

TABLE 1
FIELD DATA SUMMARY TABLE
NOBLE 100322
PAPPENHEIM 2-32, WELD COUNTY, COLORADO
REM # 28062

Sample ID	Sample Date	Depth	GPS Data Latitude/Longitude		PDOP Value	VOC Concentration (ppm)
WH-FS-01 @ 6'	4/28/2023	6.0 Ft	40.315855	-104.404846	-	0.6
WH-SS-01 @ 5'	4/28/2023	5.0 Ft	40.315858	-104.404846	-	0.7
WH-SS-02 @ 5'	4/28/2023	5.0 Ft	40.315855	-104.404842	-	0.0
WH-SS-03 @ 5'	4/28/2023	5.0 Ft	40.315851	-104.404846	-	0.3
WH-SS-04 @ 5'	4/28/2023	5.0 Ft	40.315855	-104.404852	-	0.4
FL01 3feet	06/21/2023	3.0 Ft	40.53294	-104.68013	-	1.5
FL02 3feet	06/21/2023	3.0 Ft	40.5342050	-104.67812	-	0.1
FL11 3FT	06/03/2025	3.0 Ft	40.53295096	-104.6779509	-	0.0
FL12 3FT	06/03/2025	3.0 Ft	40.53339863	-104.6779497	-	0.0
FL13 3FT	06/03/2025	3.0 Ft	40.53374796	-104.6779625	-	0.0
FL14 3FT	06/03/2025	3.0 Ft	40.53383834	-104.6781426	-	0.0
FL15 3FT	06/03/2025	3.0 Ft	40.53402978	-104.6781344	-	0.0

1. Global Positioning System (GPS) data is provided in decimal degrees using North American Datum (NAD) 83 UTMZone 13 North.

2. Volatile organic compound (VOC) concentrations are measured in the field using a photoionization detector (PID).

PDOP = Position Dilution of Precision

ppm = Parts per million

in. = Inches

ft. = Feet

bgs = Below ground surface

= Data Collected By Eagle Environmental

TABLE 2
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA
NOBLE 100322
PAPPENHEIM 2-32, WELD COUNTY, COLORADO
REM # 28062

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**		
SS-01	9/28/2021	1.0 Ft	0.20	0.055	0.0060	0.030	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
BG-1 (Background)	9/28/2021	1.0 Ft	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B3 8 Ft (Waste Char)	10/29/2021	8.0 Ft	1.13	3.06	3.85	21.2	11.2	3.07	<0.00067	1830	1220	463	147
B4 10 Ft	10/29/2021	10.0 Ft	7.51	27.8	9.33	50.1	20.3	5.57	<0.00067	4132	2280	1390	462
B5 12 Ft	10/29/2021	12.0 Ft	0.00224	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00067	<500	<0.200	<25.0	<100
West 4 Ft	10/29/2021	4.0 Ft	0.00958	0.00294	<0.00200	<0.00200	<0.00200	<0.00200	<0.00067	<500	<0.200	<25.0	<100
North 6 Ft	10/29/2021	6.0 Ft	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00067	<500	<0.200	<25.0	<100
East 6 Ft	10/29/2021	6.0 Ft	0.0521	<0.00200	0.00704	0.0058	0.0186	0.00578	<0.00067	<500	0.982	<25.0	<100
South 4 Ft	10/29/2021	4.0 Ft	0.058	0.0786	0.0223	0.146	0.0607	0.0166	<0.00067	<500	2.66	<25.0	<100
W2 6 Ft	11/1/2021	6.0 Ft	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00067	<500	<0.200	<25.0	<100
S5 6 Ft	11/1/2021	6.0 Ft	<0.00200	<0.00200	0.00740	<0.00200	<0.00200	<0.00200	<0.00067	<500	<0.200	<25.0	<100
E05 6 Ft	11/2/2021	6.0 Ft	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
WH-FS-01 @ 6'	4/28/2023	6.0 Ft	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201	<500	<0.200	<25.0	<100
FL01 3feet	06/21/2023	3.0 Ft	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
FL02 3feet	06/21/2023	3.0 Ft	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
FL11 3FT	06/03/2025	3.0 Ft	<0.00100	<0.0100	<0.0100	<0.100	<0.00500	<0.00500	<0.00300	<500	<0.100	<4.00	<4.00
FL12 3FT	06/03/2025	3.0 Ft	<0.00100	<0.0100	<0.0100	<0.100	<0.00500	<0.00500	<0.00300	<500	<0.100	<4.00	<4.00
FL13 3FT	06/03/2025	3.0 Ft	<0.00100	<0.0100	<0.0100	<0.100	<0.00500	<0.00500	<0.00300	<500	<0.100	<4.00	<4.00
FL14 3FT	06/03/2025	3.0 Ft	<0.00100	<0.0100	<0.0100	<0.100	<0.00500	<0.00500	<0.00300	<500	<0.100	<4.00	5.58
FL15 3FT	06/03/2025	3.0 Ft	<0.00100	<0.0100	<0.0100	<0.100	<0.00500	<0.00500	0.013	<500	<0.100	<4.00	4.14

