stain, no odor TD 10'				0 0
5							
10							
15							
20							



BORING/WELL CONSTRUCTION LOG



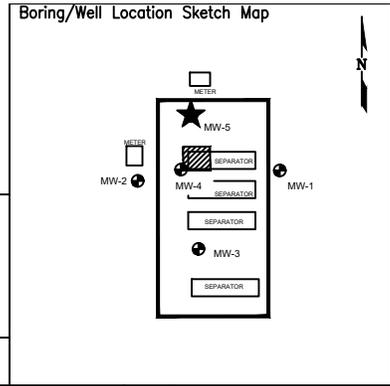
Page 1 of 1

Boring/Well No. MW-4	Total Depth 10'	Location PDC Energy, Inc. PHELPS 11-32CHZ SENE Section 32, T1N, R66W, 6th PM Weld County, Colorado	
Project No./Name CO23-233 / PDC Phelps 11-32CHZ		Approved By	
Drilling Contractor/Driller Drill Pro /		Geologist/Office Paul Henehan / Fremont Environmental, Inc.	
Drilling Equipment/Method Hand Angered		Size/Type of Bit 2.5" direct push	Sampling Method direct push
		Start/Finish Date 1/10/2024	
Well Installed? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Casing Mtrl./Dia. PVC 1"	Screen: Type Slotted Mtrl. PVC Length 8' Dia. 1" Slot Size 0.010"	
Elevation of: (ft. above datum)	Ground Surface 1.10	Top of Well Casing 99.47	Ground Water Surface/Date Measured 10.68 1/10/2024

DEPTH (feet)	WELL CONSTRUCTION	LITHOLOGY		Penetration Rate (blows/6")	Recovery Recovery (%)	Sample Interval (feet)	PID Values (ppm)
		GRAPHIC LOG	VISUAL DESCRIPTION				
	Bentonite	1" Blank	GR				2.5
5	#10-20 Silica Sand	1" Screen	SM				0
10			TD 10'				0
15							
20							



BORING/WELL CONSTRUCTION LOG



Page 1 of 1

Boring/Well No. MW-5		Total Depth 10'	Location PDC Energy, Inc. PHELPS 11-32CHZ SENE Section 32, T1N, R66W, 6th PM Weld County, Colorado			
Project No./Name CO23-233 / PDC Phelps 11-32CHZ			Drilling Contractor/Driller Drill Pro /			
Geologist/Office Paul Henehan / Fremont Environmental, Inc.			Approved By			
Drilling Equipment/Method Hand Angered		Size/Type of Bit 2.5" direct push	Sampling Method direct push	Start/Finish Date 1/10/2024		
Well Installed? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Casing Mtrl./Dia. PVC 1"	Screen: Type Slotted Mtrl. PVC Length 8' Dia. 1" Slot Size 0.010"			
Elevation of: (ft. above datum)	Ground Surface 0.96	Top of Well Casing 99.61	Top of Screen -	Bottom of Screen -	Ground Water Surface/Date Measured 10.58 1/10/2024	

DEPTH (feet)	WELL CONSTRUCTION	LITHOLOGY		Penetration Rate (blows/6")	Recovery (%)	Sample Interval (feet)	PID Values (ppm)
		GRAPHIC LOG	VISUAL DESCRIPTION				
5			Sandy silt, small gravel, moist, brown, no stain, no odor				
10			Sandy silt, small gravel, very moist, brown, no stain, no odor				
15							
20							

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

January 22, 2024

Paul Henchan
Fremont Environmental
PO Box 1289
Wellington, CO 80549
RE: PDC - Phelps Separator
Work Order #2401190

Enclosed are the results of analyses for samples received by Summit Scientific on 01/10/24 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Jacob Wood For Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1 2FT	2401190-01	Soil	01/10/24 00:00	01/10/24 16:30
MW-2 2FT	2401190-02	Soil	01/10/24 00:00	01/10/24 16:30
MW-3 2FT	2401190-03	Soil	01/10/24 00:00	01/10/24 16:30
MW-4 2FT	2401190-04	Soil	01/10/24 00:00	01/10/24 16:30
MW-5 2FT	2401190-05	Soil	01/10/24 00:00	01/10/24 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.

SUMMIT SCIENTIFIC

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

Lab ID: 2401190 Page 1 of 1

Client: Fremont		Project Manager: Paul Henehan		Company: PDC	
Address:		E-Mail:		Project Name/Location: PHELPS SEPARATOR	
City/State/Zip:		Project Name: PHELPS SEPARATOR		AFE#:	
Phone:		Project Number:		PO/Billing Codes:	
Sampler Name: HENELAN				Contact:	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested	Special Instructions
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #		
1	MW-1 2 FT	1/10/24		2			✓			✓			
2	MW-2 2 FT	↓		↓			↓			↓			
3	MW-3 2 FT	↓		↓			↓			↓			
4	MW-4 2 FT	↓		↓			↓			↓			
5	MW-5 2 FT	↓		↓			↓			↓			
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													

Relinquished by: <u>DAHFE</u>	Date/Time: <u>1/10/24 1430</u>	Received by:	Date/Time:	TAT Business Days	Field DO	Notes:
Relinquished by: <u>SZ</u>	Date/Time: <u>1/10/24 1630</u>	Received by: <u>[Signature]</u>	Date/Time: <u>1/10/24 1630</u>	Same Day	Field EC	
Relinquished by:	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
Relinquished by:	Date/Time:	Received by:	Date/Time:	2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
Temperature Upon Receipt: <u>113</u>	Corrected Temperature: <u>0</u>	IR gun #:		<u>Standard</u> <input checked="" type="checkbox"/>	Field Turb.	
					HNO3 lot #:	

S₂

Sample Receipt Checklist

S2 Work Order# 2401190

Client: Fremont Client Project ID: Phelps Separator

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

-

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

Temp (°C)

Thermometer #

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ICE
If custody seals are present, are they intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	no time stamps
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.

AS
Custodian Printed Name

1/10/24
Date/Time



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

MW-1 2FT
2401190-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHA0491	01/12/24	01/14/24	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0292	73.0 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0435	109 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0424	106 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHA0494	01/12/24	01/13/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	7.80	62.4 %		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: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

MW-1 2FT
2401190-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHA0459	01/12/24	01/13/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0174	52.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0207	62.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHA0498	01/12/24	01/17/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/10/24 00:00**

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: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

MW-1 2FT
2401190-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	0.867	0.200	mg/kg dry	1	BHA0456	01/12/24	01/18/24	EPA 6020B
Barium	129	0.400	"	"	"	"	"	"
Cadmium	0.203	0.200	"	"	"	"	"	"
Copper	2.41	0.400	"	"	"	"	"	"
Lead	9.86	0.200	"	"	"	"	"	"
Nickel	2.46	0.400	"	"	"	"	"	"
Silver	0.0587	0.0200	"	"	"	"	"	"
Zinc	10.3	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHA0445	01/11/24	01/12/24	EPA 7196A	

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

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	123	0.0500	mg/L dry	1	BHA0526	01/15/24	01/16/24	EPA 6020B	
Magnesium	25.4	0.0500	"	"	"	"	"	"	
Sodium	55.4	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.19	0.00100	units	1	BHA0618	01/17/24	01/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/10/24 00:00**

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

Project: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

**MW-1 2FT
 2401190-01 (Soil)**

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	85.9	%	1	BHA0428	01/11/24	01/12/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.362	0.0100	mmhos/cm	1	BHA0576	01/16/24	01/16/24	EPA 120.1	

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

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.01		pH Units	1	BHA0575	01/16/24	01/16/24	EPA 9045D	

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PO Box 1289
Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

MW-2 2FT
2401190-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHA0491	01/12/24	01/14/24	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0318	79.4 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0432	108 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0423	106 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHA0494	01/12/24	01/13/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	7.43	59.4 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

MW-2 2FT
2401190-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHA0459	01/12/24	01/13/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0256	76.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0242	72.5 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHA0498	01/12/24	01/17/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/10/24 00:00**

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

Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

MW-2 2FT
2401190-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	0.717	0.200	mg/kg dry	1	BHA0456	01/12/24	01/18/24	EPA 6020B
Barium	103	0.400	"	"	"	"	"	"
Cadmium	0.232	0.200	"	"	"	"	"	"
Copper	2.09	0.400	"	"	"	"	"	"
Lead	8.66	0.200	"	"	"	"	"	"
Nickel	2.25	0.400	"	"	"	"	"	"
Silver	0.0509	0.0200	"	"	"	"	"	"
Zinc	8.64	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: 01/10/24 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHA0445	01/11/24	01/12/24	EPA 7196A	

