TABLE 1
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA
PDC 69175
RAINDANCE FD OFF-SITE TANK PAD 20-202HNX, WELD COUNTY, COLORADO
REM # NA

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 (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	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	500**		
Waste Char.	03/22/2024	Grab	**34**	**160**	**50**	**220**	**69**	**19**	**8.4**	**22038**	**9000**	**12000**	**1300**
SS-01 1.5FT	03/22/2024	1.5	**0.023**	0.046	0.024	0.14	**0.11**	**0.027**	**0.044**	*<500*	3.3	*<50*	*<50*
SS-01 2.5FT	03/22/2024	2.5	*<0.0020*	0.0085	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-04 1FT	03/22/2024	1	*<0.0020*	0.0081	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-12 0.5FT	03/25/2024	0.5	*<0.0020*	0.040	0.01	*<0.010*	**0.020**	0.0054	*<0.0038*	*<500*	0.75	*<50*	*<50*
SS-13 2FT	03/25/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-14 2FT	03/25/2024	2	*<0.0020*	0.018	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-15 2FT	03/25/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-16 2FT	03/25/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-17 3FT	03/25/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-01 4 FT	3/26/2024	4	*<0.0020*	0.033	*<0.0050*	0.015	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-02 4 FT	3/26/2024	4	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-18 2 FT	3/26/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-19 2 FT	3/26/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-20 2 FT	3/26/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-21 3 FT	3/26/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-22-N 1.5 Ft	3/28/2024	1.5	*<0.0020*	**1.1**	**2.9**	**19.0**	**18.0**	**4.8**	**2.5**	**2480**	**780**	**1400**	**300**
SS-22-S 1.5 Ft	3/28/2024	1.5	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-22 2 Ft	3/28/2024	2	*<0.0020*	0.016	*<0.0050*	0.012	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-23-N 1.5 Ft	3/28/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-23-S 1,5 Ft	3/28/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-23 2 Ft	3/28/2024	3	*<0.0020*	0.022	0.0058	0.029	0.0078	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-24-N 2 Ft	3/28/2024	2.5	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-24-S 2 Ft	3/28/2024	2.5	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-24 3 Ft	3/28/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-25 -N 3 Ft	3/28/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-25-S 3 Ft	3/28/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-25 4 Ft	3/28/2024	4	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-26-N 3 Ft	3/28/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-26-S 3 Ft	3/28/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-26 4 Ft	3/28/2024	4	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-27-N 2 Ft	3/28/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-27-S 2 Ft	3/28/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-27 3 Ft	3/28/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-28-N 2.5 Ft	3/28/2024	2.5	**0.13**	**0.72**	0.27	**1.2**	**0.45**	**0.12**	**0.044**	**5528**	**38**	**4600**	**890**
SS-28-S 2.5 Ft	3/28/2024	2.5	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-28 3 Ft	3/28/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-40 3 Ft	3/29/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-41 2 Ft	3/29/2024	2	*<0.0020*	*<0.0050*	0.014	0.064	**0.036**	*<0.0050*	*<0.0038*	**602**	**2.0**	**440**	**160**
SS-42 2 Ft	3/29/2024	2	**0.65**	**1.5**	**0.82**	3.9	**1.7**	**0.45**	**0.093**	**528**	**98**	**340**	**90**
SS-43 2 Ft	3/29/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-44 2 Ft	3/29/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-45 2 Ft	3/29/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-40 3 Ft	3/29/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*

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 (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		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		500**	
FS-41 3 Ft	3/29/2024	3	*<0.0020*	0.15	0.071	0.33	**0.14**	**0.032**	*<0.0038*	6.9	6.9	*<50*	*<50*
FS-42 2 Ft	3/29/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-43 3 Ft	3/29/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-44 2 Ft	3/29/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	0.032	**0.010**	*<0.0050*	*<0.0038*	0.90	0.90	*<50*	*<50*
FS-45 2 Ft	3/29/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-29-N 2 Ft	3/29/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-29-S 2 Ft	3/29/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-29 3 Ft	3/29/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-30-N 2 Ft	3/29/2024	2	**0.22**	0.68	0.21	1.0	**0.19**	**0.048**	**0.035**	17	17	*<50*	*<50*
SS-30-S 2 Ft	3/29/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-30 3 Ft	3/29/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-46 2 Ft	3/29/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-47 2 Ft	3/29/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-Release 6 Ft	4/1/2024	6	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-30-N-2 3 Ft	4/2/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-41-2	4/2/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-42-2	4/2/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-41-2	4/2/2024	3.5	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-44-2	4/2/2024	2.5	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-28-N-2	4/5/2024	3	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-48 1 Ft	4/5/2024	1	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-49 2 Ft	4/5/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-50 2 Ft	4/5/2024	2	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-46	4/5/2024	1	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-47	4/5/2024	1.5	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-48	4/5/2024	1	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-49	4/5/2024	1	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-50	4/5/2024	1	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
FS-51 0.5 Ft	4/5/2024	0.5	*<0.0020*	*<0.0050*	*<0.0050*	*<0.010*	*<0.0050*	*<0.0050*	*<0.0038*	*<500*	*<0.50*	*<50*	*<50*
SS-51	4/9/2024	2.5	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<500*	*<0.200*	*<25.0*	*<100*
SS-52	4/9/2024	1.5	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<500*	*<0.200*	*<25.0*	*<100*
SS-53	4/9/2024	1.5	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<500*	*<0.200*	*<25.0*	*<100*
SS-54	4/9/2024	1.5	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<500*	*<0.200*	*<25.0*	*<100*
FS-51	4/9/2024	2	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<500*	*<0.200*	*<25.0*	*<100*
FS-52	4/9/2024	2	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<500*	*<0.200*	*<25.0*	*<100*
SS-22-N-2	4/9/2024	2	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<0.00200*	*<500*	*<0.200*	*<25.0*	*<100*

1. Bold values exceed the ECMC Table 915-1 limit(s)
2. Red & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL)
3. * Indicates laboratory minimum detection limit in excess of SSL
4. ** Summation of GRO+DRO+ORO must be less than 500 mg/kg

NA - Not analyzed

= Source material characterization sample, excavated and transported off site for disposal.

= Material excavated and transported off site for disposal.

TABLE 2
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA
PDC 69175
RAINDANCE FD OFF-SITE PAD, WELD COUNTY, COLORADO
REM # None

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.	03/22/2024	Grab	0.524	*<0.00500*	**0.485**	*<0.00500*	*<0.00500*	*<0.00500*	0.303	*<0.00500*	*<0.00500*	**2.13**	*<0.00500*	*<0.00500*	**21.9**	**40.6**
SS-01 1.5FT	03/22/2024	1.5	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	0.0094	*<0.00500*	*<0.00500*	*<0.00500*	**0.0454**	**0.0655**
SS-01 2.5FT	03/22/2024	2.5	*<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*
SS-04 1FT	03/22/2024	1	*<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*
SS-12 0.5FT	03/25/2024	0.5	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-13 2FT	03/25/2024	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*
SS-14 2FT	03/25/2024	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*
SS-15 2FT	03/25/2024	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*
SS-16 2FT	03/25/2024	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*
SS-17 3FT	03/25/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
FS-01 4 FT	3/26/2024	4	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
FS-02 4 FT	3/26/2024	4	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-18 2 FT	3/26/2024	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*
SS-19 2 FT	3/26/2024	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*
SS-20 2 FT	3/26/2024	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*
SS-21 3 FT	3/26/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-22-N 1.5 Ft	3/28/2024	1.5	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	0.0114	*<0.00500*	*<0.00500*	**0.288**	**0.269**
SS-22-S 1.5 Ft	3/28/2024	1.5	*<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*
FS-22 2 Ft	3/28/2024	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*
SS-23-N 1.5 Ft	3/28/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-23-S 1,5 Ft	3/28/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
FS-23 2 Ft	3/28/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-24-N 2 Ft	3/28/2024	2.5	*<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*
SS-24-S 2 Ft	3/28/2024	2.5	*<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*
FS-24 3 Ft	3/28/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-25 -N 3 Ft	3/28/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-25-S 3 Ft	3/28/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
FS-25 4 Ft	3/28/2024	4	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-26-N 3 Ft	3/28/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-26-S 3 Ft	3/28/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
FS-26 4 Ft	3/28/2024	4	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-27-N 2 Ft	3/28/2024	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*
SS-27-S 2 Ft	3/28/2024	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*
FS-27 3 Ft	3/28/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-28-N 2.5 Ft	3/28/2024	2.5	*<0.00500*	*<0.00500*	**0.151**	*<0.00500*	*<0.00500*	*<0.00500*	0.0583	*<0.00500*	*<0.00500*	0.530	*<0.00500*	*<0.00500*	**17.0**	**25.9**
SS-28-S 2.5 Ft	3/28/2024	2.5	*<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*
FS-28 3 Ft	3/28/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-40 3 Ft	3/29/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-41 2 Ft	3/29/2024	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*
SS-42 2 Ft	3/29/2024	2	*<0.00500*	*<0.00500*	0.0052	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	0.0127	*<0.00500*	*<0.00500*	**0.142**	**0.155**
SS-43 2 Ft	3/29/2024	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*
SS-44 2 Ft	3/29/2024	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*
SS-45 2 Ft	3/29/2024	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*

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
FS-40 3 Ft	3/29/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
FS-41 3 Ft	3/29/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	0.00688	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
FS-42 2 Ft	3/29/2024	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*
FS-43 3 Ft	3/29/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
FS-44 2 Ft	3/29/2024	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*	**0.0393**	**0.044**
FS-45 2 Ft	3/29/2024	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*
SS-29-N 2 Ft	3/29/2024	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*
SS-29-S 2 Ft	3/29/2024	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*
FS-29 3 Ft	3/29/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-30-N 2 Ft	3/29/2024	2	*<0.00500*	*<0.00500*	**0.0117**	*<0.00500*	0.00618	*<0.00500*	0.0101	*<0.00500*	*<0.00500*	0.033	*<0.00500*	0.0115	**0.322**	**0.335**
SS-30-S 2 Ft	3/29/2024	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*
FS-30 3 Ft	3/29/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
FS-46 2 Ft	3/29/2024	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*
FS-47 2 Ft	3/29/2024	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*
FS-Release 6 Ft	4/1/2024	6	*<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*
SS-30-N-2 3 Ft	4/2/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-41-2	4/2/2024	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*
SS-42-2	4/2/2024	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*
FS-41-2	4/2/2024	3.5	*<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*
FS-44-2	4/2/2024	2.5	*<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*
SS-28-N-2	4/5/2024	3	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
FS-48 1 Ft	4/5/2024	1	*<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*
FS-49 2 Ft	4/5/2024	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*
FS-50 2 Ft	4/5/2024	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*
SS-46	4/5/2024	1	*<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*
SS-47	4/5/2024	1.5	*<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*
SS-48	4/5/2024	1	*<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*
SS-49	4/5/2024	1	*<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*
SS-50	4/5/2024	1	*<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*
FS-51 0.5 Ft	4/5/2024	0.5	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*	*<0.00500*
SS-51	4/9/2024	2.5	*<0.020*	*<0.020*	*<0.005*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.002*	*<0.002*
SS-52	4/9/2024	1.5	*<0.020*	*<0.020*	*<0.005*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.002*	*<0.002*
SS-53	4/9/2024	1.5	*<0.020*	*<0.020*	*<0.005*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.002*	*<0.002*
SS-54	4/9/2024	1.5	*<0.020*	*<0.020*	0.005	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.002*	*<0.002*
FS-51	4/9/2024	2	*<0.020*	*<0.020*	*<0.005*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.002*	*<0.002*
FS-52	4/9/2024	2	*<0.020*	*<0.020*	*<0.005*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.002*	*<0.002*
SS-22-N-2	4/9/2024	2	*<0.020*	*<0.020*	*<0.005*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.020*	*<0.002*	*<0.002*

1. Bold values exceed the ECMC Table 915-1 limit(s)
2. Red & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL)
3. * Indicates laboratory minimum detection limit in excess of SSL

NA - Not analyzed

= Source material characterization sample, excavated and transported off site for disposal.

= Material excavated and transported off site for disposal.