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

 = Data Collected By Eagle Environmental

TABLE 3
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA
NOBLE 100322
PAPPENHEIM 2-32, WELD COUNTY, COLORADO
REM # 28062

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
SS-01	9/28/2021	1.0 Ft	<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
B3 8 Ft (Waste Char)	10/29/2021	8.0 Ft	0.116	<0.00165	0.0226	0.00772	0.00542	0.0141	0.123	0.0152	0.00401	0.349	0.00651	2.3	1.6	0.025
B4 10 Ft	10/29/2021	10.0 Ft	0.317	<0.0033	0.0234	0.0132	<0.0013	0.0103	0.255	0.00983	0.0167	0.792	0.00594	6.22	5.32	0.0636
B5 12 Ft	10/29/2021	12.0 Ft	<0.0003	<0.00033	<0.00041	<0.00021	<0.00013	<0.00014	<0.00027	<0.00036	<0.00039	<0.00029	<0.00029	<0.00033	<0.00039	<0.00059
West 4 Ft	10/29/2021	4.0 Ft	<0.0003	<0.00033	<0.00041	<0.00021	<0.00013	<0.00014	<0.00027	<0.00036	<0.00039	<0.00029	<0.00029	<0.00033	<0.00039	<0.00059
North 6 Ft	10/29/2021	6.0 Ft	<0.0003	<0.00033	<0.00041	<0.00021	<0.00013	<0.00014	<0.00027	<0.00036	<0.00039	<0.00029	<0.00029	<0.00033	<0.00039	<0.00059
East 6 Ft	10/29/2021	6.0 Ft	0.00457	0.000433	0.000776	0.000358	<0.00013	<0.00014	0.00508	<0.00036	<0.00039	0.0149	<0.00029	0.0267	0.0146	0.000797
South 4 Ft	10/29/2021	4.0 Ft	0.00805	0.000639	0.00116	0.0004	<0.00013	0.000233	0.00847	<0.00036	<0.00039	0.0248	<0.00029	0.0886	0.0886	0.00144
W2 6 Ft	11/1/2021	6.0 Ft	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	0.000752	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067
S5 6 Ft	11/1/2021	6.0 Ft	<0.00067	<0.00067	<0.00067	0.000886	<0.00067	0.000424	0.00225	0.000541	<0.00067	<0.00067	0.000389	0.000758	0.000872	<0.00067
E05 6 Ft	11/2/2021	6.0 Ft	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WH-FS-01 @ 6'	4/28/2023	6.0 Ft	<0.00067	<0.00067	0.000891	<0.00067	<0.00067	<0.00067	0.00125	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00201	<0.00201
FL01 3feet	06/21/2023	3.0 Ft	<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
FL02 3feet	06/21/2023	3.0 Ft	<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
FL11 3FT	06/03/2025	3.0 Ft	<0.0330	<0.0330	<0.00600	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.00300	<0.0120
FL12 3FT	06/03/2025	3.0 Ft	<0.0330	<0.0330	<0.00600	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.00300	<0.0120
FL13 3FT	06/03/2025	3.0 Ft	<0.0330	<0.0330	<0.00600	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.00300	<0.0120
FL14 3FT	06/03/2025	3.0 Ft	<0.0330	<0.0330	<0.00600	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.00300	<0.0120
FL15 3FT	06/03/2025	3.0 Ft	<0.0330	<0.0330	<0.00600	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	<0.0330	0.00437	<0.0120