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

Date Sampled: 01/10/24 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	128	0.0500	mg/L dry	1	BHA0526	01/15/24	01/16/24	EPA 6020B	
Magnesium	24.8	0.0500	"	"	"	"	"	"	
Sodium	15.0	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 01/10/24 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.318	0.00100	units	1	BHA0618	01/17/24	01/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 01/10/24 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Fremont Environmental
 PO Box 1289
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Project: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

MW-2 2FT
2401190-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	89.6	%	1	BHA0428	01/11/24	01/12/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/10/24 00:00**

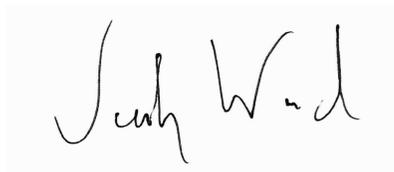
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0970	0.0100	mmhos/cm	1	BHA0576	01/16/24	01/16/24	EPA 120.1	

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

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.51		pH Units	1	BHA0575	01/16/24	01/16/24	EPA 9045D	

Summit Scientific



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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

MW-3 2FT
2401190-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHA0491	01/12/24	01/14/24	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0344	85.9 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0461	115 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0416	104 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHA0494	01/12/24	01/13/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.39	67.1 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

MW-3 2FT
2401190-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHA0459	01/12/24	01/13/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0184	55.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0217	65.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHA0498	01/12/24	01/17/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/10/24 00:00**

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

Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

MW-3 2FT
2401190-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	0.962	0.200	mg/kg dry	1	BHA0456	01/12/24	01/18/24	EPA 6020B
Barium	131	0.400	"	"	"	"	"	"
Cadmium	0.265	0.200	"	"	"	"	"	"
Copper	4.06	0.400	"	"	"	"	"	"
Lead	4.68	0.200	"	"	"	"	"	"
Nickel	2.33	0.400	"	"	"	"	"	"
Silver	0.0841	0.0200	"	"	"	"	"	"
Zinc	10.2	0.400	"	"	"	"	"	"
Selenium	0.416	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: 01/10/24 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHA0445	01/11/24	01/12/24	EPA 7196A	

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

Date Sampled: 01/10/24 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	163	0.0500	mg/L dry	1	BHA0526	01/15/24	01/16/24	EPA 6020B	
Magnesium	7.16	0.0500	"	"	"	"	"	"	
Sodium	10.0	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 01/10/24 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.208	0.00100	units	1	BHA0618	01/17/24	01/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 01/10/24 00:00

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

Project: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

MW-3 2FT
2401190-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	90.8	%	1	BHA0428	01/11/24	01/12/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.09	0.0100	mmhos/cm	1	BHA0576	01/16/24	01/16/24	EPA 120.1	

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

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.40		pH Units	1	BHA0575	01/16/24	01/16/24	EPA 9045D	

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

MW-4 2FT
2401190-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHA0491	01/12/24	01/14/24	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0302	75.4 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0451	113 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0437	109 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHA0494	01/12/24	01/13/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	7.81	62.5 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

MW-4 2FT
2401190-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHA0459	01/12/24	01/13/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0235	70.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0240	71.9 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHA0498	01/12/24	01/17/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

MW-4 2FT
2401190-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.864	0.200	mg/kg dry	1	BHA0456	01/12/24	01/18/24	EPA 6020B	
Barium	54.2	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.76	0.400	"	"	"	"	"	"	
Lead	3.85	0.200	"	"	"	"	"	"	
Nickel	1.94	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	8.15	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHA0445	01/11/24	01/12/24	EPA 7196A	

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

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	18.0	0.0500	mg/L dry	1	BHA0526	01/15/24	01/16/24	EPA 6020B	
Magnesium	4.87	0.0500	"	"	"	"	"	"	
Sodium	14.5	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.783	0.00100	units	1	BHA0618	01/17/24	01/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Project: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

MW-4 2FT
2401190-04 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.5		%	1	BHA0428	01/11/24	01/12/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.189	0.0100	mmhos/cm	1	BHA0576	01/16/24	01/16/24	EPA 120.1	

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

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.10		pH Units	1	BHA0575	01/16/24	01/16/24	EPA 9045D	

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Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

MW-5 2FT
2401190-05 (Soil)

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Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BHA0491	01/12/24	01/14/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	0.0440	110 %	50-150	"	"	"	"	"	
Surrogate: Toluene-d8	0.0441	110 %	50-150	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0441	110 %	50-150	"	"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	BHA0494	01/12/24	01/13/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl	7.67	61.4 %	30-150	"	"	"	"	"	

PAH by EPA Method 8270D SIM

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PO Box 1289
Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

MW-5 2FT
2401190-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHA0459	01/12/24	01/13/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0228	68.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0201	60.4 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHA0498	01/12/24	01/17/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/10/24 00:00**

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

Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

MW-5 2FT
2401190-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.885	0.200	mg/kg dry	1	BHA0456	01/12/24	01/18/24	EPA 6020B	
Barium	136	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.18	0.400	"	"	"	"	"	"	
Lead	11.1	0.200	"	"	"	"	"	"	
Nickel	2.76	0.400	"	"	"	"	"	"	
Silver	0.0864	0.0200	"	"	"	"	"	"	
Zinc	10.2	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 01/10/24 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHA0445	01/11/24	01/12/24	EPA 7196A	

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

Date Sampled: 01/10/24 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	118	0.0500	mg/L dry	1	BHA0526	01/15/24	01/16/24	EPA 6020B	
Magnesium	40.5	0.0500	"	"	"	"	"	"	
Sodium	25.5	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 01/10/24 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.517	0.00100	units	1	BHA0618	01/17/24	01/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Fremont Environmental
 PO Box 1289
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Project: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

MW-5 2FT
2401190-05 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	85.7		%	1	BHA0428	01/11/24	01/12/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.180	0.0100	mmhos/cm	1	BHA0576	01/16/24	01/16/24	EPA 120.1	

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

Date Sampled: **01/10/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.98		pH Units	1	BHA0575	01/16/24	01/16/24	EPA 9045D	

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Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BHA0491 - EPA 5030 Soil MS

Blank (BHA0491-BLK1)

Prepared: 01/12/24 Analyzed: 01/14/24

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0374		"	0.0400		93.6	50-150			
<i>Surrogate: Toluene-d8</i>	0.0443		"	0.0400		111	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0404		"	0.0400		101	50-150			

LCS (BHA0491-BS1)

Prepared: 01/12/24 Analyzed: 01/14/24

Benzene	0.0840	0.0020	mg/kg	0.100		84.0	70-130			
Toluene	0.0941	0.0050	"	0.100		94.1	70-130			
Ethylbenzene	0.0862	0.0050	"	0.100		86.2	70-130			
m,p-Xylene	0.176	0.010	"	0.200		87.9	70-130			
o-Xylene	0.0826	0.0050	"	0.100		82.6	70-130			
1,2,4-Trimethylbenzene	0.0812	0.0050	"	0.100		81.2	70-130			
1,3,5-Trimethylbenzene	0.0826	0.0050	"	0.100		82.6	70-130			
Naphthalene	0.0993	0.0038	"	0.100		99.3	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0358		"	0.0400		89.6	50-150			
<i>Surrogate: Toluene-d8</i>	0.0435		"	0.0400		109	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0394		"	0.0400		98.5	50-150			

Matrix Spike (BHA0491-MS1)

Source: 2401183-01

Prepared: 01/12/24 Analyzed: 01/14/24

Benzene	0.0737	0.0020	mg/kg	0.100	ND	73.7	70-130			
Toluene	0.0808	0.0050	"	0.100	ND	80.8	70-130			
Ethylbenzene	0.101	0.0050	"	0.100	ND	101	70-130			
m,p-Xylene	0.146	0.010	"	0.200	ND	73.0	70-130			
o-Xylene	0.0992	0.0050	"	0.100	ND	99.2	70-130			
1,2,4-Trimethylbenzene	0.0906	0.0050	"	0.100	ND	90.6	70-130			
1,3,5-Trimethylbenzene	0.0952	0.0050	"	0.100	ND	95.2	70-130			
Naphthalene	0.105	0.0038	"	0.100	ND	105	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0362		"	0.0400		90.5	50-150			
<i>Surrogate: Toluene-d8</i>	0.0452		"	0.0400		113	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0402		"	0.0400		100	50-150			

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Project: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BHA0491 - EPA 5030 Soil MS