TABLE 3

SUMMARY OF SOIL SUITABILITY FOR RECLAMATION

PDC 69175

RAINDANCE FD OFFSITE PAD, WELD COUNTY, COLORADO

REM #

Sample ID	Sample Date	Depth (ft)	pH (Standard Units)	EC (mmhos/cm)	SAR (Standard Units)	Boron (mg/L)
ECMC Table 915-1 Soil Suitability Limits			6 - 8.3	<4	<6	2
Waste Char.	03/22/2024	Grab	**8.82**	0.143	0.682	*<2.00*
SS-01 1.5FT	03/22/2024	1.5	7.9	2.12	0.818	*<2.00*
SS-01 2.5FT	03/22/2024	2.5	7.88	3.82	1.41	*<2.00*
SS-04 1FT	03/22/2024	1	**8.44**	0.209	0.525	*<2.00*
SS-12 0.5FT	03/25/2024	0.5	**8.53**	0.155	0.118	*<2.00*
SS-13 2FT	03/25/2024	2	7.87	3.01	0.757	*<2.00*
SS-14 2FT	03/25/2024	2	8.07	1.04	0.106	*<2.00*
SS-15 2FT	03/25/2024	2	8.23	0.303	0.347	*<2.00*
SS-16 2FT	03/25/2024	2	7.99	1.55	1.64	*<2.00*
SS-17 3FT	03/25/2024	3	7.90	2.48	0.536	*<2.00*
FS-01 4 FT	3/26/2024	4	8.28	0.744	1.41	*<2.00*
FS-02 4 FT	3/26/2024	4	8.04	3	1.39	*<2.00*
SS-18 2 FT	3/26/2024	2	8.01	2.79	0.938	*<2.00*
SS-19 2 FT	3/26/2024	2	**8.57**	0.255	0.213	*<2.00*
SS-20 2 FT	3/26/2024	2	8.25	0.683	0.135	*<2.00*
SS-21 3 FT	3/26/2024	3	8.2	1.07	0.967	*<2.00*
SS-22-N 1.5 Ft	3/28/2024	1.5	**8.52**	0.951	4.22	*<2.00*
SS-22-S 1.5 Ft	3/28/2024	1.5	**8.34**	1	0.239	*<2.00*
FS-22 2 Ft	3/28/2024	2	**8.45**	0.888	0.252	*<2.00*
SS-23-N 1.5 Ft	3/28/2024	3	8.24	1.1	0.263	*<2.00*
SS-23-S 1,5 Ft	3/28/2024	3	**8.54**	0.327	0.335	*<2.00*
FS-23 2 Ft	3/28/2024	3	**8.37**	1.03	0.25	*<2.00*
SS-24-N 2 Ft	3/28/2024	2.5	**8.39**	0.869	0.248	*<2.00*
SS-24-S 2 Ft	3/28/2024	2.5	**8.43**	1.32	1.55	*<2.00*
FS-24 3 Ft	3/28/2024	3	8.26	1.3	0.767	*<2.00*
SS-25 -N 3 Ft	3/28/2024	3	**8.55**	1.16	1.6	*<2.00*
SS-25-S 3 Ft	3/28/2024	3	**8.43**	1.18	1.33	*<2.00*
FS-25 4 Ft	3/28/2024	4	**8.47**	1.38	1.03	*<2.00*
SS-26-N 3 Ft	3/28/2024	3	8.26	1.68	0.315	*<2.00*
SS-26-S 3 Ft	3/28/2024	3	**8.56**	0.888	0.54	*<2.00*
FS-26 4 Ft	3/28/2024	4	**8.38**	1.07	0.165	*<2.00*
SS-27-N 2 Ft	3/28/2024	2	**8.36**	1.07	0.208	*<2.00*
SS-27-S 2 Ft	3/28/2024	2	**8.51**	0.832	0.373	*<2.00*

Sample ID	Sample Date	Depth (ft)	pH (Standard Units)	EC (mmhos/cm)	SAR (Standard Units)	Boron (mg/L)
ECMC Table 915-1 Soil Suitability Limits			6 - 8.3	<4	<6	2
FS-27 3 Ft	3/28/2024	3	**8.62**	0.547	0.338	*<2.00*
SS-28-N 2.5 Ft	3/28/2024	2.5	8.21	0.298	0.114	*<2.00*
SS-28-S 2.5 Ft	3/28/2024	2.5	**8.42**	0.456	0.51	*<2.00*
FS-28 3 Ft	3/28/2024	3	**8.41**	1.21	0.125	*<2.00*
SS-40 3 Ft	3/29/2024	3	7.91	2.6	0.746	*<2.00*
SS-41 2 Ft	3/29/2024	2	8.04	1.76	0.769	*<2.00*
SS-42 2 Ft	3/29/2024	2	7.83	1.48	0.474	*<2.00*
SS-43 2 Ft	3/29/2024	2	8.00	2.82	1.06	*<2.00*
SS-44 2 Ft	3/29/2024	2	8.09	1.31	0.39	*<2.00*
SS-45 2 Ft	3/29/2024	2	8.15	0.873	0.779	*<2.00*
FS-40 3 Ft	3/29/2024	3	7.92	**4.28**	1.61	*<2.00*
FS-41 3 Ft	3/29/2024	3	8.05	2.00	0.803	*<2.00*
FS-42 2 Ft	3/29/2024	2	7.95	2.68	1.55	*<2.00*
FS-43 3 Ft	3/29/2024	3	**8.31**	0.881	1.92	*<2.00*
FS-44 2 Ft	3/29/2024	2	8.02	2.71	2.46	*<2.00*
FS-45 2 Ft	3/29/2024	2	7.9	3.59	1.65	*<2.00*
SS-29-N 2 Ft	3/29/2024	2	8.11	1.39	0.925	*<2.00*
SS-29-S 2 Ft	3/29/2024	2	**8.35**	0.384	0.33	*<2.00*
FS-29 3 Ft	3/29/2024	3	7.97	2.02	0.621	*<2.00*
SS-30-N 2 Ft	3/29/2024	2	8.29	0.222	0.174	*<2.00*
SS-30-S 2 Ft	3/29/2024	2	8.22	0.489	0.825	*<2.00*
FS-30 3 Ft	3/29/2024	3	8.16	0.633	0.28	*<2.00*
FS-46 2 Ft	3/29/2024	2	8.16	1.18	1.09	*<2.00*
FS-47 2 Ft	3/29/2024	2	7.96	2.54	1.06	*<2.00*
FS-Release 6 Ft	4/1/2024	6	7.94	3.82	1.15	*<2.00*
SS-30-N-2 3 Ft	4/2/2024	3	**8.33**	0.577	0.997	*<2.00*
SS-41-2	4/2/2024	2	7.95	3.96	1.27	*<2.00*
SS-42-2	4/2/2024	2	8.16	1.19	0.565	*<2.00*
FS-41-2	4/2/2024	3.5	7.88	**4.54**	0.797	*<2.00*
FS-44-2	4/2/2024	2.5	8.21	2.09	1.76	*<2.00*
SS-28-N-2	4/5/2024	3	8.21	0.83	0.392	*<2.00*
FS-48 1 Ft	4/5/2024	1	8.12	1.84	1.47	*<2.00*
FS-49 2 Ft	4/5/2024	2	8.24	1.66	1.27	*<2.00*
FS-50 2 Ft	4/5/2024	2	8.26	1.39	0.834	*<2.00*
SS-46	4/5/2024	1	8.12	1.24	0.794	*<2.00*
SS-47	4/5/2024	1.5	8.2	1.53	1.65	*<2.00*
SS-48	4/5/2024	1	**8.41**	1.04	1.83	*<2.00*
SS-49	4/5/2024	1	**8.55**	0.708	0.92	*<2.00*

Sample ID	Sample Date	Depth (ft)	pH (Standard Units)	EC (mmhos/cm)	SAR (Standard Units)	Boron (mg/L)
ECMC Table 915-1 Soil Suitability Limits			6 - 8.3	<4	<6	2
SS-50	4/5/2024	1	**8.62**	0.692	1.62	*<2.00*
FS-51 0.5 Ft	4/5/2024	0.5	**8.53**	0.252	0.304	*<2.00*
SS-51	4/9/2024	2.5	8.10	2.53	1.15	0.290
SS-52	4/9/2024	1.5	7.98	2.38	0.748	0.347
SS-53	4/9/2024	1.5	8.11	1.88	1.03	0.343
SS-54	4/9/2024	1.5	8.11	1.99	0.220	0.331
FS-51	4/9/2024	2	8.12	2.89	1.29	0.327
FS-52	4/9/2024	2	8.13	2.99	0.869	0.220
SS-22-N-2	4/9/2024	2	8.15	2.59	1.52	0.321
Maximum Root Background Concentration (0 - 3 ft)						
Average Root Background Concentration (0 - 3 ft)						
Maximum Background Concentration						
Average Background Concentration						

1. Bold faced values exceed the ECMC Table 915-1 limit(s)

2. Blue highlighted soil analytical values indicate a regulatory exceedance

NA - Not analyzed

= Source material characterization sample, excavated and transported off site for disposal.

= Material excavated and transported off site for disposal.

TABLE 4
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
PDC 69175
RAINDANCE FD OFFSITE PAD, WELD COUNTY, COLORADO
REM #

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.	03/22/2024	Grab	**2.92**	40.7	*<0.200*	*<0.30*	4.71	4.65	4.52	*<0.260*	0.0262	18.7
SS-01 1.5FT	03/22/2024	1.5	**5.83**	16.5	*<0.200*	*<0.30*	5.01	10.6	7.2	*<0.260*	0.0799	32.1
SS-01 2.5FT	03/22/2024	2.5	**8.63**	51.1	0.269	*<0.30*	8.03	**16.7**	8.25	**0.273**	0.0986	35.8
SS-04 1FT	03/22/2024	1	**9.08**	**96.1**	0.322	*<0.30*	8.59	**18.6**	9.1	**0.365**	0.105	37.7
SS-12 0.5FT	03/25/2024	0.5	**6.80**	**103**	0.316	*<0.30*	4.97	6.42	4.39	**1.1**	0.0282	19
SS-13 2FT	03/25/2024	2	**7.99**	45.7	0.21	*<0.30*	6.74	12.9	8.86	**0.408**	0.0813	33.5
SS-14 2FT	03/25/2024	2	**3.93**	56.0	*<0.200*	*<0.30*	5.63	6.82	5.05	*<0.260*	0.0375	21.1
SS-15 2FT	03/25/2024	2	**7.00**	72.1	0.237	*<0.30*	7.33	13.6	7.74	**0.342**	0.0729	32.6
SS-16 2FT	03/25/2024	2	**6.41**	81.4	0.218	*<0.30*	7.47	12.4	7.84	**0.29**	0.0722	31.2
SS-17 3FT	03/25/2024	3	**8.31**	48.3	0.202	*<0.30*	7.24	13.7	7.71	**0.495**	0.0752	32.4
FS-01 4 FT	3/26/2024	4	**4.63**	78.7	*<0.200*	*<0.30*	5.39	8.44	7.37	*<0.260*	0.0379	28.5
FS-02 4 FT	3/26/2024	4	**7.80**	80.7	0.215	*<0.30*	7.96	8.36	7.39	*<0.234*	0.0296	37.8
SS-18 2 FT	3/26/2024	2	**3.22**	74.3	*<0.200*	*<0.30*	3.77	5.93	5.57	*<0.260*	*<0.0200*	20
SS-19 2 FT	3/26/2024	2	**3.40**	37.9	*<0.200*	*<0.30*	6.38	7.92	4.9	*<0.260*	0.0367	36.5
SS-20 2 FT	3/26/2024	2	**4.43**	59.6	*<0.200*	*<0.30*	9.37	7.62	9.27	*<0.260*	0.0441	35.6
SS-21 3 FT	3/26/2024	3	**7.03**	72.3	0.231	*<0.30*	15.8	13.9	16.1	**0.282**	0.0826	64.4
SS-22-N 1.5 Ft	3/28/2024	1.5	**1.81**	31.8	*<0.200*	*<0.30*	5.66	3.53	3.37	*<0.260*	*<0.0200*	13.5
SS-22-S 1.5 Ft	3/28/2024	1.5	**6.14**	46.9	0.216	*<0.30*	11.7	11.4	6.42	0.254	0.0723	42.1
FS-22 2 Ft	3/28/2024	2	**6.04**	42.9	0.211	*<0.30*	11.1	11.7	6.88	*<0.260*	0.0676	44.1
SS-23-N 1.5 Ft	3/28/2024	3	**6.75**	51.2	0.226	*<0.30*	12.9	12.5	6.96	**0.288**	0.0738	49
SS-23-S 1.5 Ft	3/28/2024	3	**5.98**	49.8	0.205	*<0.30*	11.7	11.3	6.85	*<0.260*	0.0673	43.6
FS-23 2 Ft	3/28/2024	3	**6.58**	50.9	0.221	*<0.30*	12.5	12.1	6.88	**0.262**	0.0702	45.5
SS-24-N 2 Ft	3/28/2024	2.5	**7.18**	54	0.215	*<0.30*	13.4	12.7	7	**0.342**	0.0726	49.2
SS-24-S 2 Ft	3/28/2024	2.5	**7.95**	39.1	0.223	*<0.30*	14.7	13.7	7.21	**0.279**	0.0929	54.6
FS-24 3 Ft	3/28/2024	3	**7.97**	38.3	0.222	*<0.30*	11.8	12.5	7.57	**0.295**	0.0818	48.3
SS-25 -N 3 Ft	3/28/2024	3	**6.86**	59.4	0.225	*<0.30*	12.4	12.4	7.06	**0.373**	0.0736	46.4
SS-25-S 3 Ft	3/28/2024	3	**7.03**	38.4	*<0.200*	*<0.30*	11.3	11.5	7.08	*<0.260*	0.0688	46.7
FS-25 4 Ft	3/28/2024	4	**7.12**	53.7	0.221	*<0.30*	12.4	12.7	6.88	**0.343**	0.0773	47.2
SS-26-N 3 Ft	3/28/2024	3	**6.71**	49.6	0.225	*<0.30*	12.4	12	6.89	**0.325**	0.0707	45.7
SS-26-S 3 Ft	3/28/2024	3	**6.93**	39.7	0.214	*<0.30*	10.9	11.7	7.43	**0.277**	0.0747	47.2