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

 = Data Collected By Eagle Environmental

TABLE 4
SUMMARY OF SOIL SUITABILITY FOR RECLAMATION
OPERATOR (NOBLE 100322 OR PDC 69175)
PAPPENHEIM 2-32, WELD COUNTY, COLORADO
REM # 28062

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-01	9/29/2021	1.0 Ft	8.3	1.17	2.32	0.164
BG-1	9/29/2021	1.0 Ft	8.1	0.388	0.739	0.241
B3 8 Ft (waste)	10/29/2021	8.0 Ft	7.85	3.29	1.46	0.558
WH-FS-01 @ 6'	4/28/2023	6.0 Ft	8.27	0.888	0.305	0.344
FL01 3feet	06/21/2023	3.0 Ft	7.66	0.724	0.328	0.121
FL02 3feet	06/21/2023	3.0 Ft	7.83	0.268	0.0812	0.186
FL11 3FT	06/03/2025	3.0 Ft	8.25	3.4	2.6	0.835
FL12 3FT	06/03/2025	3.0 Ft	7.69	2	0.322	0.391
FL13 3FT	06/03/2025	3.0 Ft	8.3	0.357	0.852	0.296
FL14 3FT	06/03/2025	3.0 Ft	7.9	0.513	0.262	0.319
FL15 3FT	06/03/2025	3.0 Ft	7.96	0.477	0.286	0.737
BKG01 6"	11/2/2021	0.5 Ft	8.06	0.56	1.02	0.299
Maximum Background Concentration			8.06	0.56	1.02	0.299

1. **Bold** faced values exceed the ECMC Table 915-1 limit(s), but are within background concentrations.

2. **Bold** faced values exceed the ECMC Table 915-1 limit(s) and native background concentrations.

3. Brown highlighted soil analytical values indicate a regulatory exceedance.

NA - Not analyzed/Not applicable

= Data Collected By Eagle Environmental

TABLE 5
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
NOBLE 100322
PAPPENHEIM 2-32, WELD COUNTY, COLORADO
REM # 28062

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
SS-01	9/29/2021	1.0 Ft	6.09	82.8	0.247	<0.30	12.7	10.6	9.87	1.05	0.055	60.3
BG-1	9/29/2021	1.0 Ft	6.68	69.5	0.304	<0.30	15	19	12.6	1.32	0.0714	77.3
B3 8 Ft (waste)	10/29/2021	8.0 Ft	2.51	25.3	0.142	<0.30	8.88	14.1	7.34	0.395	0.0657	52.4
FL11 3FT	06/03/2025	3.0 Ft	4.96	123	0.169	<0.200	<10.0	<10.0	11.8	0.296	<0.500	<50.0
FL12 3FT	06/03/2025	3.0 Ft	6.56	146	0.241	0.211	12.3	10.3	14.3	0.493	<0.500	<50.0
FL13 3FT	06/03/2025	3.0 Ft	5.02	152	0.21	<0.200	<10.0	<10.0	10.6	0.366	<0.500	<50.0
FL14 3FT	06/03/2025	3.0 Ft	5.21	120	0.245	0.279	10.7	<10.0	14	0.383	<0.500	<50.0
FL15 3FT	06/03/2025	3.0 Ft	5.93	114	0.269	0.286	10.9	<10.0	15.8	0.512	<0.500	<50.0
BKG01 6"	11/2/2021	0.5 Ft	6.63	79.2	0.289	<0.30	15.6	13.4	11.1	1.07	0.0669	70.4
1.25x Maximum Background Concentration			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

- Bold** faced values exceed the ECMC Table 915-1 limit(s), but are within 1.25x background concentrations.
- Bold** faced values exceed the ECMC Table 915-1 limit(s) and native background concentrations.
- Red & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL).
- Non-detect background results accounted for in the highest background concentration by using the reporting limit.