Matrix Spike Dup (BHA0491-MSD1)	Source: 2401183-01			Prepared: 01/12/24 Analyzed: 01/14/24						
Benzene	0.0707	0.0020	mg/kg	0.100	ND	70.7	70-130	4.15	30	
Toluene	0.0762	0.0050	"	0.100	ND	76.2	70-130	5.77	30	
Ethylbenzene	0.102	0.0050	"	0.100	ND	102	70-130	0.621	30	
m,p-Xylene	0.143	0.010	"	0.200	ND	71.7	70-130	1.82	30	
o-Xylene	0.101	0.0050	"	0.100	ND	101	70-130	1.32	30	
1,2,4-Trimethylbenzene	0.0894	0.0050	"	0.100	ND	89.4	70-130	1.40	30	
1,3,5-Trimethylbenzene	0.0940	0.0050	"	0.100	ND	94.0	70-130	1.33	30	
Naphthalene	0.103	0.0038	"	0.100	ND	103	70-130	1.73	30	
Surrogate: 1,2-Dichloroethane-d4	0.0302		"	0.0400		75.4	50-150			
Surrogate: Toluene-d8	0.0455		"	0.0400		114	50-150			
Surrogate: 4-Bromofluorobenzene	0.0400		"	0.0400		100	50-150			

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Project: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BHA0494 - EPA 3550A

Blank (BHA0494-BLK1)

Prepared & Analyzed: 01/12/24

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: <i>o</i> -Terphenyl	11.3		"	12.5		90.7		30-150		

LCS (BHA0494-BS1)

Prepared: 01/12/24 Analyzed: 01/13/24

C10-C28 (DRO)	417	50	mg/kg	500		83.4		70-130		
Surrogate: <i>o</i> -Terphenyl	9.60		"	12.5		76.8		30-150		

Matrix Spike (BHA0494-MS1)

Source: 2401183-01

Prepared: 01/12/24 Analyzed: 01/13/24

C10-C28 (DRO)	447	50	mg/kg	500	14.5	86.5		70-130		
Surrogate: <i>o</i> -Terphenyl	10.1		"	12.5		80.7		30-150		

Matrix Spike Dup (BHA0494-MSD1)

Source: 2401183-01

Prepared: 01/12/24 Analyzed: 01/13/24

C10-C28 (DRO)	404	50	mg/kg	500	14.5	77.9		70-130	10.1	20
Surrogate: <i>o</i> -Terphenyl	10.5		"	12.5		83.9		30-150		

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Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BHA0459 - EPA 5030 Soil MS

Blank (BHA0459-BLK1)

Prepared & Analyzed: 01/12/24

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0200</i>		<i>"</i>	<i>0.0333</i>		<i>60.1</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0208</i>		<i>"</i>	<i>0.0333</i>		<i>62.4</i>	<i>40-150</i>			

LCS (BHA0459-BS1)

Prepared & Analyzed: 01/12/24

Acenaphthene	0.0225	0.00500	mg/kg	0.0333		67.6	31-137			
Anthracene	0.0218	0.00500	"	0.0333		65.3	30-120			
Benzo (a) anthracene	0.0170	0.00500	"	0.0333		50.9	30-120			
Benzo (a) pyrene	0.0195	0.00500	"	0.0333		58.6	30-120			
Benzo (b) fluoranthene	0.0200	0.00500	"	0.0333		60.1	30-120			
Benzo (k) fluoranthene	0.0201	0.00500	"	0.0333		60.3	30-120			
Chrysene	0.0210	0.00500	"	0.0333		63.0	30-120			
Dibenz (a,h) anthracene	0.0353	0.00500	"	0.0333		106	30-120			
Fluoranthene	0.0231	0.00500	"	0.0333		69.3	30-120			
Fluorene	0.0219	0.00500	"	0.0333		65.8	30-120			
Indeno (1,2,3-cd) pyrene	0.0225	0.00500	"	0.0333		67.5	30-120			
Pyrene	0.0289	0.00500	"	0.0333		86.7	35-142			
1-Methylnaphthalene	0.0214	0.00500	"	0.0333		64.2	35-142			
2-Methylnaphthalene	0.0208	0.00500	"	0.0333		62.5	35-142			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0241</i>		<i>"</i>	<i>0.0333</i>		<i>72.3</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0232</i>		<i>"</i>	<i>0.0333</i>		<i>69.5</i>	<i>40-150</i>			

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PO Box 1289
Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BHA0459 - EPA 5030 Soil MS

Matrix Spike (BHA0459-MS1)

Source: 2401178-04

Prepared & Analyzed: 01/12/24

Acenaphthene	0.0144	0.00500	mg/kg	0.0333	ND	43.2	31-137			
Anthracene	0.0146	0.00500	"	0.0333	ND	43.7	30-120			
Benzo (a) anthracene	0.0139	0.00500	"	0.0333	ND	41.7	30-120			
Benzo (a) pyrene	0.0147	0.00500	"	0.0333	ND	44.2	30-120			
Benzo (b) fluoranthene	0.0180	0.00500	"	0.0333	ND	53.9	30-120			
Benzo (k) fluoranthene	0.0160	0.00500	"	0.0333	ND	48.1	30-120			
Chrysene	0.0134	0.00500	"	0.0333	ND	40.1	30-120			
Dibenz (a,h) anthracene	0.0146	0.00500	"	0.0333	ND	43.7	30-120			
Fluoranthene	0.0153	0.00500	"	0.0333	ND	45.9	30-120			
Fluorene	0.0149	0.00500	"	0.0333	ND	44.6	30-120			
Indeno (1,2,3-cd) pyrene	0.0253	0.00500	"	0.0333	ND	75.8	30-120			
Pyrene	0.0146	0.00500	"	0.0333	ND	43.9	35-142			
1-Methylnaphthalene	0.0163	0.00500	"	0.0333	ND	48.8	15-130			
2-Methylnaphthalene	0.0160	0.00500	"	0.0333	ND	48.0	15-130			
Surrogate: 2-Methylnaphthalene-d10	0.0173		"	0.0333		51.8	40-150			
Surrogate: Fluoranthene-d10	0.0158		"	0.0333		47.5	40-150			

Matrix Spike Dup (BHA0459-MSD1)

Source: 2401178-04

Prepared & Analyzed: 01/12/24

Acenaphthene	0.0142	0.00500	mg/kg	0.0333	ND	42.6	31-137	1.31	30	
Anthracene	0.0172	0.00500	"	0.0333	ND	51.6	30-120	16.7	30	
Benzo (a) anthracene	0.0172	0.00500	"	0.0333	ND	51.6	30-120	21.2	30	
Benzo (a) pyrene	0.0252	0.00500	"	0.0333	ND	75.6	30-120	52.5	30	QR-02
Benzo (b) fluoranthene	0.0180	0.00500	"	0.0333	ND	54.1	30-120	0.354	30	
Benzo (k) fluoranthene	0.0179	0.00500	"	0.0333	ND	53.7	30-120	11.1	30	
Chrysene	0.0171	0.00500	"	0.0333	ND	51.2	30-120	24.3	30	
Dibenz (a,h) anthracene	0.0208	0.00500	"	0.0333	ND	62.4	30-120	35.4	30	QR-02
Fluoranthene	0.0153	0.00500	"	0.0333	ND	45.8	30-120	0.270	30	
Fluorene	0.0144	0.00500	"	0.0333	ND	43.2	30-120	3.05	30	
Indeno (1,2,3-cd) pyrene	0.0272	0.00500	"	0.0333	ND	81.7	30-120	7.43	30	
Pyrene	0.0137	0.00500	"	0.0333	ND	41.0	35-142	6.83	30	
1-Methylnaphthalene	0.0135	0.00500	"	0.0333	ND	40.5	15-130	18.5	50	
2-Methylnaphthalene	0.0148	0.00500	"	0.0333	ND	44.3	15-130	7.99	50	
Surrogate: 2-Methylnaphthalene-d10	0.0141		"	0.0333		42.3	40-150			
Surrogate: Fluoranthene-d10	0.0153		"	0.0333		46.0	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: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHA0456 - EPA 3050B

Blank (BHA0456-BLK1)

Prepared: 01/12/24 Analyzed: 01/18/24

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 (BHA0456-BS1)

Prepared: 01/12/24 Analyzed: 01/18/24

Arsenic	42.0	0.200	mg/kg wet	40.0	105	80-120
Barium	38.9	0.400	"	40.0	97.1	80-120
Cadmium	1.96	0.200	"	2.00	98.2	80-120
Copper	41.6	0.400	"	40.0	104	80-120
Lead	19.3	0.200	"	20.0	96.5	80-120
Nickel	41.6	0.400	"	40.0	104	80-120
Silver	1.93	0.0200	"	2.00	96.7	80-120
Zinc	41.1	0.400	"	40.0	103	80-120
Selenium	4.82	0.260	"	4.00	120	80-120