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
FS-26 4 Ft	3/28/2024	4	**7.03**	52.8	0.224	*<0.30*	12.9	12.6	6.93	**0.352**	0.0683	47.8
SS-27-N 2 Ft	3/28/2024	2	**7.25**	49.9	0.216	*<0.30*	11.3	11.8	7.01	**0.299**	0.0737	46.1
SS-27-S 2 Ft	3/28/2024	2	**7.07**	54.7	0.224	*<0.30*	13.3	12.4	6.8	**0.27**	0.0796	48.4
FS-27 3 Ft	3/28/2024	3	**8.03**	37.5	0.218	*<0.30*	12.6	13.2	7.15	**0.3**	0.084	51.9
SS-28-N 2.5 Ft	3/28/2024	2.5	**6.95**	57.5	0.231	*<0.30*	13.5	12.9	7.22	**0.292**	0.0731	49.8
SS-28-S 2.5 Ft	3/28/2024	2.5	**6.58**	61.2	0.225	*<0.30*	13.3	12.8	6.82	*<0.260*	0.0752	47.3
FS-28 3 Ft	3/28/2024	3	**6.27**	66.7	0.208	*<0.30*	6.92	12	6.99	*<0.260*	0.0977	51
SS-40 3 Ft	3/29/2024	3	**7.14**	61.1	0.243	*<0.30*	13.8	12.4	14.7	*<0.260*	0.076	59.8
SS-41 2 Ft	3/29/2024	2	**7.03**	24.5	*<0.200*	*<0.30*	9.79	10.6	13	*<0.260*	0.0785	55.8
SS-42 2 Ft	3/29/2024	2	**5.61**	18.7	*<0.200*	*<0.30*	8.4	9.94	11.6	*<0.260*	0.0748	50.2
SS-43 2 Ft	3/29/2024	2	**7.25**	74	0.267	*<0.30*	14.7	12.9	16.4	**0.266**	0.076	63.4
SS-44 2 Ft	3/29/2024	2	**6.15**	67.3	0.239	*<0.30*	12.9	10.9	19.1	*<0.260*	0.0644	53
SS-45 2 Ft	3/29/2024	2	**6.61**	**95.4**	0.229	*<0.30*	14	12	15.2	*<0.234*	0.0677	58.6
FS-40 3 Ft	3/29/2024	3	**7.23**	46.9	0.227	*<0.30*	13.9	12.5	14.5	*<0.260*	0.0732	61
FS-41 3 Ft	3/29/2024	3	**6.83**	35.1	*<0.180*	*<0.30*	9.45	10.4	12.6	*<0.234*	0.0693	51.1
FS-42 2 Ft	3/29/2024	2	**7.68**	39.3	0.224	*<0.30*	15.2	13.6	15	*<0.260*	0.0835	65.1
FS-43 3 Ft	3/29/2024	3	**6.63**	76.2	0.183	*<0.30*	11.5	10.3	13.3	**0.326**	0.0464	51.5
FS-44 2 Ft	3/29/2024	2	**6.66**	71.1	0.236	*<0.30*	14.1	12.1	14.9	**0.321**	0.0725	58.4
FS-45 2 Ft	3/29/2024	2	**7.44**	38.2	0.213	*<0.30*	12.9	12.4	13.9	**0.283**	0.0741	58.6
SS-29-N 2 Ft	3/29/2024	2	**6.98**	57.4	0.205	*<0.30*	14.1	12.3	14.6	*<0.260*	0.0713	58.6
SS-29-S 2 Ft	3/29/2024	2	**6.6**	62	0.204	*<0.30*	13.7	11.8	14	*<0.260*	0.0715	55.8
FS-29 3 Ft	3/29/2024	3	**6.89**	72.1	0.233	*<0.30*	14.5	12	14.8	*<0.260*	0.0699	59.3
SS-30-N 2 Ft	3/29/2024	2	**4.58**	**202**	0.315	*<0.30*	13.9	10	10.8	*<0.260*	0.0403	33
SS-30-S 2 Ft	3/29/2024	2	**6.31**	64	*<0.200*	*<0.30*	12.2	11.2	13.5	*<0.260*	0.0646	52.1
FS-30 3 Ft	3/29/2024	3	**3.13**	**186**	*<0.200*	*<0.30*	7.86	6.44	7.36	*<0.260*	0.0344	25.7
FS-46 2 Ft	3/29/2024	2	**7.38**	45.2	0.206	*<0.30*	12.8	12.2	14.2	0.239	0.0767	58.1
FS-47 2 Ft	3/29/2024	2	**8.19**	40.7	0.223	*<0.30*	14.8	13.6	15	**0.31**	0.0838	64.7
FS-Release 6 Ft	4/1/2024	6	**4.90**	23.1	*<0.200*	*<0.30*	3.66	7.98	4.84	*<0.260*	0.0508	20
SS-30-N-2 3 Ft	4/2/2024	3	**3.35**	**300**	0.225	*<0.30*	8.96	7.9	5.07	*<0.260*	0.0624	27.1
SS-41-2	4/2/2024	2	**6.01**	28	*<0.200*	*<0.30*	10.2	10.9	6.51	*<0.260*	0.0961	45.4
SS-42-2	4/2/2024	2	**5.16**	15.5	*<0.181*	*<0.30*	7.91	9.64	6.12	*<0.236*	0.0926	40.8
FS-41-2	4/2/2024	3.5	**7.08**	44	0.258	*<0.30*	13.9	13.3	7.09	*<0.260*	0.0966	51.3
FS-44-2	4/2/2024	2.5	**6.66**	66.4	0.261	*<0.30*	13.2	12.4	7	**0.33**	0.0942	47.4
SS-28-N-2	4/5/2024	3	**6.74**	56.9	0.214	*<0.30*	12.9	12.5	14.1	*<0.260*	0.073	56.8
FS-48 1 Ft	4/5/2024	1	**7.35**	35.7	0.221	*<0.30*	12.6	13	13.8	**0.278**	0.0873	58.7

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
FS-49 2 Ft	4/5/2024	2	**7.51**	50.4	0.22	*<0.30*	13	12.7	13.9	**0.3**	0.0805	58
FS-50 2 Ft	4/5/2024	2	**7.14**	36.3	0.218	*<0.30*	12.3	12.5	13.2	**0.268**	0.0772	56.1
SS-46	4/5/2024	1	**6.04**	46	0.212	*<0.30*	10.8	11	13.4	*<0.260*	0.0726	51.4
SS-47	4/5/2024	1.5	**6.22**	78.4	0.248	*<0.30*	13.6	12.1	14.9	*<0.236*	0.0774	56.2
SS-48	4/5/2024	1	**6.22**	75.1	0.25	*<0.30*	12.9	11.9	14.3	*<0.260*	0.0715	54.2
SS-49	4/5/2024	1	**6.22**	**88.8**	0.262	*<0.30*	14.1	12.3	15.5	*<0.260*	0.0753	57.3
SS-50	4/5/2024	1	**6.20**	69.2	0.237	*<0.30*	12.3	12	13.8	*<0.260*	0.0712	53.2
FS-51 0.5 Ft	4/5/2024	0.5	**5.96**	34	0.215	*<0.30*	9.96	10.8	11.4	*<0.260*	0.063	46.9
SS-51	4/9/2024	2.5	**6.89**	71.0	0.101	*<0.177*	12.6	12.2	15.7	**0.333**	0.0878	59.5
SS-52	4/9/2024	1.5	**6.40**	38.3	0.0960	*<0.120*	9.62	11.2	13.7	**0.277**	0.101	54.8
SS-53	4/9/2024	1.5	**5.90**	**86.3**	0.109	*<0.187*	13.0	11.6	14.5	0.234	*<0.0894*	54.7
SS-54	4/9/2024	1.5	**6.25**	**93.3**	0.124	*<0.126*	13.8	11.8	15.2	**0.421**	0.0864	57.3
FS-51	4/9/2024	2	**7.31**	**82.2**	0.100	*<0.141*	12.9	12.7	14.6	**0.409**	0.0968	59.4
FS-52	4/9/2024	2	**7.13**	60.7	*<0.0968*	*<0.174*	14.2	**14.1**	14.8	**0.394**	*<0.0968*	62.1
SS-22-N-2	4/9/2024	2	**7.12**	69.4	0.0957	*<0.158*	13.3	12.6	14.8	**0.337**	0.0983	60.8

1. Bold values exceed the ECMC Table 915-1 limit(s)

2. Red & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL)

* Indicates laboratory minimum detection limit in excess of SSL

NA - Not analyzed

= Source material characterization sample, excavated and transported off site for disposal.

= Material excavated and transported off site for disposal.

TABLE 5
SUMMARY OF ARSENIC (As) CONCENTRATIONS IN EXCAVATED SOILS CALCULATION (BASED ON REPORTED SPILL VOLUME)
PDC ENERGY INC.
RAINDANCE PAD
FREMONT PROJECT NO. C024-066

Compare Mass of Arsenic (As) Excavated to Arsenic Released

Arsenic Removed During Excavation	6,407.31 grams
Arsenic Released Due to Spill	0.011424 grams
Excess Arsenic Removed During Excavation	6,407.30 grams

Therefore, approximately 560,864 times more arsenic were removed via excavation than were released

Calculation of Arsenic Removed During Excavation

Avg. As Concentration in Excav. Soil Samples	Mass of Excavated Soil	Mass of As in Exc. Soil
6.53 mg/kg	981,211 kg	6,407.31 grams

Mass of excavated soil is: 832 cubic yards x 1.30 ton/CY = 1081.60 tons = 981,211 kg

Seventy-nine soil samples from the excavation were analyzed for arsenic; the average concentration was 6.53 mg/kg

Calculation of Arsenic Released Due to Spill

Produced H2O/Oil Release Volume (bbl)	Produced H2O/Oil Volume (L	As Concentration (ug/L)	As Mass Released (mg)	As Mass Released (g)
72	11447.064	0.998	(0.998 ug/L x 11447 L)/1000 11.424	0.011424

Net Volume of Produced Water Released: (72 bbl)(158.987 L/bbl) = 11447.06 L

1 kg/L is weight of water

Arsenic concentration in produced fluids sample was 0.998 ug/L

TABLE 6
SUMMARY OF BARIUM (Ba) CONCENTRATIONS IN EXCAVATED SOILS CALCULATION (BASED ON REPORTED SPILL VOLUME)
PDC ENERGY INC.
RAINDANCE PAD
FREMONT PROJECT NO. C024-066

Compare Mass of Barium (Ba) Excavated to Barium Released

Barium Removed During Excavation	61,688.74 grams
Barium Released Due to Spill	159.114 grams
Excess Barium Removed During Excavation	61,529.63 grams

Therefore, approximately 387 times more barium were removed via excavation than were released

Calculation of Barium Removed During Excavation

Avg. Ba Concentration in Excav. Soil Samples	Mass of Excavated Soil	Mass of Ba in Exc. Soil
62.87 mg/kg	981,211 kg	61,688.74 grams

Mass of excavated soil is: 832 cubic yards x 1.30 ton/CY = 1081.60 tons = 981,211 kg

Seventy-nine soil samples from the excavation were analyzed for barium; the average concentration was 62.87 mg/kg

Calculation of Barium Released Due to Spill

Produced H2O/Oil Release Volume (bbl)	Produced H2O/Oil Volume (L	Ba Concentration (ug/L)	Ba Mass Released (mg)	Ba Mass Released (g)
72	11447.064	13900	(13900 ug/L x 11447 L)/1000 159114.190	159.114

Net Volume of Produced Water Released: (72 bbl)(158.987 L/bbl) = 11447.06 L

1 kg/L is weight of water

Barium concentration in produced fluid sample was 13,900 ug/L (see lab report)

TABLE 7
SUMMARY OF Selenium (Se) CONCENTRATIONS IN EXCAVATED SOILS CALCULATION (BASED ON REPORTED SPILL VOLUME)
PDC ENERGY INC.
RAINDANCE PAD
FREMONT PROJECT NO. C024-066

Compare Mass of Selenium (Se) Excavated to Selenium Released

Selenium Removed During Excavation	294.36 grams
Selenium Released Due to Spill	0.00876 grams
Excess Selenium Removed During Excavation	294.35 grams

Therefore, approximately 33,602 times more Selenium were removed via excavation than were released

Calculation of Selenium Removed During Excavation

Avg. Se Concentration in Excav. Soil Samples	Mass of Excavated Soil	Mass of Se in Exc. Soil
0.300 mg/kg	981,211 kg	294.36 grams

Mass of excavated soil is: 832 cubic yards x 1.30 ton/CY = 1081.60 tons = 981,211 kg

Seventy-nine soil samples from the excavation were analyzed for Selenium; the average concentration was 0.300 mg/kg

Calculation of Selenium Released Due to Spill

Produced H2O/Oil Release Volume (bbl)	Produced H2O/Oil Volume (L)	Se Concentration (ug/L)	Se Mass Released (mg)	Se Mass Released (g)
72	11447.064	0.765	(0.765 ug/L x 11447.06 L)/1000 8.76	0.00876

Net Volume of Produced Water Released: (72 bbl)(158.987 L/bbl) = 11447.06 L

1 kg/L is weight of water

Se concentration in produced fluid sample was 0.765 ug/L (see lab report)

TABLE 8
SUMMARY OF LEAD (Pb) CONCENTRATIONS IN EXCAVATED SOILS CALCULATION (BASED ON REPORTED SPILL VOLUME)
PDC ENERGY INC.
RAINDANCE PAD
FREMONT PROJECT NO. C024-066

Compare Mass of Lead (Pb) Excavated to Lead Released

Lead Removed During Excavation	11,382 grams
Lead Released Due to Spill	0.01145 grams
Excess Lead Removed During Excavation	11,382 grams

Therefore, approximately 994,061 times more Lead were removed via excavation than were released

Calculation of Lead Removed During Excavation

Avg. Pb Concentration in Excav. Soil Samples	Mass of Excavated Soil	Mass of Pb in Exc. Soil
11.60 mg/kg	981,211 kg	11,382 grams

Mass of excavated soil is: 832 cubic yards x 1.30 ton/CY = 1081.60 tons = 981,211 kg

Seventy-nine soil samples from the excavation were analyzed for Lead; the average concentration was 11.60 mg/kg