ECMC = Energy & Carbon Management Commission

(<) = Analytical result is less than the indicated laboratory reporting limit.

mg/kg = Milligrams per kilogram

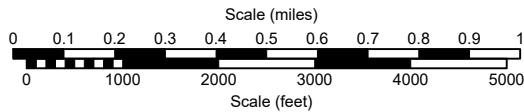
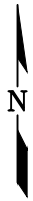
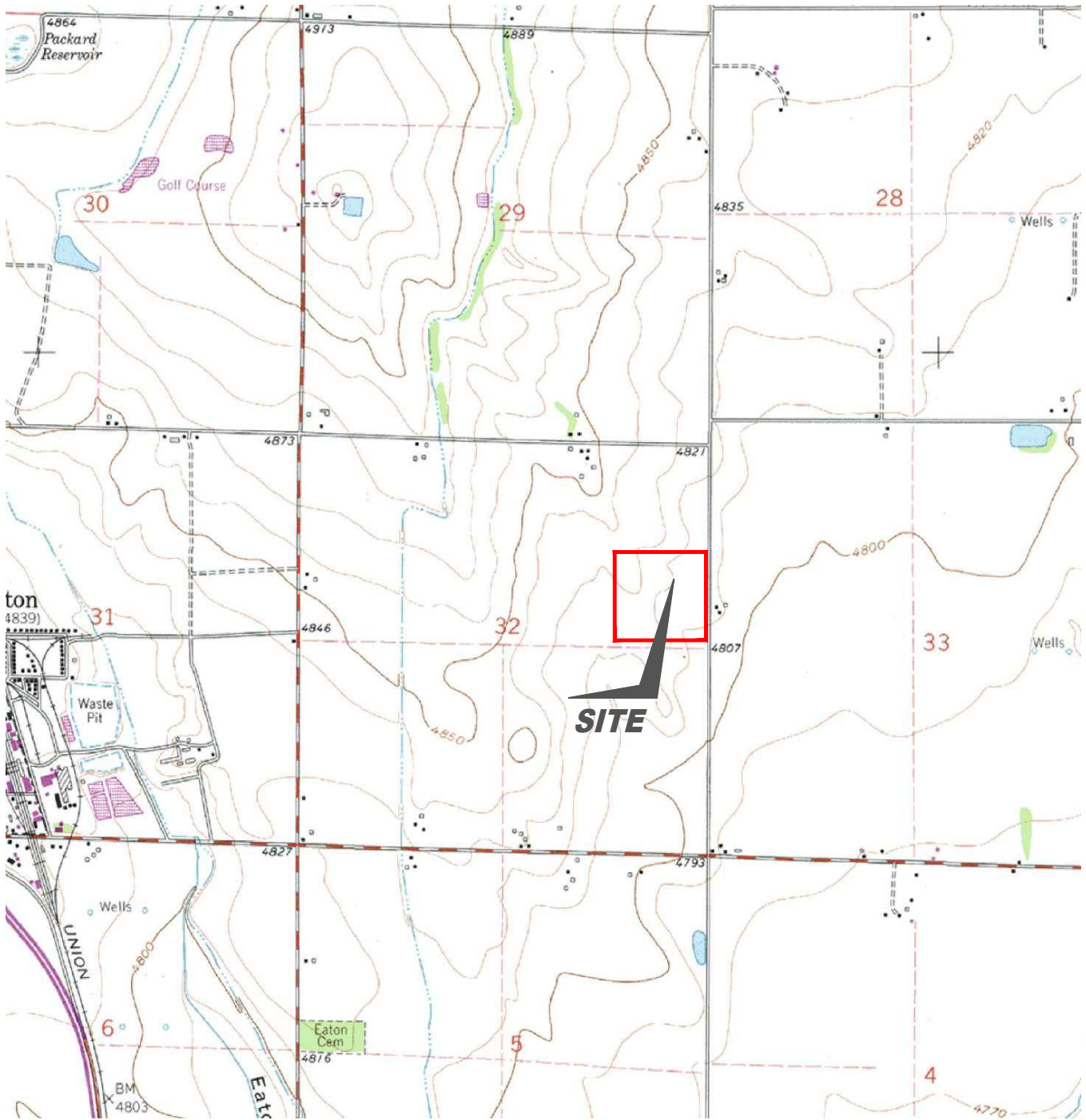
ft. = Feet