Duplicate (BHA0456-DUP1)

Source: 2312418-04

Prepared: 01/12/24 Analyzed: 01/18/24

Arsenic	0.574	0.200	mg/kg dry	0.505	12.7	20
Barium	25.0	0.400	"	23.8	4.83	20
Cadmium	0.0482	0.200	"	0.0431	11.1	20
Copper	1.07	0.400	"	0.970	9.50	20
Lead	2.69	0.200	"	2.74	2.02	20
Nickel	1.11	0.400	"	1.02	8.33	20
Silver	0.00972	0.0200	"	0.0110	12.2	20
Zinc	4.65	0.400	"	4.35	6.56	20
Selenium	ND	0.260	"	ND		20

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

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 BHA0456 - EPA 3050B

Matrix Spike (BHA0456-MS1)

Source: 2312418-04

Prepared: 01/12/24 Analyzed: 01/18/24

Arsenic	21.4	0.200	mg/kg dry	42.2	0.505	49.4	75-125				QM-07
Barium	66.4	0.400	"	42.2	23.8	101	75-125				
Cadmium	2.19	0.200	"	2.11	0.0431	102	75-125				
Copper	22.3	0.400	"	42.2	0.970	50.5	75-125				QM-07
Lead	22.7	0.200	"	21.1	2.74	94.4	75-125				
Nickel	22.4	0.400	"	42.2	1.02	50.6	75-125				QM-07
Silver	2.05	0.0200	"	2.11	0.0110	96.5	75-125				
Zinc	25.6	0.400	"	42.2	4.35	50.3	75-125				QM-07
Selenium	4.70	0.260	"	4.22	ND	111	75-125				

Matrix Spike Dup (BHA0456-MSD1)

Source: 2312418-04

Prepared: 01/12/24 Analyzed: 01/18/24

Arsenic	21.7	0.200	mg/kg dry	42.2	0.505	50.1	75-125	1.49	25		QM-07
Barium	65.9	0.400	"	42.2	23.8	99.6	75-125	0.811	25		
Cadmium	2.16	0.200	"	2.11	0.0431	100	75-125	1.07	25		
Copper	22.5	0.400	"	42.2	0.970	50.9	75-125	0.768	25		QM-07
Lead	22.7	0.200	"	21.1	2.74	94.6	75-125	0.193	25		
Nickel	22.6	0.400	"	42.2	1.02	51.0	75-125	0.731	25		QM-07
Silver	2.04	0.0200	"	2.11	0.0110	96.3	75-125	0.289	25		
Zinc	25.8	0.400	"	42.2	4.35	50.7	75-125	0.651	25		QM-07
Selenium	4.62	0.260	"	4.22	ND	109	75-125	1.61	25		

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BHA0445 - 3060A Mod

Blank (BHA0445-BLK1)

Prepared: 01/11/24 Analyzed: 01/12/24

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BHA0445-BS1)

Prepared: 01/11/24 Analyzed: 01/12/24

Chromium, Hexavalent 26.7 0.30 mg/kg wet 25.0 107 80-120

Duplicate (BHA0445-DUP1)

Source: 2312418-04

Prepared: 01/11/24 Analyzed: 01/12/24

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BHA0445-MS1)

Source: 2312418-04

Prepared: 01/11/24 Analyzed: 01/12/24

Chromium, Hexavalent 27.3 0.30 mg/kg dry 26.4 ND 103 75-125

Matrix Spike Dup (BHA0445-MSD1)

Source: 2312418-04

Prepared: 01/11/24 Analyzed: 01/12/24

Chromium, Hexavalent 26.9 0.30 mg/kg dry 26.4 ND 102 75-125 1.36 20

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

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 BHA0526 - General Preparation

Blank (BHA0526-BLK1)

Prepared: 01/15/24 Analyzed: 01/16/24

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

LCS (BHA0526-BS1)

Prepared: 01/15/24 Analyzed: 01/16/24

Calcium	5.41	0.0500	mg/L wet	5.00		108	70-130			
Magnesium	5.10	0.0500	"	5.00		102	70-130			
Sodium	5.12	0.0500	"	5.00		102	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: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

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

Summit Scientific

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

Batch BHA0428 - General Preparation

Duplicate (BHA0428-DUP1)	Source: 2401184-01		Prepared: 01/11/24 Analyzed: 01/12/24	
% Solids	95.7	%	96.9	1.18 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: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

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

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

Batch BHA0576 - General Preparation

Blank (BHA0576-BLK1)

Prepared & Analyzed: 01/16/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BHA0576-BS1)

Prepared & Analyzed: 01/16/24

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

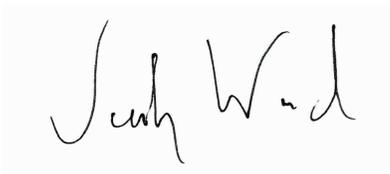
Duplicate (BHA0576-DUP1)

Source: 2311618-01

Prepared & Analyzed: 01/16/24

Specific Conductance (EC) 0.154 0.0100 mmhos/cm 0.156 1.22 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: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/22/24 08:52

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 BHA0575 - General Preparation

LCS (BHA0575-BS1)

Prepared & Analyzed: 01/16/24

pH	9.12	pH Units	9.18	99.3	95-105
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Duplicate (BHA0575-DUP1)

Source: 2311618-01

Prepared & Analyzed: 01/16/24

pH	8.48	pH Units	8.67	2.22	20
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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: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/22/24 08:52

Notes and Definitions

- QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

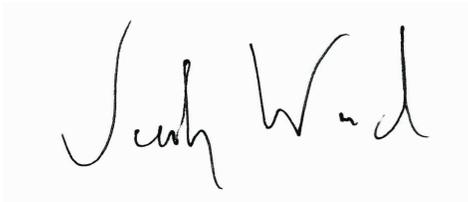
303.277.9310

January 18, 2024

Paul Henchan
Fremont Environmental
PO Box 1289
Wellington, CO 80549
RE: PDC - Phelps Separator
Work Order #2401251

Enclosed are the results of analyses for samples received by Summit Scientific on 01/12/24 17:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Jacob Wood For Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/18/24 13:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	2401251-01	Water	01/12/24 00:00	01/12/24 17:30
MW-2	2401251-02	Water	01/12/24 00:00	01/12/24 17:30
MW-3	2401251-03	Water	01/12/24 00:00	01/12/24 17:30
MW-4	2401251-04	Water	01/12/24 00:00	01/12/24 17:30
MW-5	2401251-05	Water	01/12/24 00:00	01/12/24 17:30

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.

Summit Scientific

S₂

2401251

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 TEAM
City/State/Zip: Project Name: PHELPS SEPARATOR
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	MW-1	1/12/24		3	✓		✓		✓										✓	✓		
2	MW-2																					
3	MW-3																					
4	MW-4																					
5	MW-5																					
6																						
7																						
8																						
9																						
10																						

Relinquished by: MAJ/FE 1/12/24 1730	Date/Time: 1/12/24 1730	Received by: [Signature]	Date/Time: 1/12/24 1730	Turn Around Time (Check): Same Day ___ 24 hours ___ 48 hours ___ 72 hours ___ Standard <input checked="" type="checkbox"/>	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Sample Integrity: Temperature Upon Receipt: 88 Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	
Relinquished by:	Date/Time:	Received by:	Date/Time:		

S₂

Sample Receipt Checklist

S2 Work Order# 2401251

Client: Fremont Client Project ID: Phelps separator

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

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

Temp (°C) Thermometer #

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>on ICE</u>
If custody seals are present, are they intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely? ⁽¹⁾	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>no time stamps</u>
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>HCl</u>
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"/>	
<u>Additional Comments (if any):</u>				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				

AS

Custodian Printed Name

1/12/24
Date/Time



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/18/24 13:58

MW-1
2401251-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BHA0566	01/15/24	01/16/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	13.5	102 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.1	98.2 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.7	103 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	208	12.0		mg/L	200	BHA0534	01/15/24	01/15/24	EPA 300.0	
Sulfate	172	60.0		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	924	10.0		mg/L	1	BHA0606	01/17/24	01/17/24	SM2540C	

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: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/18/24 13:58

MW-2
2401251-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BHA0566	01/15/24	01/16/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	13.5	101 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.3	100 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.8	103 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	178	12.0		mg/L	200	BHA0534	01/15/24	01/15/24	EPA 300.0	
Sulfate	189	60.0		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	902	10.0		mg/L	1	BHA0606	01/17/24	01/17/24	SM2540C	

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: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/18/24 13:58