Calculation of Lead Released Due to Spill

Produced H2O/Oil Release Volume (bbl)	Produced H2O/Oil Volume (L)	Pb Concentration (ug/L)	Pb Mass Released (mg)	Pb Mass Released (g)
72	11447.064	1.00	(1.00 ug/L x 11447.06 L)/1000 11.45	0.01145

Net Volume of Produced Water Released: (72 bbl)(158.987 L/bbl) = 11447.06 L

1 kg/L is weight of water

Pb concentration in produced fluid sample was below the laboratory detection limit of 1.00 ug/L; therefore, use a concentration of 1.00 ug/L (see lab report)

TABLE 9

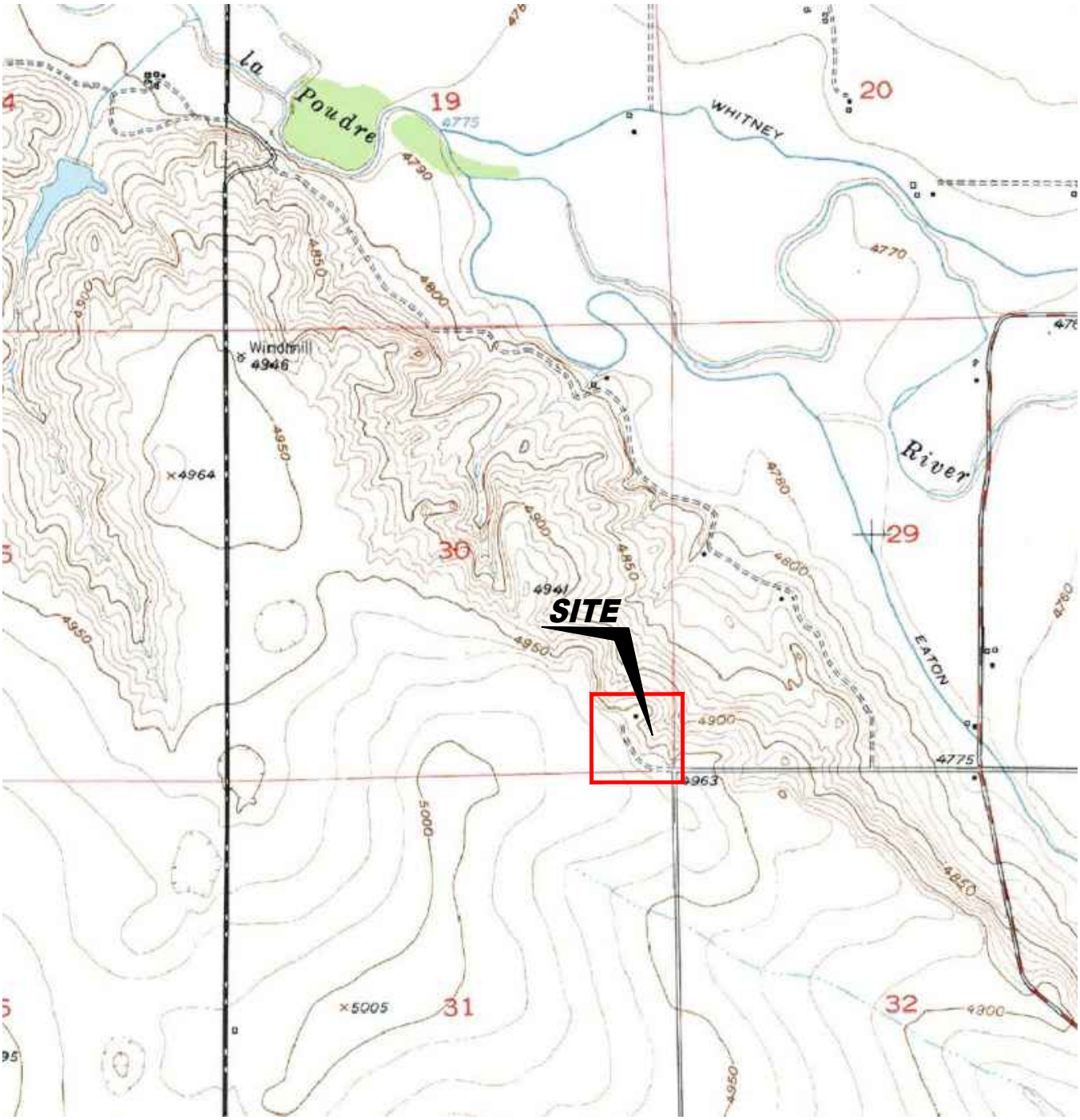
SUMMARY OF TOTAL RECOVERABLE METALS IN PRODUCED FLUID CHEMISTRY DATA

PDC ENERGY INC.

RAINDANCE PAD

FREMONT PROJECT NO. C024

Sample ID	Sample Date	Arsenic (ug/L)	Barium (ug/L)	Cadmium (ug/L)	Copper (ug/L)	Lead (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Silver (ug/L)	Zinc (ug/L)
PW	6/3/2024	0.998	13900	<1.00	2.10	<1.00	4.92	0.765	*<5.00*	**559**



N

Scale (miles)
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
0 1000 2000 3000 4000 5000
Scale (feet)

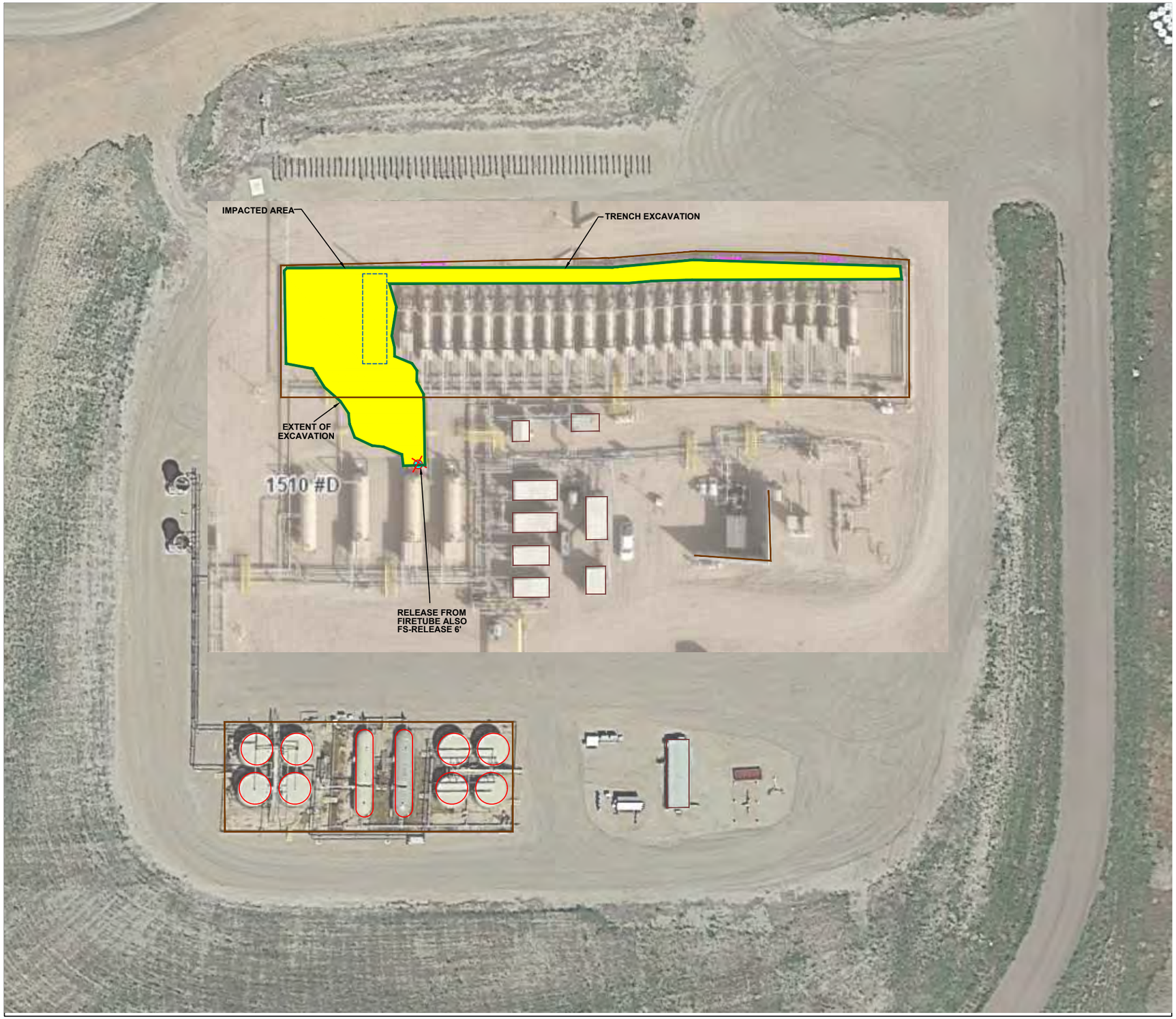
USGS 7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 1
SITE LOCATION MAP

PDC ENERGY INC
Raindance FD Off-site Tank Pad
SESE Sec. 30, T6N, R67W, 6th PM
Weld County, Colorado
40.451465°, -104.928371°

Project #	API #	Facility #
C024-066		**451100**
Date	Remediation #	Filename
6/24/24		**24066T**

FREMONT ENVIRONMENTAL



LEGEND

- POINT OF RELEASE
- ABOVE GROUND STORAGE TANK
- BUILDING — BUILDING
- FORMER — FORMER FACILITY
- IMPACTED AREA
- EXTENT OF EXCAVATION
- FENCE LINE
- CONTAINMENT BERM
- CONTAINMENT WALL

[NA] NOT ANALYZED

SAMPLE ID	
DATE	
DEPTH	
ACE	<0.00500
Ant	<0.00500
BaA	<0.00500
BaP	<0.00500
BbF	<0.00500
BkF	<0.00500
Chr	<0.00500
DiBahAnt	<0.00500
FLU	<0.00500
FL	<0.00500
IP23cdPY	<0.00500
PY	<0.00500
1MN	<0.00500
2MN	<0.00500

SAMPLE ID
DATE SAMPLED
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)
DIBENZ (A,H) ANTHRACENE (mg/kg)
FLUORANTHENE (mg/kg)
FLUORENE (mg/kg)
INDENO (1,2,3-CD) PYRENE(mg/kg)
PYRENE (mg/kg)
1-METHYLNAPHTHALENE (mg/kg)
2-METHYLNAPHTHALENE (mg/kg)

SS-44 2 Ft	
3/29/2024	
2	
B	<0.0020
T	<0.0050
E	<0.0050
X	<0.010
124TMB	<0.0050
135TMB	<0.0050
N	<0.0038
G	<0.50
D	<50
O	<50

SAMPLE ID
DATE SAMPLED
DEPTH (ft)
BENZENE (mg/kg)
TOLUENE (mg/kg)
ETHYLBENZENE (mg/kg)
TOTAL XYLENES (mg/kg)
1,2,4-TRIMETHYLBENZENE (mg/kg)
1,3,5-TRIMETHYLBENZENE (mg/kg)
NAPHTHALENE (mg/kg)
TPH-GRO (mg/kg)
TPH-DRO (mg/kg)
TPH-ORO (mg/kg)

SAMPLE	
DATE	
DEPTH	
As	<0.01
BA	<0.01
CD	<0.01
CR(VI)	<0.05
CU	<0.01
PB	<0.05
NI	<0.05
SE	<0.5
AG	<0.05
Z	<0.05

SAMPLE ID
DATE SAMPLED
DEPTH (ft)
ARSENIC (mg/kg)
BARIUM (mg/kg)
CADMIUM (mg/kg)
CHROMIUM (mg/kg)
COPPER (mg/kg)
LEAD (mg/kg)
NICKEL (mg/kg)
SELENIUM (mg/kg)
SILVER (mg/kg)
ZINC (mg/kg)

SAMPLE	
DATE	
DEPTH	
pH	<500
EC	7.00
SAR	<1
B	<5

SAMPLE ID
DATE SAMPLED
DEPTH (ft)
SAR (units)
pH (pH units)
EC (mmhos/cm)
BORON (mg/L)