bgs = Below ground surface

* Indicates laboratory minimum detection limit in excess of SSL

NA - Not analyzed/Not applicable

= Data Collected By Eagle Environmental



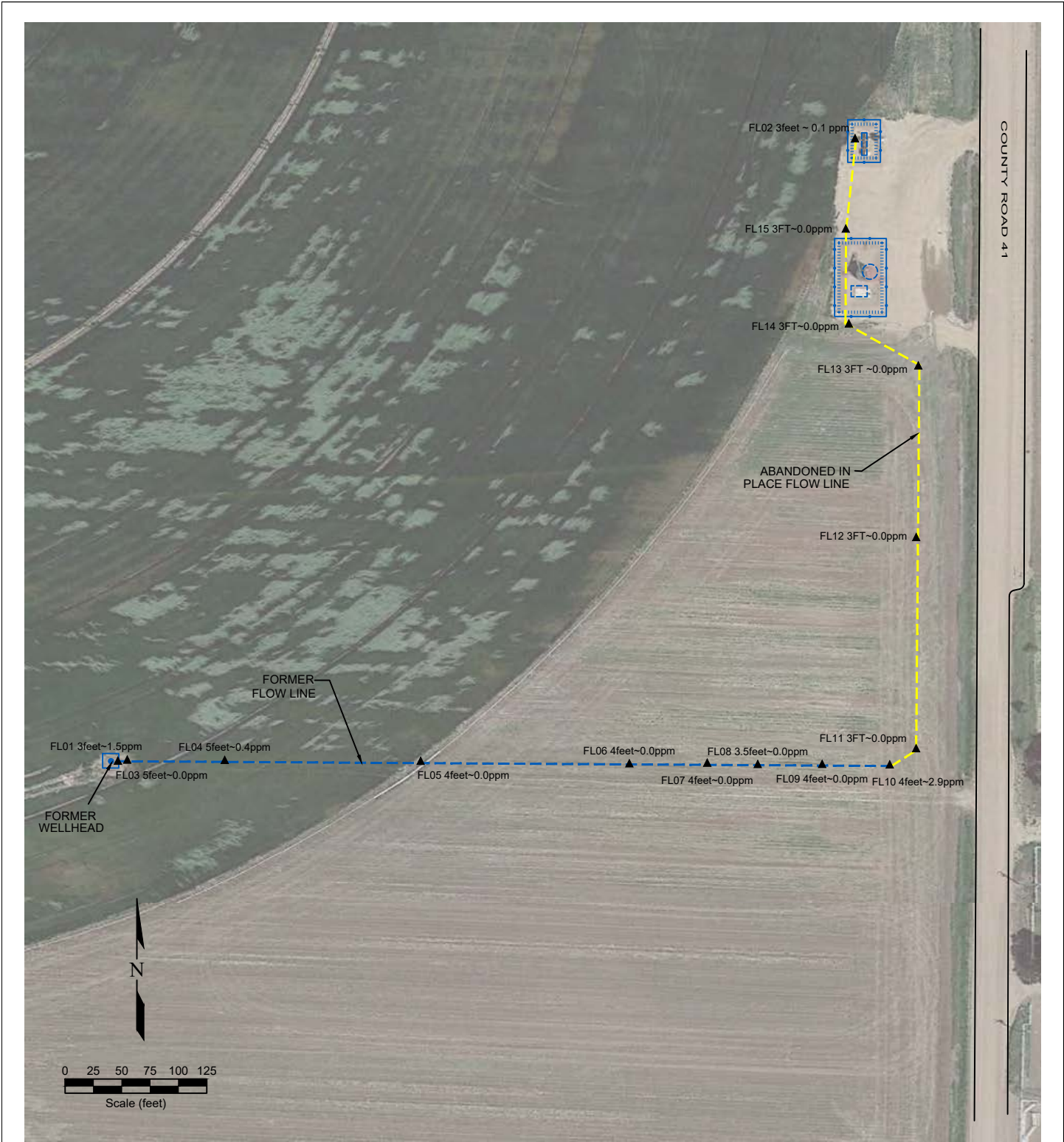
USGS 7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 1
SITE LOCATION MAP