MW-3
2401251-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BHA0566	01/15/24	01/17/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	13.8	104 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.4	100 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.8	103 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	202	12.0		mg/L	200	BHA0534	01/15/24	01/15/24	EPA 300.0	
Sulfate	243	60.0		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	1020	10.0		mg/L	1	BHA0606	01/17/24	01/17/24	SM2540C	

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: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/18/24 13:58

MW-4
2401251-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	8.5	1.0	ug/l	1	BHA0566	01/15/24	01/17/24	EPA 8260B	
Toluene	25	1.0	"	"	"	"	"	"	
Ethylbenzene	2.5	1.0	"	"	"	"	"	"	
Xylenes (total)	13	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	1.5	1.0	"	"	"	"	"	"	

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>	13.4	100 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>	13.1	98.6 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>	13.4	100 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	191	12.0	mg/L	200	BHA0534	01/15/24	01/15/24	EPA 300.0	
Sulfate	182	60.0	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	870	10.0	mg/L	1	BHA0606	01/17/24	01/17/24	SM2540C	

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: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/18/24 13:58

MW-5
2401251-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BHA0566	01/15/24	01/17/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	13.7	103 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.2	99.2 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	14.0	105 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	206	12.0		mg/L	200	BHA0534	01/15/24	01/15/24	EPA 300.0	
Sulfate	165	60.0		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **01/12/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	822	10.0		mg/L	1	BHA0606	01/17/24	01/17/24	SM2540C	

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: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/18/24 13:58

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BHA0566 - EPA 5030 Water MS

Blank (BHA0566-BLK1)

Prepared: 01/15/24 Analyzed: 01/16/24

Benzene	ND	1.0	ug/l								
Toluene	ND	1.0	"								
Ethylbenzene	ND	1.0	"								
Xylenes (total)	ND	2.0	"								
Naphthalene	ND	1.0	"								
1,2,4-Trimethylbenzene	ND	1.0	"								
1,3,5-Trimethylbenzene	ND	1.0	"								
<i>Surrogate: 1,2-Dichloroethane-d4</i>	13.3		"	13.3		100		23-173			
<i>Surrogate: Toluene-d8</i>	13.3		"	13.3		99.9		20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	13.5		"	13.3		101		21-167			

LCS (BHA0566-BS1)

Prepared: 01/15/24 Analyzed: 01/16/24

Benzene	39.6	1.0	ug/l	33.3		119		51-132			
Toluene	40.4	1.0	"	33.3		121		51-138			
Ethylbenzene	38.7	1.0	"	33.3		116		58-146			
m,p-Xylene	78.4	2.0	"	66.7		118		57-144			
o-Xylene	40.4	1.0	"	33.3		121		53-146			
Naphthalene	34.0	1.0	"	33.3		102		70-130			
1,2,4-Trimethylbenzene	38.8	1.0	"	33.3		116		70-130			
1,3,5-Trimethylbenzene	39.4	1.0	"	33.3		118		70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	13.5		"	13.3		101		23-173			
<i>Surrogate: Toluene-d8</i>	13.2		"	13.3		99.1		20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	13.3		"	13.3		99.5		21-167			

Matrix Spike (BHA0566-MS1)

Source: 2401248-01

Prepared: 01/15/24 Analyzed: 01/16/24

Benzene	36.5	1.0	ug/l	33.3	ND	110		34-141			
Toluene	37.3	1.0	"	33.3	ND	112		27-151			
Ethylbenzene	35.7	1.0	"	33.3	ND	107		29-160			
m,p-Xylene	73.3	2.0	"	66.7	ND	110		20-166			
o-Xylene	38.0	1.0	"	33.3	ND	114		33-159			
Naphthalene	37.4	1.0	"	33.3	ND	112		70-130			
1,2,4-Trimethylbenzene	36.8	1.0	"	33.3	ND	111		70-130			
1,3,5-Trimethylbenzene	36.0	1.0	"	33.3	ND	108		70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	13.5		"	13.3		101		23-173			
<i>Surrogate: Toluene-d8</i>	13.2		"	13.3		98.9		20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	13.2		"	13.3		99.3		21-167			

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: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/18/24 13:58

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BHA0566 - EPA 5030 Water MS

Matrix Spike Dup (BHA0566-MSD1)	Source: 2401248-01			Prepared: 01/15/24 Analyzed: 01/16/24						
Benzene	37.4	1.0	ug/l	33.3	ND	112	34-141	2.30	30	
Toluene	38.1	1.0	"	33.3	ND	114	27-151	2.07	30	
Ethylbenzene	36.9	1.0	"	33.3	ND	111	29-160	3.14	30	
m,p-Xylene	75.4	2.0	"	66.7	ND	113	20-166	2.74	30	
o-Xylene	38.2	1.0	"	33.3	ND	114	33-159	0.473	30	
Naphthalene	39.3	1.0	"	33.3	ND	118	70-130	4.93	30	
1,2,4-Trimethylbenzene	38.5	1.0	"	33.3	ND	115	70-130	4.30	30	
1,3,5-Trimethylbenzene	37.0	1.0	"	33.3	ND	111	70-130	2.91	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>13.5</i>		<i>"</i>	<i>13.3</i>		<i>101</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>13.6</i>		<i>"</i>	<i>13.3</i>		<i>102</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>13.3</i>		<i>"</i>	<i>13.3</i>		<i>99.5</i>	<i>21-167</i>			

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: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/18/24 13:58

Anions by EPA Method 300.0 - Quality Control
Summit Scientific

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

Batch BHA0534 - General Preparation

Blank (BHA0534-BLK1)

Prepared & Analyzed: 01/15/24

Chloride	ND	0.0600	mg/L						
Sulfate	ND	0.300	"						

LCS (BHA0534-BS1)

Prepared & Analyzed: 01/15/24

Chloride	3.17	0.0600	mg/L	3.00	106	90-110		
Sulfate	16.0	0.300	"	15.0	106	90-110		

Duplicate (BHA0534-DUP1)

Source: 2401228-01

Prepared & Analyzed: 01/15/24

Chloride	127	12.0	mg/L		123		3.04	20
Sulfate	268	60.0	"		278		3.67	20

Matrix Spike (BHA0534-MS1)

Source: 2401228-01

Prepared & Analyzed: 01/15/24

Chloride	761	12.0	mg/L	600	123	106	80-120	
Sulfate	3430	60.0	"	3000	278	105	80-120	

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: PDC - Phelps Separator

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/18/24 13:58

Total Dissolved Solids by SM2540C - Quality Control
Summit Scientific

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

Batch BHA0606 - General Preparation

Blank (BHA0606-BLK1)

Prepared & Analyzed: 01/17/24

Total Dissolved Solids ND 10.0 mg/L

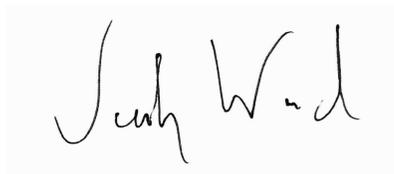
Duplicate (BHA0606-DUP1)

Source: 2401247-01

Prepared & Analyzed: 01/17/24

Total Dissolved Solids 1840 10.0 mg/L 1820 0.873 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: PDC - Phelps Separator

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/18/24 13:58

Notes and Definitions

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

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

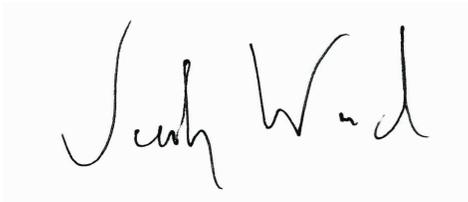
303.277.9310

January 25, 2024

Paul Henchan
Fremont Environmental
PO Box 1289
Wellington, CO 80549
RE: PDC - Phelps Pad
Work Order #2401040

Enclosed are the results of analyses for samples received by Summit Scientific on 01/03/24 17:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Jacob Wood". The signature is written in a cursive style with a large initial "J" and a long, sweeping underline.

Jacob Wood For Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: PDC - Phelps Pad

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/25/24 14:39

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BG N-W	2401040-01	Soil	01/03/24 00:00	01/03/24 17:30
BG N-C	2401040-02	Soil	01/03/24 00:00	01/03/24 17:30
BG N-E	2401040-03	Soil	01/03/24 00:00	01/03/24 17:30
BG SE	2401040-04	Soil	01/03/24 00:00	01/03/24 17:30
BG SW	2401040-05	Soil	01/03/24 00:00	01/03/24 17:30

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.