N

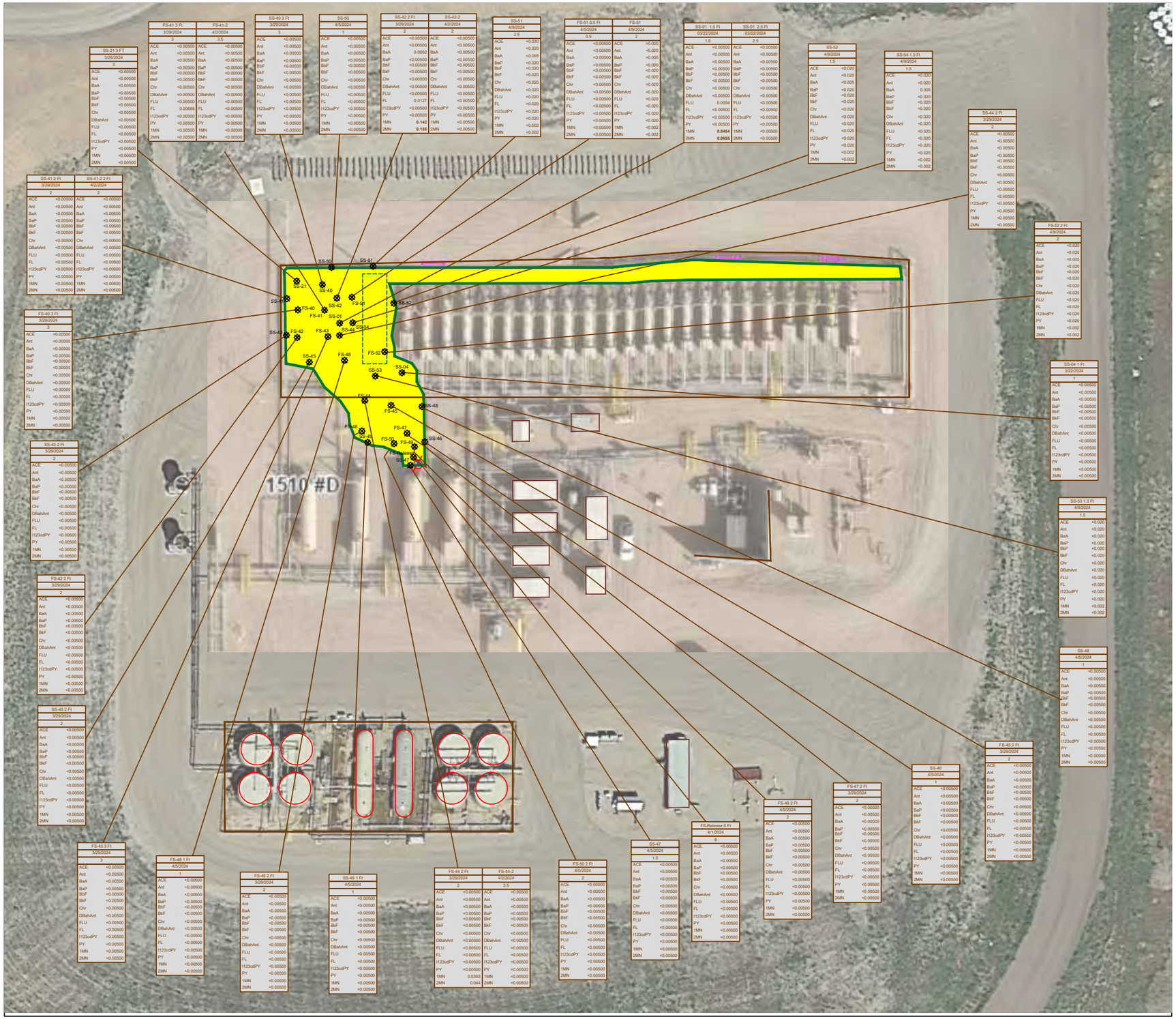
0 10 20 30 40 50
Scale (feet)

Figure 2
SITE MAP

PDC ENERGY INC
Raindance FD Off-site Tank Pad
SESE Sec. 30, T6N, R67W, 6th PM
Weld County, Colorado
40.451465°, -104.928371°

Project No.	Facility #	Initial Spill/Release Report Doc#
C024-066		**451100**
Date	Remediation #	Filename
6/24/24		**24066Q2**

FREMONT ENVIRONMENTAL



LEGEND

- POINT OF RELEASE
- SOIL SAMPLE LOCATION
- ABOVE GROUND STORAGE TANK
- BUILDING — BUILDING
- FORMER — FORMER FACILITY
- IMPACTED AREA
- EXTENT OF EXCAVATION
- FENCE LINE
- CONTAINMENT BERM
- CONTAINMENT WALL

[NA] NOT ANALYZED

SAMPLE ID	
DATE	SAMPLE ID DATE SAMPLED
DEPTH	DEPTH (ft)
ACE	ACENAPHTHENE (mg/kg)
Ant	ANTHRACENE (mg/kg)
BaA	BENZO (A) ANTHRACENE (mg/kg)
BaP	BENZO (A) PYRENE (mg/kg)
BbF	BENZO (B) FLUORANTHENE (mg/kg)
BkF	BENZO (K) FLUORANTHENE(mg/kg)
Chr	CHRYSENE (mg/kg)
DBahAnt	DIBENZ (A,H) ANTHRACENE (mg/kg)
FLU	FLUORANTHENE (mg/kg)
FL	FLUORENE (mg/kg)
I123cdPY	INDENO (1,2,3-CD) PYRENE(mg/kg)
PY	PYRENE (mg/kg)
1MN	1-METHYLNAPHTHALENE (mg/kg)
2MN	2-METHYLNAPHTHALENE (mg/kg)

SS-44 2 Ft	
3/29/2024	SAMPLE ID DATE SAMPLED
2	DEPTH (ft)
B	BENZENE (mg/kg)
T	TOLUENE (mg/kg)
E	ETHYLBENZENE (mg/kg)
X	TOTAL XYLENES (mg/kg)
124TMB	1,2,4-TRIMETHYLBENZENE (mg/kg)
135TMB	1,3,5-TRIMETHYLBENZENE (mg/kg)
N	NAPHTHALENE (mg/kg)
G	TPH-GRO (mg/kg)
D	TPH-DRO (mg/kg)
O	TPH-ORO (mg/kg)

SAMPLE	
DATE	SAMPLE ID DATE SAMPLED
DEPTH	DEPTH (ft)
As	ARSENIC (mg/kg)
BA	BARIUM (mg/kg)
CD	CADMIUM (mg/kg)
CR(VI)	CHROMIUM (mg/kg)
CU	COPPER (mg/kg)
PB	LEAD (mg/kg)
NI	NICKEL (mg/kg)
SE	SELENIUM (mg/kg)
AG	SILVER (mg/kg)
Z	ZINC (mg/kg)

SAMPLE	
DATE	SAMPLE ID DATE SAMPLED
DEPTH	DEPTH (ft)
pH	SAR (units)
EC	pH (pH units)
SAR	EC (mmhos/cm)
B	BORON (mg/L)

N

0 10 20 30 40 50

Scale (feet)

Figure 3

PAH SOIL CHEMISTRY MAP

PDC ENERGY INC

Raindance FD Off-site Tank Pad

SESE Sec. 30, T6N, R67W, 6th PM

Weld County, Colorado

40.451465°, -104.928371°

Project No.	Facility #	Initial Spill/Release Report Doc#	
C024-066		451100	FREMONT ENVIRONMENTAL
Date	Remediation #	Filename	
6/24/24		24066Q2	

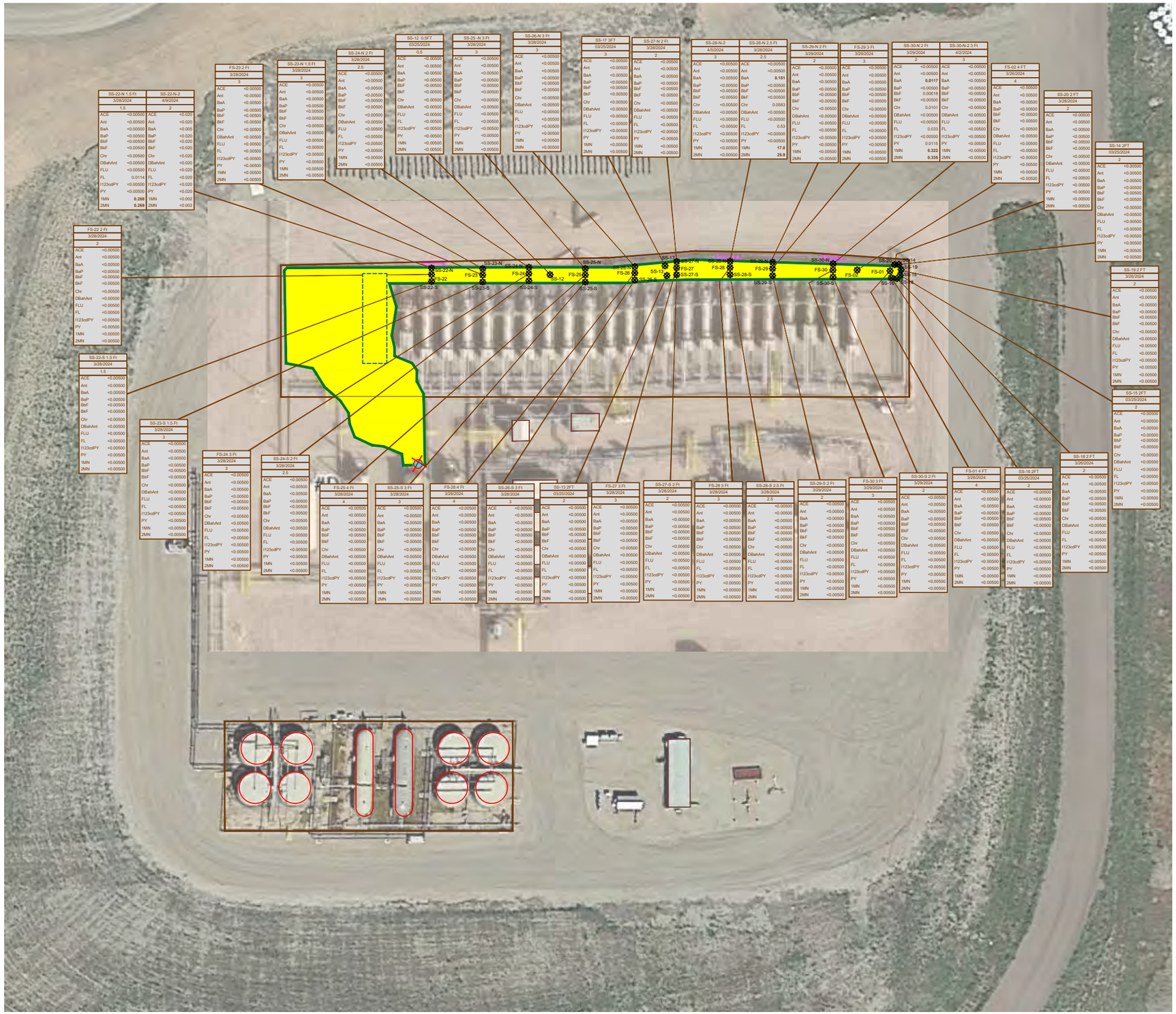


Figure 4

TRENCH PAH SOIL CHEMISTRY MAP

PDC ENERGY INC

Raindance FD Off-site Tank Pad

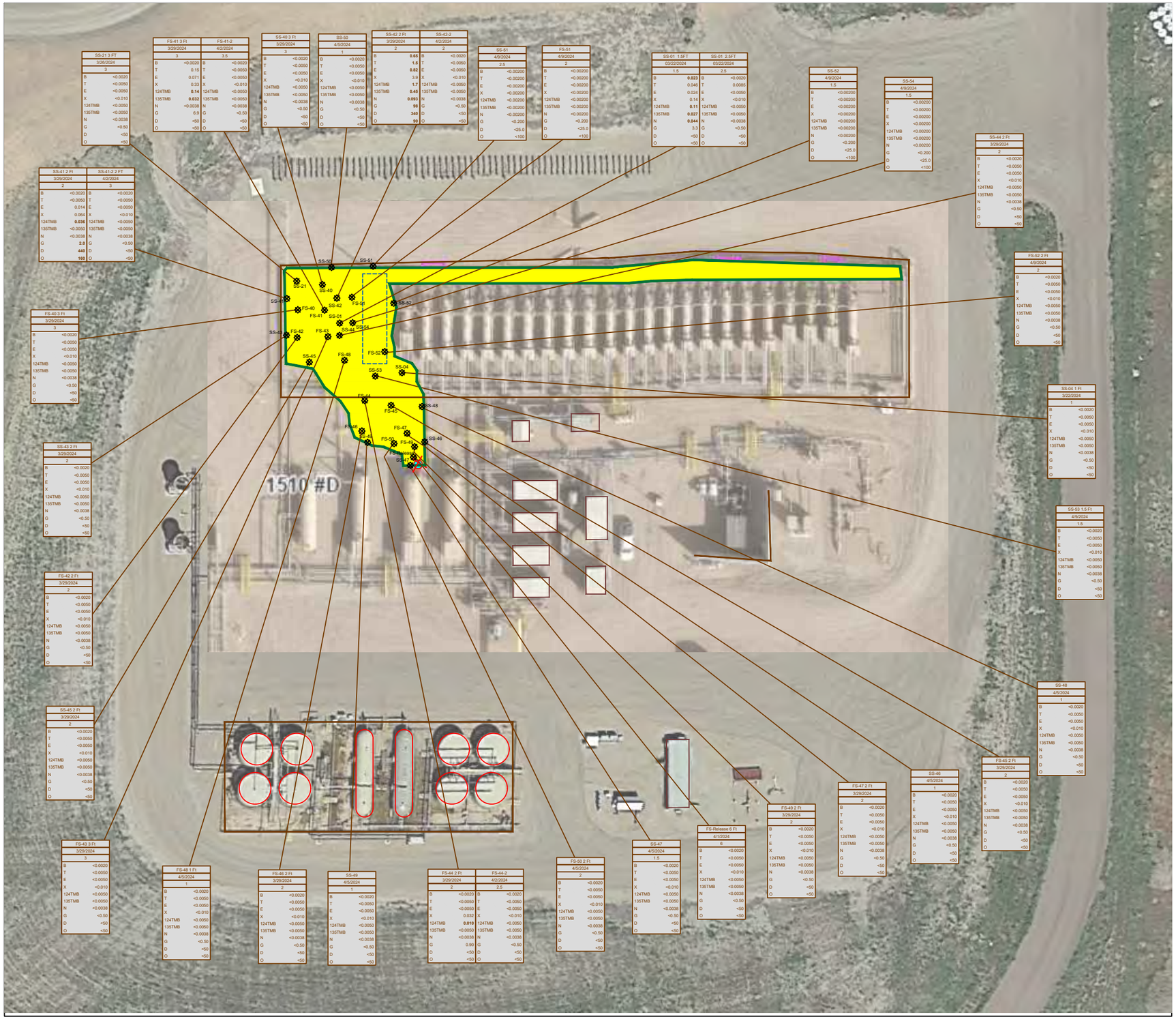
SESE Sec. 30, T6N, R67W, 6th PM

Weld County, Colorado

40.451465°, -104.928371°

Project No.	Facility #	Initial Spill/Release Report Doc#	
C024-066		**451100**	
Date	Remediation #	Filename	
6/24/24		**24066Q2T**	