Noble Energy, Inc. ~ Pappenheim 2-32
 SENE Sec. 32, T7N, R65W, 6th PM
 Weld County, Colorado
 40.532940°, -104.680130°

Project # CO23-174	API # 05-123-11851	Facility #
Date 7/21/25	Remediation # 28062	Filename 23174TFL





LEGEND

● WELL HEAD LOCATION	○ ABOVE GROUND STORAGE TANK	--- ABANDONED IN PLACE FLOW LINE
▲ PID READING LOCATION	FORMER FACILITY	--- FORMER FLOW LINE
	BUILDING	--- FENCE LINE
		--- CONTAINMENT BERM
		--- CONTAINMENT WALL

**Figure 2
 SITE MAP**

Noble Energy, Inc. ~ Pappenheim 2-32
 SENE Sec. 32, T7N, R65W, 6th PM
 Weld County, Colorado
 40.532940°, -104.680130°

Project No. CO23-174	API # 05-123-11851	Facility #
Date 7/21/25	Remediation # 28062	Filename 23174QFL2



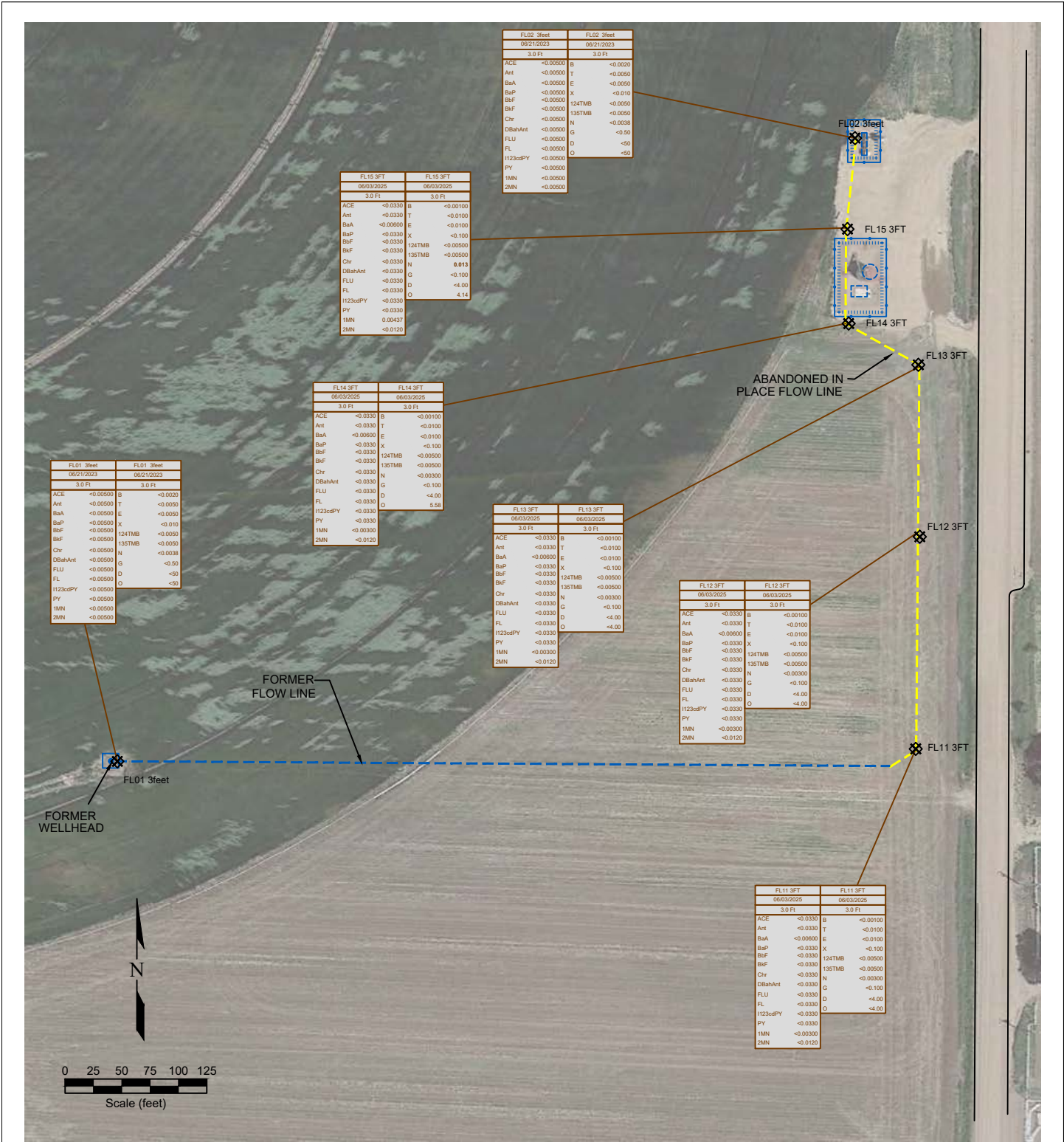


Figure 3
ORGANIC SOIL CHEMISTRY MAP

Noble Energy, Inc. ~ Pappenheim 2-32
 SENE Sec. 32, T7N, R65W, 6th PM
 Weld County, Colorado
 40.532940, -104.680130°