Summit Scientific

2401040

S₂

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 TEAM
City/State/Zip: Project Name: PHELPS 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	PC, EC, SAR	Boron	915-1 metals	Arsenic, Barium	BTEXN + TMBs	TDS, Cl, Su		
1	BG N-W	1/3/24		2			✓		✓						✓			✓					
2	BG N-C														✓			✓					
3	BG N-E														✓			✓					
4	BG SE														✓			✓					
5	BG SW														✓			✓					
6																							
7																							
8																							
9																							
10																							

Relinquished by: <u>PA/FE</u>	Date/Time: <u>1/3/24 1730</u>	Received by: <u>[Signature]</u>	Date/Time: <u>1324 1730</u>	Turn Around Time (Check)	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day <input type="checkbox"/>	72 hours <input type="checkbox"/>
Relinquished by:	Date/Time:	Received by:	Date/Time:	24 hours <input type="checkbox"/>	Standard <input checked="" type="checkbox"/>
Relinquished by:	Date/Time:	Received by:	Date/Time:	48 hours <input type="checkbox"/>	
				Sample Integrity:	
				Temperature Upon Receipt: <u>10.7</u>	
				Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	

S₂

Sample Receipt Checklist

S2 Work Order: 2401040

Client: Tremont

Client Project ID: Phelps Pad

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

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

Temp (°C) 16.7

Thermometer # 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 JOE
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 checked="" type="checkbox"/>	<input type="checkbox"/>	no time stamps
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"/>	location on jars
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

1/3/24
Date/Time

11



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: PDC - Phelps Pad

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/25/24 14:39

BG N-W
2401040-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	3.67	0.200	mg/kg dry	1	BHA0226	01/06/24	01/11/24	EPA 6020B	
Barium	94.8	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

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

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	207	0.0500	mg/L dry	1	BHA0292	01/09/24	01/16/24	EPA 6020B	
Magnesium	42.6	0.0500	"	"	"	"	"	"	
Sodium	24.0	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.397	0.00100	units	1	BHA0614	01/17/24	01/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	86.7		%	1	BHA0149	01/04/24	01/09/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	0.111	0.0100	mmhos/cm	1	BHA0360	01/10/24	01/10/24	EPA 120.1	

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: PDC - Phelps Pad

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/25/24 14:39

BG N-C
2401040-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	4.95	0.200	mg/kg dry	1	BHA0226	01/06/24	01/11/24	EPA 6020B	
Barium	138	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

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

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	122	0.0500	mg/L dry	1	BHA0292	01/09/24	01/16/24	EPA 6020B	
Magnesium	34.5	0.0500	"	"	"	"	"	"	
Sodium	28.9	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.595	0.00100	units	1	BHA0614	01/17/24	01/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	86.1		%	1	BHA0149	01/04/24	01/09/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	0.190	0.0100	mmhos/cm	1	BHA0360	01/10/24	01/10/24	EPA 120.1	

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: PDC - Phelps Pad

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/25/24 14:39

BG N-E
2401040-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	4.20	0.200	mg/kg dry	1	BHA0226	01/06/24	01/11/24	EPA 6020B	
Barium	99.8	0.400	"	"	"	"	"	"	
Selenium	0.293	0.260	"	"	"	"	"	"	

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

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	113	0.0500	mg/L dry	1	BHA0292	01/09/24	01/16/24	EPA 6020B	
Magnesium	31.8	0.0500	"	"	"	"	"	"	
Sodium	25.3	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.542	0.00100	units	1	BHA0614	01/17/24	01/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	90.9		%	1	BHA0149	01/04/24	01/09/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	0.188	0.0100	mmhos/cm	1	BHA0360	01/10/24	01/10/24	EPA 120.1	

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: PDC - Phelps Pad

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/25/24 14:39

BG SE
2401040-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.27	0.200	mg/kg dry	1	BHA0226	01/06/24	01/11/24	EPA 6020B	
Barium	92.0	0.400	"	"	"	"	"	"	
Selenium	0.264	0.260	"	"	"	"	"	"	

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

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	14.4	0.0500	mg/L dry	1	BHA0292	01/09/24	01/16/24	EPA 6020B	
Magnesium	12.8	0.0500	"	"	"	"	"	"	
Sodium	79.6	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	3.68	0.00100	units	1	BHA0614	01/17/24	01/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	84.8		%	1	BHA0149	01/04/24	01/09/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	0.454	0.0100	mmhos/cm	1	BHA0360	01/10/24	01/10/24	EPA 120.1	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: PDC - Phelps Pad

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/25/24 14:39

BG SW
2401040-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.89	0.200	mg/kg dry	1	BHA0226	01/06/24	01/11/24	EPA 6020B	
Barium	98.7	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

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

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	97.7	0.0500	mg/L dry	1	BHA0292	01/09/24	01/16/24	EPA 6020B	
Magnesium	33.5	0.0500	"	"	"	"	"	"	
Sodium	183	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	4.07	0.00100	units	1	BHA0614	01/17/24	01/17/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	88.4		%	1	BHA0149	01/04/24	01/09/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	1.49	0.0100	mmhos/cm	1	BHA0360	01/10/24	01/10/24	EPA 120.1	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: PDC - Phelps Pad

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/25/24 14:39

Total Metals by EPA 6020B - Quality Control

Summit Scientific

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

Batch BHA0226 - EPA 3050B

Blank (BHA0226-BLK1)

Prepared: 01/08/24 Analyzed: 01/11/24

Arsenic	ND	0.200	mg/kg wet						
Barium	ND	0.400	"						
Selenium	ND	0.260	"						

LCS (BHA0226-BS1)

Prepared: 01/08/24 Analyzed: 01/11/24

Arsenic	40.2	0.200	mg/kg wet	40.0	100	80-120			
Barium	41.5	0.400	"	40.0	104	80-120			
Selenium	4.21	0.260	"	4.00	105	80-120			

Duplicate (BHA0226-DUP1)

Source: 2312111-01RE1

Prepared: 01/08/24 Analyzed: 01/11/24

Arsenic	2.33	0.200	mg/kg wet	2.03			13.5	20	
Barium	52.7	0.400	"	55.9			5.83	20	
Selenium	ND	0.260	"	ND				20	

Matrix Spike (BHA0226-MS1)

Source: 2312111-01RE1

Prepared: 01/08/24 Analyzed: 01/11/24

Arsenic	39.7	0.200	mg/kg wet	40.0	2.03	94.2	75-125		
Barium	93.7	0.400	"	40.0	55.9	94.5	75-125		
Selenium	3.88	0.260	"	4.00	ND	97.1	75-125		

Matrix Spike Dup (BHA0226-MSD1)

Source: 2312111-01RE1

Prepared: 01/08/24 Analyzed: 01/11/24

Arsenic	39.9	0.200	mg/kg wet	40.0	2.03	94.8	75-125	0.561	25
Barium	93.1	0.400	"	40.0	55.9	92.9	75-125	0.690	25
Selenium	4.05	0.260	"	4.00	ND	101	75-125	4.13	25

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: PDC - Phelps Pad

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/25/24 14:39

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 BHA0292 - General Preparation

Blank (BHA0292-BLK1)

Prepared: 01/09/24 Analyzed: 01/16/24

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

LCS (BHA0292-BS1)

Prepared: 01/09/24 Analyzed: 01/16/24

Calcium	5.52	0.0500	mg/L wet	5.00		110	70-130			
Magnesium	5.90	0.0500	"	5.00		118	70-130			
Sodium	6.15	0.0500	"	5.00		123	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: PDC - Phelps Pad

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/25/24 14:39

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

Summit Scientific

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

Batch BHA0149 - General Preparation

Duplicate (BHA0149-DUP1)	Source: 2312563-01	Prepared: 01/04/24	Analyzed: 01/09/24
% Solids	85.0	%	83.9
			1.35
			20

Summit Scientific



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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: PDC - Phelps Pad

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 01/25/24 14:39

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 BHA0360 - General Preparation

Blank (BHA0360-BLK1)

Prepared & Analyzed: 01/10/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BHA0360-BS1)

Prepared & Analyzed: 01/10/24

Specific Conductance (EC) 0.154 0.0100 mmhos/cm 0.150 103 95-105

Duplicate (BHA0360-DUP1)

Source: 2401007-01

Prepared & Analyzed: 01/10/24

Specific Conductance (EC) 0.0781 0.0100 mmhos/cm 0.0782 0.0896 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: PDC - Phelps Pad

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/25/24 14:39

Notes and Definitions

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

April 24, 2024

Fremont Environmental

Paul Henehan

8305 6th St, PO Box 1289

Wellington CO 80549

Project Name - PDC - Phelps

Project Number - [none]

Attached are your analytical results for PDC - Phelps received by Origins Laboratory, Inc. April 11, 2024. This project is associated with Origins project number Y404352-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: [none]
Project: PDC - Phelps

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	Y404352-01	Water	April 11, 2024 0:00	04/11/2024 14:30
MW-2	Y404352-02	Water	April 11, 2024 0:00	04/11/2024 14:30
MW-3	Y404352-03	Water	April 11, 2024 0:00	04/11/2024 14:30
MW-4	Y404352-04	Water	April 11, 2024 0:00	04/11/2024 14:30
MW-5	Y404352-05	Water	April 11, 2024 0:00	04/11/2024 14:30
HA-S	Y404352-06	Soil	April 11, 2024 0:00	04/11/2024 14:30
HA-E	Y404352-07	Soil	April 11, 2024 0:00	04/11/2024 14:30

Origins Laboratory, Inc.