FREMONT ENVIRONMENTAL



LEGEND

- POINT OF RELEASE
- SOIL SAMPLE LOCATION
- ABOVE GROUND STORAGE TANK
- BUILDING — BUILDING
- FORMER — FORMER FACILITY
- IMPACTED AREA
- EXTENT OF EXCAVATION
- FENCE LINE
- CONTAINMENT BERM
- CONTAINMENT WALL

[NA] NOT ANALYZED

SAMPLE ID	
DATE	SAMPLE ID DATE SAMPLED
DEPTH	DEPTH (ft)
AcE	ACENAPHTHENE (mg/kg)
Ant	ANTHRACENE (mg/kg)
BaA	BENZO (A) ANTHRACENE (mg/kg)
BaP	BENZO (A) PYRENE (mg/kg)
BbF	BENZO (B) FLUORANTHENE (mg/kg)
BkF	BENZO (K) FLUORANTHENE(mg/kg)
Chr	CHRYSENE (mg/kg)
DBahAnt	DIBENZ (A,H) ANTHRACENE (mg/kg)
FLU	FLUORANTHENE (mg/kg)
FL	FLUORENE (mg/kg)
IP23cdPY	INDENO (1,2,3-CD) PYRENE(mg/kg)
PY	PYRENE (mg/kg)
1MN	1-METHYLNAPHTHALENE (mg/kg)
2MN	2-METHYLNAPHTHALENE (mg/kg)

SS-44 2 Ft	
3/29/2024	SAMPLE ID DATE SAMPLED
2	DEPTH (ft)
B	BENZENE (mg/kg)
T	TOLUENE (mg/kg)
E	ETHYLBENZENE (mg/kg)
X	TOTAL XYLENES (mg/kg)
124TMB	1,2,4-TRIMETHYLBENZENE (mg/kg)
135TMB	1,3,5-TRIMETHYLBENZENE (mg/kg)
N	NAPHTHALENE (mg/kg)
G	TPH-GRO (mg/kg)
D	TPH-DRO (mg/kg)
O	TPH-ORO (mg/kg)

SAMPLE	
DATE	SAMPLE ID DATE SAMPLED
DEPTH	DEPTH (ft)
As	ARSENIC (mg/kg)
BA	BARIUM (mg/kg)
CD	CADMIUM (mg/kg)
CR(VI)	CHROMIUM (mg/kg)
CU	COPPER (mg/kg)
PB	LEAD (mg/kg)
NI	NICKEL (mg/kg)
SE	SELENIUM (mg/kg)
AG	SILVER (mg/kg)
Z	ZINC (mg/kg)

SAMPLE	
DATE	SAMPLE ID DATE SAMPLED
DEPTH	DEPTH (ft)
pH	SAR (units)
EC	pH (pH units)
SAR	EC (mmhos/cm)
B	BORON (mg/L)

N

0 10 20 30 40 50
Scale (feet)

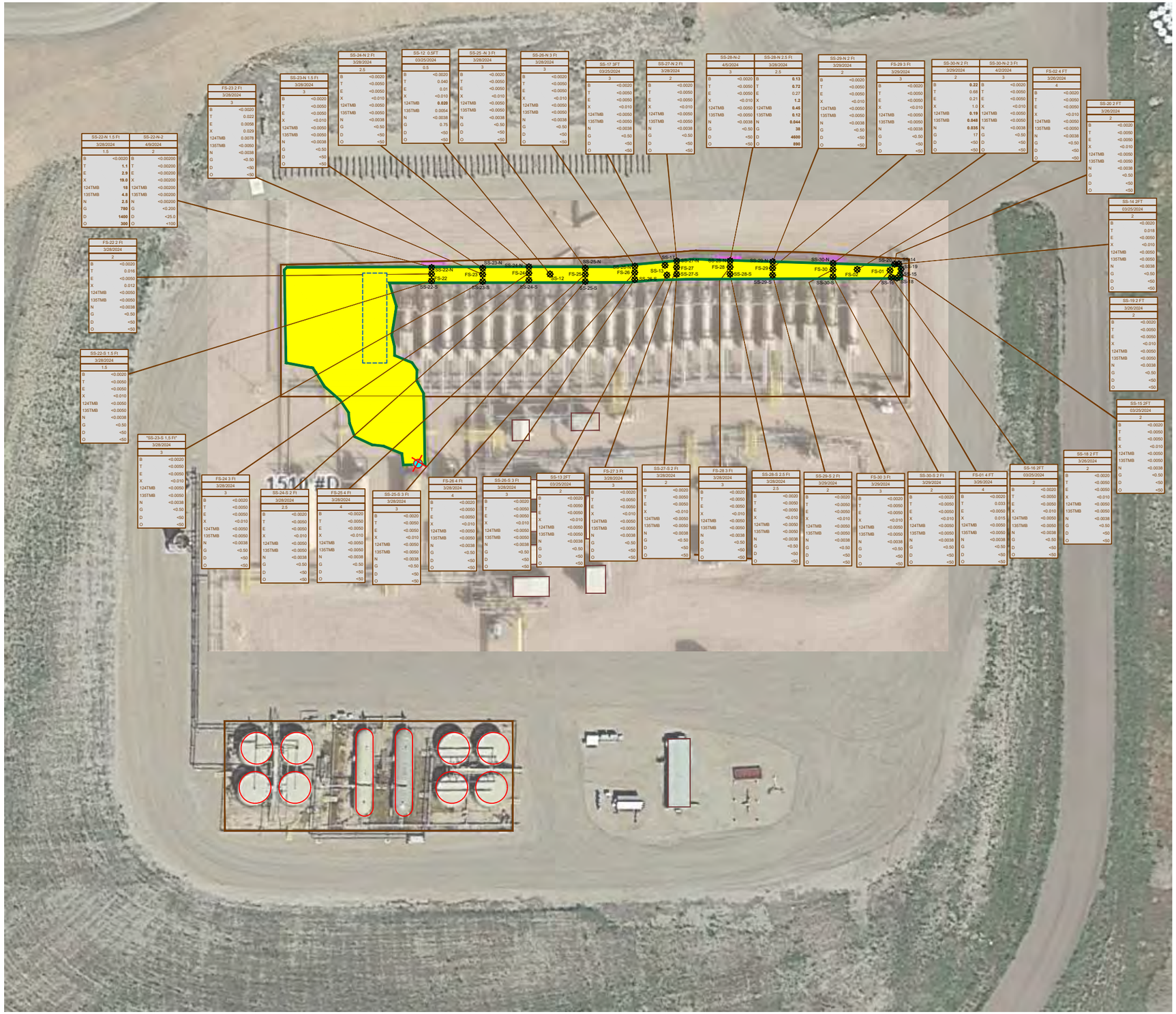
Figure 5

VOLATILE SOIL CHEMISTRY MAP

PDC ENERGY INC
Raindance FD Off-site Tank Pad
SESE Sec. 30, T6N, R67W, 6th PM
Weld County, Colorado
40.451465°, -104.928371°

Project No.	Facility #	Initial Spill/Release Report Doc#
C024-066		**451100**
Date	Remediation #	Filename
6/24/24		**24066Q2**

FREMONT ENVIRONMENTAL



LEGEND

- POINT OF RELEASE
- SOIL SAMPLE LOCATION
- ABOVE GROUND STORAGE TANK
- BUILDING — BUILDING
- FORMER — FORMER FACILITY
- IMPACTED AREA
- EXTENT OF EXCAVATION
- FENCE LINE
- CONTAINMENT BERM
- CONTAINMENT WALL

[NA] NOT ANALYZED

SAMPLE ID	
DATE	SAMPLE ID DATE SAMPLED
DEPTH	DEPTH (ft)
ACE	ACENAPHTHENE (mg/kg)
Ant	ANTHRACENE (mg/kg)
BaA	BENZO (A) ANTHRACENE (mg/kg)
BaP	BENZO (A) PYRENE (mg/kg)
BbF	BENZO (B) FLUORANTHENE (mg/kg)
BkF	BENZO (K) FLUORANTHENE(mg/kg)
Chr	CHRYSENE (mg/kg)
DBahAnt	DIBENZ (A,H) ANTHRACENE (mg/kg)
FLU	FLUORANTHENE (mg/kg)
FL	FLUORENE (mg/kg)
IR23cdPY	INDENO (1,2,3-CD) PYRENE(mg/kg)
PY	PYRENE (mg/kg)
1MN	1-METHYLNAPHTHALENE (mg/kg)
2MN	2-METHYLNAPHTHALENE (mg/kg)

SAMPLE	
DATE	SAMPLE ID DATE SAMPLED
DEPTH	DEPTH (ft)
B	BENZENE (mg/kg)
T	TOLUENE (mg/kg)
E	ETHYLBENZENE (mg/kg)
X	TOTAL XYLENES (mg/kg)
124TMB	1,2,4-TRIMETHYLBENZENE (mg/kg)
135TMB	1,3,5-TRIMETHYLBENZENE (mg/kg)
N	NAPHTHALENE (mg/kg)
G	TPH-GRO (mg/kg)
D	TPH-DRO (mg/kg)
O	TPH-ORO (mg/kg)

SAMPLE	
DATE	SAMPLE ID DATE SAMPLED
DEPTH	DEPTH (ft)
As	ARSENIC (mg/kg)
BA	BARIUM (mg/kg)
CD	CADMIUM (mg/kg)
CR(VI)	CHROMIUM (mg/kg)
CU	COPPER (mg/kg)
PB	LEAD (mg/kg)
NI	NICKEL (mg/kg)
SE	SELENIUM (mg/kg)
AG	SILVER (mg/kg)
Z	ZINC (mg/kg)

SAMPLE	
DATE	SAMPLE ID DATE SAMPLED
DEPTH	DEPTH (ft)
pH	SAR (units)
EC	pH (pH units)
SAR	EC (mmhos/cm)
B	BORON (mg/L)

N

0 10 20 30 40 50

Scale (feet)

Figure 6

TRENCH VOLATILE SOIL CHEMISTRY MAP

PDC ENERGY INC

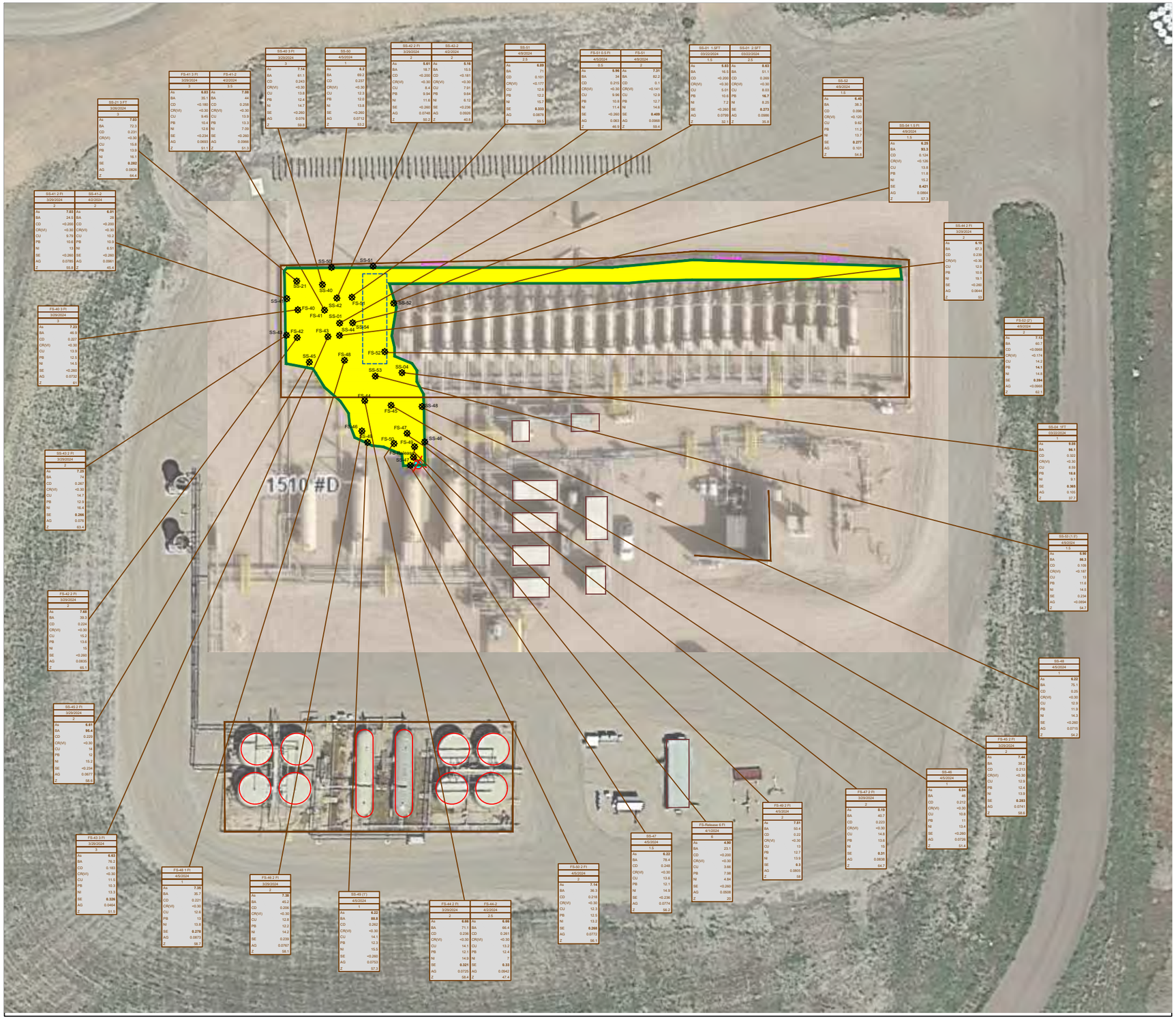
Raindance FD Off-site Tank Pad

SESE Sec. 30, T6N, R67W, 6th PM

Weld County, Colorado

40.451465°, -104.928371°

Project No.	Facility #	Initial Spill/Release Report Doc#	
C024-066		**451100**	FREMONT ENVIRONMENTAL
Date	Remediation #	Filename	
6/24/24		**24066Q2T**	