Project No. CO23-174	API # 05-123-11851	Facility #
Date 7/21/25	Remediation # 28062	Filename 23174QFL2



LEGEND

- WELL HEAD LOCATION
- ABOVE GROUND STORAGE TANK
- FORMER FACILITY
- ABANDONED IN PLACE FLOW LINE
- FORMER FLOW LINE
- FENCE LINE
- CONTAINMENT BERM
- CONTAINMENT WALL

SAMPLE ID	DEPTH (ft)	DATE SAMPLED	CONCENTRATION
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)
DBahAnt	<0.00500		DIBENZ (A,H) ANTHRACENE (mg/kg)
FLU	<0.00500		FLUORANTHENE (mg/kg)
FL	<0.00500		FLUORENE (mg/kg)
H123cdPY	<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)
B	<0.00200		BENZENE (mg/kg)
T	<0.00500		TOLUENE (mg/kg)
E	<0.00500		ETHYLBENZENE (mg/kg)
X	<0.01000		TOTAL XYLENES (mg/kg)
124TMB	<0.00500		1,2,4-TRIMETHYLBENZENE (mg/kg)
135TMB	<0.00500		1,3,5-TRIMETHYLBENZENE (mg/kg)
N	<0.00300		NAPHTHALENE (mg/kg)
G	<0.50		TPH-GRD (mg/kg)
D	<50		TPH-GRD (mg/kg)
O	<50		TPH-GRD (mg/kg)