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
 8305 6th St, PO Box 1289
 Wellington CO 80549

Paul Henehan
 Project Number: [none]
 Project: PDC - Phelps

www.originslaboratory.com



4404352

page 1 of

Client: PDC / FREMONT
 Address: _____
 Telephone Number: _____
 Email Address: paulh@fremontenv.com

Project Manager: HENEHAN
 Project Name: PDC - PHELPS
 Project Number: _____
 Samples Collected By: HENEHAN

Fax: 303.265.9645

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions	
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa Canister #			Other
MW-1	4/11/24		3	✓	✓			✓				1	
MW-2			3	✓	✓			✓				2	
MW-3			3	✓	✓			✓				3	
MW-4			3	✓	✓			✓				4	
MW-5			3	✓	✓			✓				5	
HA-5			2	✓				✓				6	
HA-E			2	✓				✓				7	
												8	
												9	
												10	

Relinquished by: <u>[Signature]</u>	Date: <u>4/11/24</u>	Time: <u>14:30</u>	Received by: <u>SA</u>	Date: <u>4/11/24</u>	Time: <u>14:30</u>
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Turnaround Time: Same Day 24 Hr 48 Hr 72 Hr Standard

Temp Received: 1, 2 Date Results Needed

Origins Laboratory, Inc.

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
 8305 6th St, PO Box 1289
 Wellington CO 80549

Paul Henehan
 Project Number: [none]
 Project: PDC - Phelps

Origins Laboratory

F-012207-01-R1
 Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: Y404352 Client: Fremont
 Client Project ID: Phelps
 Checklist Completed by: EAD/gh Shipped Via: HO
 Date/time completed: 4/12/24 (UPS, FedEx, Hand Delivered, Pick-up, etc.)
 Airbill #: N/A
 Matrix(s) Received: (Check all that apply): Soil/Solid Water Other: _____
 Cooler Number/Temperature: 1, 11.2 °C / _____ °C / _____ °C (Describe) _____ °C
 Thermometer ID: TOO821

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?		/		SD
Is there ice present (document if blue ice is used)	/			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		/		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		/		
Were all samples received intact ⁽¹⁾ ?	/			
Was adequate sample volume provided ⁽¹⁾ ?	/			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		/		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	/			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	/			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	/			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	/			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.		/		
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)	/			Not checked
Additional Comments (if any): <u>Samples for TDS and anions in non-lab approved containers.</u>				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) [Signature] Date/Time Reviewed 4/15/24

Origins Laboratory, Inc.
[Signature]

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
 8305 6th St, PO Box 1289
 Wellington CO 80549

Paul Henehan
 Project Number: [none]
 Project: PDC - Phelps

MW-1

4/11/2024 12:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y404352-01 (Water)

Anions by IC 300.0

Chloride	244	31.2	mg/L	125	B4D1518	DLT	04/15/2024	04/17/2024	
Sulfate	232	31.2	"	"	"	DLT	"	"	

BTEX+N+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	2.00	ug/L	1	B4D1232	JSM	04/12/2024	04/12/2024	U
1,3,5-Trimethylbenzene	ND	2.00	"	"	"	JSM	"	"	U
Benzene	ND	1.00	"	"	"	JSM	"	"	U
Ethylbenzene	ND	1.00	"	"	"	JSM	"	"	U
Naphthalene	ND	2.00	"	"	"	JSM	"	"	U
Toluene	ND	1.00	"	"	"	JSM	"	"	U
Xylenes, total	ND	1.00	"	"	"	JSM	"	"	U

Surrogate: 1,2-Dichloroethane-d4	109 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	100 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"	"	

Total Dissolved Solids by 2540C

Total Dissolved Solids	1350	5.00	mg/L	1	B4D1217	KRM	04/12/2024	04/15/2024	
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Origins Laboratory, Inc.



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Fremont Environmental
 8305 6th St, PO Box 1289
 Wellington CO 80549

Paul Henehan
 Project Number: [none]
 Project: PDC - Phelps

MW-2

4/11/2024 12:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y404352-02 (Water)

Anions by IC 300.0

Chloride	215	31.2	mg/L	125	B4D1518	DLT	04/15/2024	04/17/2024	
Sulfate	210	31.2	"	"	"	DLT	"	"	

BTEX+N+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	2.00	ug/L	1	B4D1232	JSM	04/12/2024	04/12/2024	U
1,3,5-Trimethylbenzene	ND	2.00	"	"	"	JSM	"	"	U
Benzene	ND	1.00	"	"	"	JSM	"	"	U
Ethylbenzene	ND	1.00	"	"	"	JSM	"	"	U
Naphthalene	ND	2.00	"	"	"	JSM	"	"	U
Toluene	ND	1.00	"	"	"	JSM	"	"	U
Xylenes, total	ND	1.00	"	"	"	JSM	"	"	U

Surrogate: 1,2-Dichloroethane-d4	109 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	98.6 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"	"	

Total Dissolved Solids by 2540C

Total Dissolved Solids	1110	5.00	mg/L	1	B4D1217	KRM	04/12/2024	04/15/2024	
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Origins Laboratory, Inc.



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Fremont Environmental
 8305 6th St, PO Box 1289
 Wellington CO 80549

Paul Henehan
 Project Number: [none]
 Project: PDC - Phelps

MW-3

4/11/2024 12:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y404352-03 (Water)

Anions by IC 300.0

Chloride	226	31.2	mg/L	125	B4D1518	DLT	04/15/2024	04/17/2024	
Sulfate	248	31.2	"	"	"	DLT	"	"	

BTEX+N+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	2.00	ug/L	1	B4D1232	JSM	04/12/2024	04/12/2024	U
1,3,5-Trimethylbenzene	ND	2.00	"	"	"	JSM	"	"	U
Benzene	ND	1.00	"	"	"	JSM	"	"	U
Ethylbenzene	ND	1.00	"	"	"	JSM	"	"	U
Naphthalene	ND	2.00	"	"	"	JSM	"	"	U
Toluene	ND	1.00	"	"	"	JSM	"	"	U
Xylenes, total	ND	1.00	"	"	"	JSM	"	"	U

Surrogate: 1,2-Dichloroethane-d4	110 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	97.4 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"	"	

Total Dissolved Solids by 2540C

Total Dissolved Solids	1260	5.00	mg/L	1	B4D1217	KRM	04/12/2024	04/15/2024	
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Origins Laboratory, Inc.



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Fremont Environmental
 8305 6th St, PO Box 1289
 Wellington CO 80549

Paul Henehan
 Project Number: [none]
 Project: PDC - Phelps

MW-4

4/11/2024 12:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y404352-04 (Water)

Anions by IC 300.0

Chloride	227	31.2	mg/L	125	B4D1518	DLT	04/15/2024	04/17/2024	
Sulfate	217	31.2	"	"	"	DLT	"	"	

BTEX+N+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	2.00	ug/L	1	B4D1232	JSM	04/12/2024	04/12/2024	U
1,3,5-Trimethylbenzene	ND	2.00	"	"	"	JSM	"	"	U
Benzene	ND	1.00	"	"	"	JSM	"	"	U
Ethylbenzene	ND	1.00	"	"	"	JSM	"	"	U
Naphthalene	ND	2.00	"	"	"	JSM	"	"	U
Toluene	ND	1.00	"	"	"	JSM	"	"	U
Xylenes, total	ND	1.00	"	"	"	JSM	"	"	U

Surrogate: 1,2-Dichloroethane-d4	110 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	97.6 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"	"	

Total Dissolved Solids by 2540C

Total Dissolved Solids	1160	5.00	mg/L	1	B4D1217	KRM	04/12/2024	04/15/2024	
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Origins Laboratory, Inc.