LEGEND

- POINT OF RELEASE
- SOIL SAMPLE LOCATION
- ABOVE GROUND STORAGE TANK
- BUILDING — BUILDING
- FORMER — FORMER FACILITY
- IMPACTED AREA
- EXTENT OF EXCAVATION
- FENCE LINE
- CONTAINMENT BERM
- CONTAINMENT WALL

[NA] NOT ANALYZED

SAMPLE ID	
DATE	SAMPLE ID
DEPTH	DATE SAMPLED
	DEPTH (ft)
AcE	ACENAPHTHENE (mg/kg)
Ant	ANTHRACENE (mg/kg)
BaA	BENZO (A) ANTHRACENE (mg/kg)
BaP	BENZO (A) PYRENE (mg/kg)
BbF	BENZO (B) FLUORANTHENE (mg/kg)
BkF	BENZO (K) FLUORANTHENE(mg/kg)
Chr	CHRYSENE (mg/kg)
DiBahAnt	DIBENZ (A,H) ANTHRACENE (mg/kg)
FLU	FLUORANTHENE (mg/kg)
FL	FLUORENE (mg/kg)
IP23cdPY	INDENO (1,2,3-CD) PYRENE(mg/kg)
PY	PYRENE (mg/kg)
1MN	1-METHYLNAPHTHALENE (mg/kg)
2MN	2-METHYLNAPHTHALENE (mg/kg)

SS-44 2 Ft	
3/29/2024	SAMPLE ID
2	DATE SAMPLED
	DEPTH (ft)
B	BENZENE (mg/kg)
T	TOLUENE (mg/kg)
E	ETHYLBENZENE (mg/kg)
X	TOTAL XYLENES (mg/kg)
124TMB	1,2,4-TRIMETHYLBENZENE (mg/kg)
135TMB	1,3,5-TRIMETHYLBENZENE (mg/kg)
N	NAPHTHALENE (mg/kg)
G	TPH-GRO (mg/kg)
D	TPH-DRO (mg/kg)
O	TPH-ORO (mg/kg)

SAMPLE	
DATE	SAMPLE ID
DEPTH	DATE SAMPLED
	DEPTH (ft)
As	ARSENIC (mg/kg)
BA	BARIUM (mg/kg)
CD	CADMIUM (mg/kg)
CR(VI)	CHROMIUM (mg/kg)
CU	COPPER (mg/kg)
PB	LEAD (mg/kg)
NI	NICKEL (mg/kg)
SE	SELENIUM (mg/kg)
AG	SILVER (mg/kg)
Z	ZINC (mg/kg)

SAMPLE	
DATE	SAMPLE ID
DEPTH	DATE SAMPLED
	DEPTH (ft)
pH	SAR (units)
EC	pH (pH units)
SAR	EC (mmhos/cm)
B	BORON (mg/L)

N

0 10 20 30 40 50

Scale (feet)

Figure 7

METALS IN SOIL CHEMISTRY MAP

PDC ENERGY INC

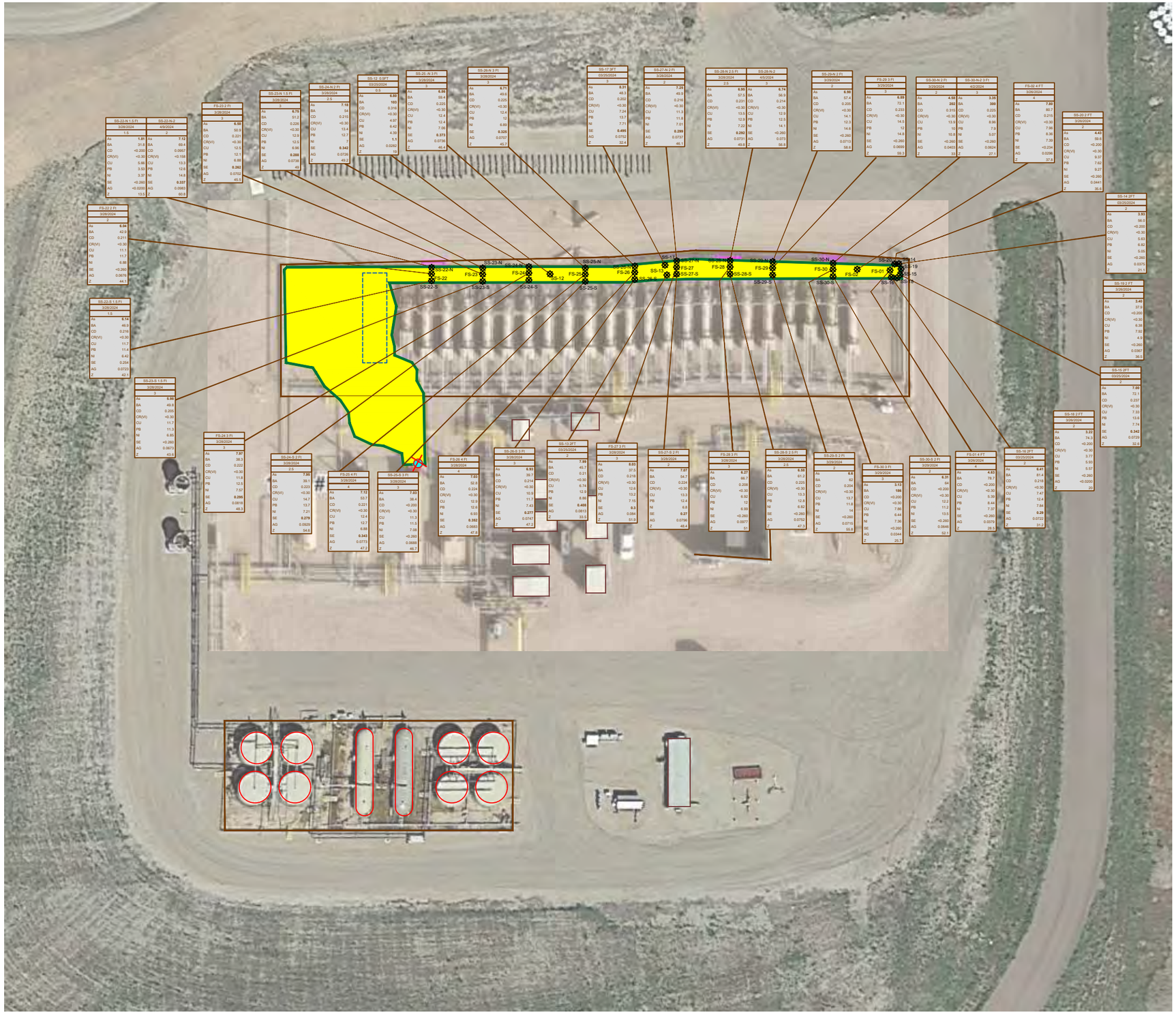
Raindance FD Off-site Tank Pad

SESE Sec. 30, T6N, R67W, 6th PM

Weld County, Colorado

40.451465°, -104.928371°

Project No.	Facility #	Initial Spill/Release Report Doc#	FREMONT ENVIRONMENTAL
C024-066		451100	
Date	Remediation #	Filename	
6/24/24		24066Q2	



LEGEND

- POINT OF RELEASE
- SOIL SAMPLE LOCATION
- ABOVE GROUND STORAGE TANK
- BUILDING — BUILDING
- FORMER — FORMER FACILITY
- IMPACTED AREA
- EXTENT OF EXCAVATION
- FENCE LINE
- CONTAINMENT BERM
- CONTAINMENT WALL

[NA] NOT ANALYZED

SAMPLE ID	
DATE	SAMPLE ID
DEPTH	DATE SAMPLED
	DEPTH (ft)
ACE <0.00500	ACENAPHTHENE (mg/kg)
Ant <0.00500	ANTHRACENE (mg/kg)
BaA <0.00500	BENZO (A) ANTHRACENE (mg/kg)
BaP <0.00500	BENZO (A) PYRENE (mg/kg)
BbF <0.00500	BENZO (B) FLUORANTHENE (mg/kg)
BkF <0.00500	BENZO (K) FLUORANTHENE(mg/kg)
Chr <0.00500	CHRYSENE (mg/kg)
DiBahAnt <0.00500	DIBENZ (A,H) ANTHRACENE (mg/kg)
FLU <0.00500	FLUORANTHENE (mg/kg)
FL <0.00500	FLUORENE (mg/kg)
IP23cdPY <0.00500	INDENO (1,2,3-CD) PYRENE(mg/kg)
PY <0.00500	PYRENE (mg/kg)
1MN <0.00500	1-METHYLNAPHTHALENE (mg/kg)
2MN <0.00500	2-METHYLNAPHTHALENE (mg/kg)

SAMPLE	
DATE	SAMPLE ID
DEPTH	DATE SAMPLED
	DEPTH (ft)
B <0.0020	BENZENE (mg/kg)
T <0.0050	TOLUENE (mg/kg)
E <0.0050	ETHYLBENZENE (mg/kg)
X <0.010	TOTAL XYLENES (mg/kg)
124TMB <0.0050	1,2,4-TRIMETHYLBENZENE (mg/kg)
135TMB <0.0050	1,3,5-TRIMETHYLBENZENE (mg/kg)
N <0.0038	NAPHTHALENE (mg/kg)
G <0.50	TPH-GRO (mg/kg)
D <50	TPH-DRO (mg/kg)
O <50	TPH-ORO (mg/kg)

SAMPLE	
DATE	SAMPLE ID
DEPTH	DATE SAMPLED
	DEPTH (ft)
As <0.01	ARSENIC (mg/kg)
BA <0.01	BARIUM (mg/kg)
CD <0.01	CADMIUM (mg/kg)
CR(VI) <0.05	CHROMIUM (mg/kg)
CU <0.01	COPPER (mg/kg)
PB <0.05	LEAD (mg/kg)
NI <0.05	NICKEL (mg/kg)
SE <0.5	SELENIUM (mg/kg)
AG <0.05	SILVER (mg/kg)
Z <0.05	ZINC (mg/kg)

SAMPLE	
DATE	SAMPLE ID
DEPTH	DATE SAMPLED
	DEPTH (ft)
pH <500	SAR (units)
EC 7.00	pH (pH units)
SAR <1	EC (mmhos/cm)
B <5	BORON (mg/L)

N

0 10 20 30 40 50

Scale (feet)

Figure 8

TRENCH METALS IN SOIL CHEMISTRY MAP

PDC ENERGY INC

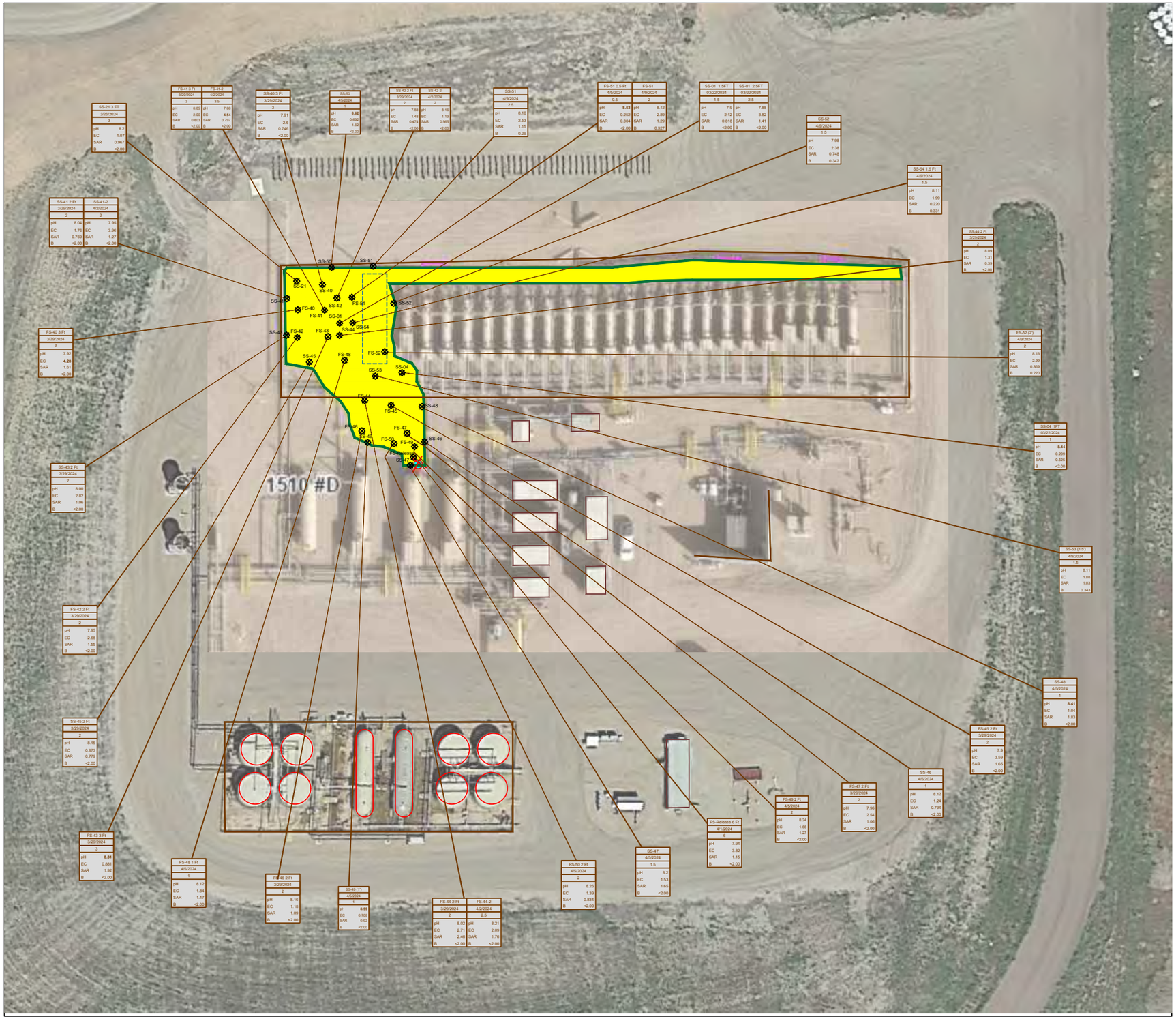
Raindance FD Off-site Tank Pad

SESE Sec. 30, T6N, R67W, 6th PM

Weld County, Colorado

40.451465°, -104.928371°

Project No.	Facility #	Initial Spill/Release Report Doc#	FREMONT ENVIRONMENTAL
C024-066		**451100**	
Date	Remediation #	Filename	
6/24/24		**24066Q2T**	