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Fremont Environmental
 8305 6th St, PO Box 1289
 Wellington CO 80549

Paul Henehan
 Project Number: [none]
 Project: PDC - Phelps

MW-5

4/11/2024 12:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y404352-05 (Water)

Anions by IC 300.0

Chloride	261	31.2	mg/L	125	B4D1518	DLT	04/15/2024	04/17/2024	
Sulfate	232	31.2	"	"	"	DLT	"	"	

BTEX+N+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	2.00	ug/L	1	B4D1232	JSM	04/12/2024	04/12/2024	U
1,3,5-Trimethylbenzene	ND	2.00	"	"	"	JSM	"	"	U
Benzene	ND	1.00	"	"	"	JSM	"	"	U
Ethylbenzene	ND	1.00	"	"	"	JSM	"	"	U
Naphthalene	ND	2.00	"	"	"	JSM	"	"	U
Toluene	ND	1.00	"	"	"	JSM	"	"	U
Xylenes, total	ND	1.00	"	"	"	JSM	"	"	U

Surrogate: 1,2-Dichloroethane-d4	110 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	96.7 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	99.9 %	70-130			"	"	"	"	

Total Dissolved Solids by 2540C

Total Dissolved Solids	1350	5.00	mg/L	1	B4D1217	KRM	04/12/2024	04/15/2024	
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Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: [none]
Project: PDC - Phelps

HA-S

4/11/2024 12:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y404352-06 (Soil)

pH in Soil by 9045D

pH	8.41		pH Units	1	B4D1511	GCG	04/15/2024	04/16/2024	
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Origins Laboratory, Inc.



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Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: [none]
Project: PDC - Phelps

HA-E

4/11/2024 12:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y404352-07 (Soil)

pH in Soil by 9045D

pH	7.98		pH Units	1	B4D1511	GCG	04/15/2024	04/16/2024	
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Origins Laboratory, Inc.



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Fremont Environmental
 8305 6th St, PO Box 1289
 Wellington CO 80549

Paul Henehan
 Project Number: [none]
 Project: PDC - Phelps

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4D1232 - EPA 5030B (Water)										
Blank (B4D1232-BLK1)										
					Prepared: 04/12/2024 Analyzed: 04/12/2024					
1,2,4-Trimethylbenzene	ND	2.00	ug/L							U
1,3,5-Trimethylbenzene	ND	2.00	"							U
Benzene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Naphthalene	ND	2.00	"							U
Toluene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5		105	70-130			
Surrogate: Toluene-d8	63		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	70-130			

Origins Laboratory, Inc.



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Fremont Environmental
 8305 6th St, PO Box 1289
 Wellington CO 80549

Paul Henehan
 Project Number: [none]
 Project: PDC - Phelps

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B4D1232 - EPA 5030B (Water)

LCS (B4D1232-BS1)

Prepared: 04/12/2024 Analyzed: 04/12/2024

1,2,4-Trimethylbenzene	45.6	2.00	ug/L	50.0		91.2	70-130			
1,3,5-Trimethylbenzene	45.6	2.00	"	50.0		91.3	70-130			
Benzene	45.1	1.00	"	50.0		90.1	70-130			
Ethylbenzene	48.2	1.00	"	50.0		96.3	70-130			
m,p-Xylene	96.5	2.00	"	100		96.5	70-130			
Naphthalene	44.0	2.00	"	50.0		88.1	70-130			
o-Xylene	47.5	1.00	"	50.0		95.0	70-130			
Toluene	46.4	1.00	"	50.0		92.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	65		"	62.5		104	70-130			
Surrogate: Toluene-d8	63		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	56		"	62.5		90.0	70-130			

Origins Laboratory, Inc.



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Fremont Environmental
 8305 6th St, PO Box 1289
 Wellington CO 80549

Paul Henehan
 Project Number: [none]
 Project: PDC - Phelps

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B4D1232 - EPA 5030B (Water)

Matrix Spike (B4D1232-MS1)	Source: Y404326-07			Prepared: 04/12/2024 Analyzed: 04/12/2024						
1,2,4-Trimethylbenzene	49.5	2.00	ug/L	50.0	ND	99.1	70-130			
1,3,5-Trimethylbenzene	48.9	2.00	"	50.0	ND	97.8	70-130			
Benzene	48.9	1.00	"	50.0	ND	97.7	70-130			
Ethylbenzene	50.5	1.00	"	50.0	ND	101	70-130			
m,p-Xylene	100	2.00	"	100	ND	100	70-130			
Naphthalene	44.2	2.00	"	50.0	ND	88.4	70-130			
o-Xylene	50.6	1.00	"	50.0	ND	101	70-130			
Toluene	47.8	1.00	"	50.0	ND	95.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5		106	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.6	70-130			
Surrogate: 4-Bromofluorobenzene	59		"	62.5		94.9	70-130			

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Fremont Environmental
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 Wellington CO 80549

Paul Henehan
 Project Number: [none]
 Project: PDC - Phelps

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B4D1232 - EPA 5030B (Water)

Matrix Spike Dup (B4D1232-MSD1)	Source: Y404326-07			Prepared: 04/12/2024 Analyzed: 04/12/2024						
1,2,4-Trimethylbenzene	49.7	2.00	ug/L	50.0	ND	99.4	70-130	0.343	20	
1,3,5-Trimethylbenzene	49.7	2.00	"	50.0	ND	99.5	70-130	1.72	20	
Benzene	49.5	1.00	"	50.0	ND	99.0	70-130	1.34	20	
Ethylbenzene	50.3	1.00	"	50.0	ND	101	70-130	0.556	20	
m,p-Xylene	100	2.00	"	100	ND	100	70-130	0.339	20	
Naphthalene	46.5	2.00	"	50.0	ND	92.9	70-130	5.03	20	
o-Xylene	50.0	1.00	"	50.0	ND	100	70-130	1.15	20	
Toluene	47.3	1.00	"	50.0	ND	94.6	70-130	0.989	20	
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5		105	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.1	70-130			
Surrogate: 4-Bromofluorobenzene	60		"	62.5		95.5	70-130			

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Fremont Environmental
 8305 6th St, PO Box 1289
 Wellington CO 80549

Paul Henehan
 Project Number: [none]
 Project: PDC - Phelps

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Classical Chemistry Parameters - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B4D1217 - NO PREP

Blank (B4D1217-BLK1)

Prepared: 04/12/2024 Analyzed: 04/15/2024

Total Dissolved Solids ND 5.00 mg/L

LCS (B4D1217-BS1)

Prepared: 04/12/2024 Analyzed: 04/15/2024

Total Dissolved Solids 938 5.00 mg/L 1040 90.2 90-110

Duplicate (B4D1217-DUP1)

Source: Y404327-10

Prepared: 04/12/2024 Analyzed: 04/15/2024

Total Dissolved Solids 2800 5.00 mg/L 2670 4.83 10

Batch B4D1518 - Filter .45um non acidified

Blank (B4D1518-BLK1)

Prepared: 04/15/2024 Analyzed: 04/17/2024

Chloride ND 0.250 mg/L

Sulfate ND 0.250 "

LCS (B4D1518-BS1)

Prepared: 04/15/2024 Analyzed: 04/17/2024

Chloride 4.12 0.250 mg/L 4.00 103 90-110

Sulfate 4.09 0.250 " 4.00 102 90-110

Matrix Spike (B4D1518-MS1)

Source: Y404397-03

Prepared: 04/15/2024 Analyzed: 04/17/2024

Chloride 743 mg/L 500 165 116 90-110 QM-07

Sulfate 754 " 500 137 123 90-110 QM-07

Matrix Spike Dup (B4D1518-MSD1)

Source: Y404397-03

Prepared: 04/15/2024 Analyzed: 04/17/2024

Origins Laboratory, Inc.



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 Wellington CO 80549

Paul Henehan
 Project Number: [none]
 Project: PDC - Phelps

Classical Chemistry Parameters - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B4D1518 - Filter .45um non acidified

Matrix Spike Dup (B4D1518-MSD1)	Source: Y404397-03			Prepared: 04/15/2024 Analyzed: 04/17/2024						
Chloride	732		mg/L	500	165	113	90-110	1.51	5	QM-07
Sulfate	738		"	500	137	120	90-110	2.12	5	QM-07

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 Wellington CO 80549

Paul Henehan
 Project Number: [none]
 Project: PDC - Phelps

Saturated Paste - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B4D1511 - Saturated Paste pH/EC

Duplicate (B4D1511-DUP1)

Source: Y404339-01

Prepared: 04/15/2024 Analyzed: 04/16/2024

pH	8.26		pH Units		8.16			1.22	25	
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Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: [none]
Project: PDC - Phelps

Notes and Definitions

U Sample is Non-Detect.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



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