LEGEND

- POINT OF RELEASE
- SOIL SAMPLE LOCATION
- ABOVE GROUND STORAGE TANK
- BUILDING — BUILDING
- FORMER — FORMER FACILITY
- IMPACTED AREA
- EXTENT OF EXCAVATION
- FENCE LINE
- CONTAINMENT BERM
- CONTAINMENT WALL

[NA] NOT ANALYZED

SAMPLE ID	
DATE	SAMPLE ID DATE SAMPLED
DEPTH	DEPTH (ft)
ACE	ACENAPHTHENE (mg/kg)
Ant	ANTHRACENE (mg/kg)
BaA	BENZO (A) ANTHRACENE (mg/kg)
BaP	BENZO (A) PYRENE (mg/kg)
BbF	BENZO (B) FLUORANTHENE (mg/kg)
BkF	BENZO (K) FLUORANTHENE(mg/kg)
Chr	CHRYSENE (mg/kg)
DBahAnt	DIBENZ (A,H) ANTHRACENE (mg/kg)
FLU	FLUORANTHENE (mg/kg)
FL	FLUORENE (mg/kg)
I123cdPY	INDENO (1,2,3-CD) PYRENE(mg/kg)
PY	PYRENE (mg/kg)
1MN	1-METHYLNAPHTHALENE (mg/kg)
2MN	2-METHYLNAPHTHALENE (mg/kg)

SS-44 2 Ft	
3/29/2024	SAMPLE ID
2	DATE SAMPLED
	DEPTH (ft)
B	BENZENE (mg/kg)
T	TOLUENE (mg/kg)
E	ETHYLBENZENE (mg/kg)
X	TOTAL XYLENES (mg/kg)
124TMB	1,2,4-TRIMETHYLBENZENE (mg/kg)
135TMB	1,3,5-TRIMETHYLBENZENE (mg/kg)
N	NAPHTHALENE (mg/kg)
G	TPH-GRO (mg/kg)
D	TPH-DRO (mg/kg)
O	TPH-ORO (mg/kg)

SAMPLE	
DATE	SAMPLE ID DATE SAMPLED
DEPTH	DEPTH (ft)
As	ARSENIC (mg/kg)
BA	BARIUM (mg/kg)
CD	CADMIUM (mg/kg)
CR(VI)	CHROMIUM (mg/kg)
CU	COPPER (mg/kg)
PB	LEAD (mg/kg)
NI	NICKEL (mg/kg)
SE	SELENIUM (mg/kg)
AG	SILVER (mg/kg)
Z	ZINC (mg/kg)

SAMPLE	
DATE	SAMPLE ID DATE SAMPLED
DEPTH	DEPTH (ft)
pH	SAR (units)
EC	pH (pH units)
SAR	EC (mmhos/cm)
B	BORON (mg/L)

N

0 10 20 30 40 50

Scale (feet)

Figure 9

INORGANIC SOIL CHEMISTRY MAP

PDC ENERGY INC

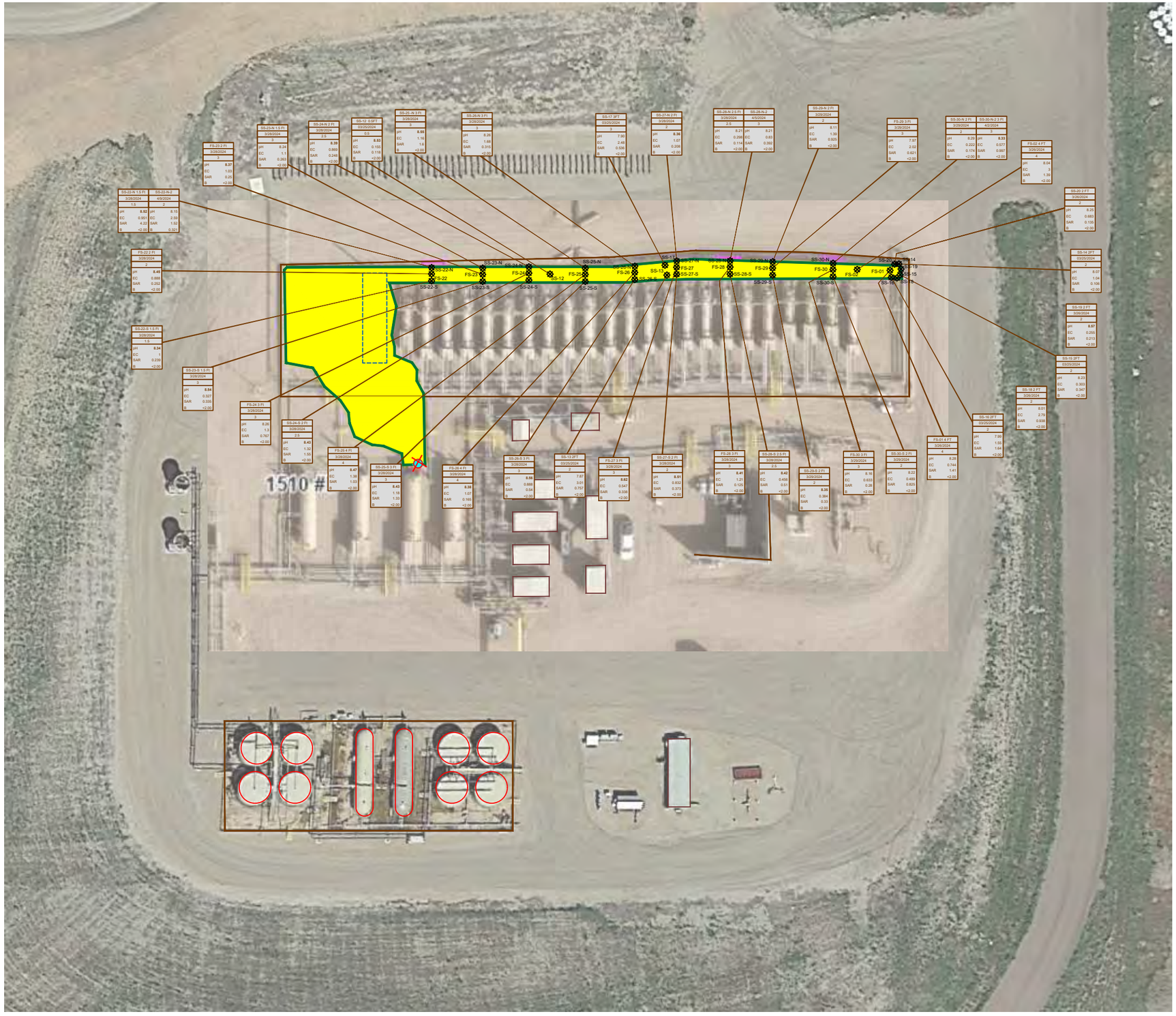
Raindance FD Off-site Tank Pad

SESE Sec. 30, T6N, R67W, 6th PM

Weld County, Colorado

40.451465°, -104.928371°

Project No.	Facility #	Initial Spill/Release Report Doc#	
C024-066		**451100**	FREMONT ENVIRONMENTAL
Date	Remediation #	Filename	
6/24/24		**24066Q2**	



LEGEND

- POINT OF RELEASE
- SOIL SAMPLE LOCATION
- ABOVE GROUND STORAGE TANK
- BUILDING — BUILDING
- FORMER — FORMER FACILITY
- IMPACTED AREA
- EXTENT OF EXCAVATION
- FENCE LINE
- CONTAINMENT BERM
- CONTAINMENT WALL

[NA] NOT ANALYZED

SAMPLE ID	
DATE	SAMPLE ID
DEPTH	DATE SAMPLED
ACE <0.00500	DEPTH (ft)
Ant <0.00500	ACENAPHTHENE (mg/kg)
BaA <0.00500	ANTHRACENE (mg/kg)
BaP <0.00500	BENZO (A) ANTHRACENE (mg/kg)
BbF <0.00500	BENZO (A) PYRENE (mg/kg)
BkF <0.00500	BENZO (B) FLUORANTHENE (mg/kg)
Chr <0.00500	BENZO (K) FLUORANTHENE(mg/kg)
DiBahAnt <0.00500	CHRYSENE (mg/kg)
FLU <0.00500	DIBENZ (A,H) ANTHRACENE (mg/kg)
FL <0.00500	FLUORANTHENE (mg/kg)
IP23cdPY <0.00500	FLUORENE (mg/kg)
PY <0.00500	INDENO (1,2,3-CD) PYRENE(mg/kg)
1MN <0.00500	PYRENE (mg/kg)
2MN <0.00500	1-METHYLNAPHTHALENE (mg/kg)
	2-METHYLNAPHTHALENE (mg/kg)

SAMPLE	
DATE	SAMPLE ID
DEPTH	DATE SAMPLED
B <0.0020	DEPTH (ft)
T <0.0050	BENZENE (mg/kg)
E <0.0050	TOLUENE (mg/kg)
X <0.010	ETHYLBENZENE (mg/kg)
124TMB <0.0050	TOTAL XYLENES (mg/kg)
135TMB <0.0050	1,2,4-TRIMETHYLBENZENE (mg/kg)
N <0.0038	1,3,5-TRIMETHYLBENZENE (mg/kg)
G <0.50	NAPHTHALENE (mg/kg)
D <50	TPH-GRO (mg/kg)
O <50	TPH-DRO (mg/kg)
	TPH-ORO (mg/kg)

SAMPLE	
DATE	SAMPLE ID
DEPTH	DATE SAMPLED
As <0.01	DEPTH (ft)
BA <0.01	ARSENIC (mg/kg)
CD <0.01	BARIUM (mg/kg)
CR(VI) <0.05	CADMIUM (mg/kg)
CU <0.01	CHROMIUM (mg/kg)
PB <0.05	COPPER (mg/kg)
NI <0.05	LEAD (mg/kg)
SE <0.5	NICKEL (mg/kg)
AG <0.05	SELENIUM (mg/kg)
Z <0.05	SILVER (mg/kg)
	ZINC (mg/kg)

SAMPLE	
DATE	SAMPLE ID
DEPTH	DATE SAMPLED
pH <500	DEPTH (ft)
EC 7.00	SAR (units)
SAR <1	pH (pH units)
B <5	EC (mmhos/cm)
	BORON (mg/L)

N

0 10 20 30 40 50
Scale (feet)

Figure 10
TRENCH INORGANIC SOIL CHEMISTRY MAP

PDC ENERGY INC
Raindance FD Off-site Tank Pad
SESE Sec. 30, T6N, R67W, 6th PM
Weld County, Colorado
40.451465°, -104.928371°

Project No.	Facility #	Initial Spill/Release Report Doc#
C024-066		**451100**
Date	Remediation #	Filename
6/24/24		**24066Q2T**

FREMONT ENVIRONMENTAL

Photo Log

Description:

#1 - Raindance Bulk Separator where Firetube Failed

Photo Log

Description:

#2 - Looking South at Bulk Separator with excavation and soil samples shown

Photo Log

Description:

#3 - Looking east at excavation area requiring additional excavation denoted by pink paint

Photo Log

Description:

#4 - Looking North at excavation just north of bulk separator release location

Photo Log

Description:

#5 - Looking west at excavation beneath bulk separator and further west

Photo Log

Description:

#6 - Looking east at excavation; note Bulk Separator in the upper right corner of photo

Photo Log

Description:

#7 - Looking southeast at excavation; note Bulk Separator in center of photo in background

Photo Log

Description:

#8 - Looking south at excavation that was confined within secondary containment. This shows the NW corner of the containment.

Photo Log

Description:

#9 - Looking south at excavation in NW corner of containment.

Photo Log

Description:

#10 - Looking east at row of separators where produced fluids traveled.

Photo Log

Description:

#11 - Looking west at excavation along northern edge of containment

Photo Log

Description:

#12 - Looking west at additional excavation along north trench after removal of containment wall.