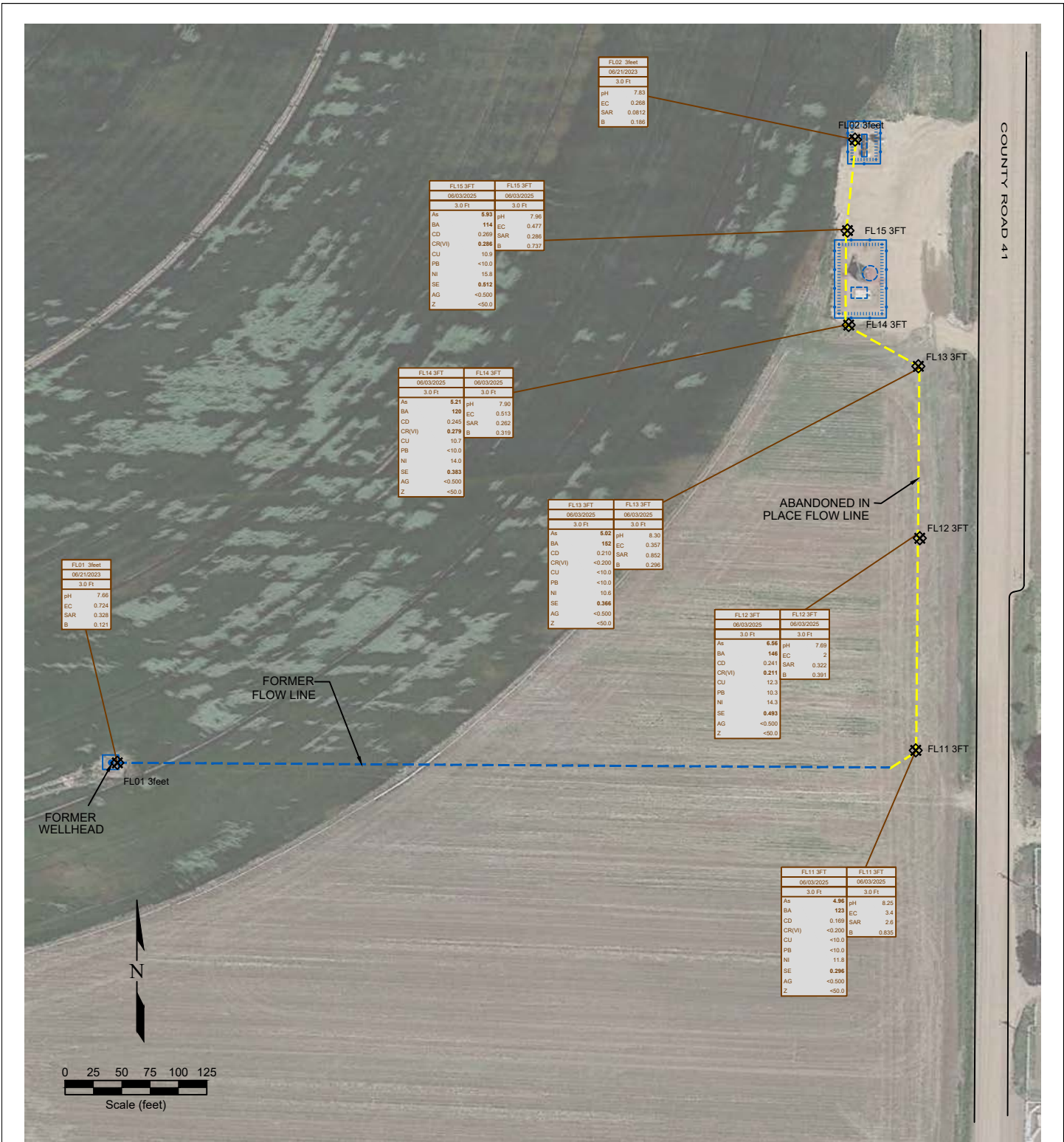


Figure 4
METALS AND INORGANIC SOIL CHEMISTRY MAP

Noble Energy, Inc. ~ Pappenheim 2-32
 SENE Sec. 32, T7N, R65W, 6th PM
 Weld County, Colorado
 40.532940, -104.680130°

Project No. CO23-174	API # 05-123-11851	Facility #
Date 7/21/25	Remediation # 28062	Filename 23174QFL2



SAMPLE	SAMPLE ID	DATE	DATE SAMPLED
As	ARSENIC (mg/kg)	DATE	DATE SAMPLED
BA	BARREN (mg/kg)	pH	pH (unit)
CD	CADMIUM (mg/kg)	EC	EC (microsiemens)
CR(VI)	CHROMIUM (mg/kg)	SAR	SAR (unit)
CU	COPPER (mg/kg)	B	BORON (mg/L)
PB	LEAD (mg/kg)		
NI	NICKEL (mg/kg)		
SE	SELENIUM (mg/kg)		
AG	SILVER (mg/kg)		
Z	ZINC (mg/kg)		

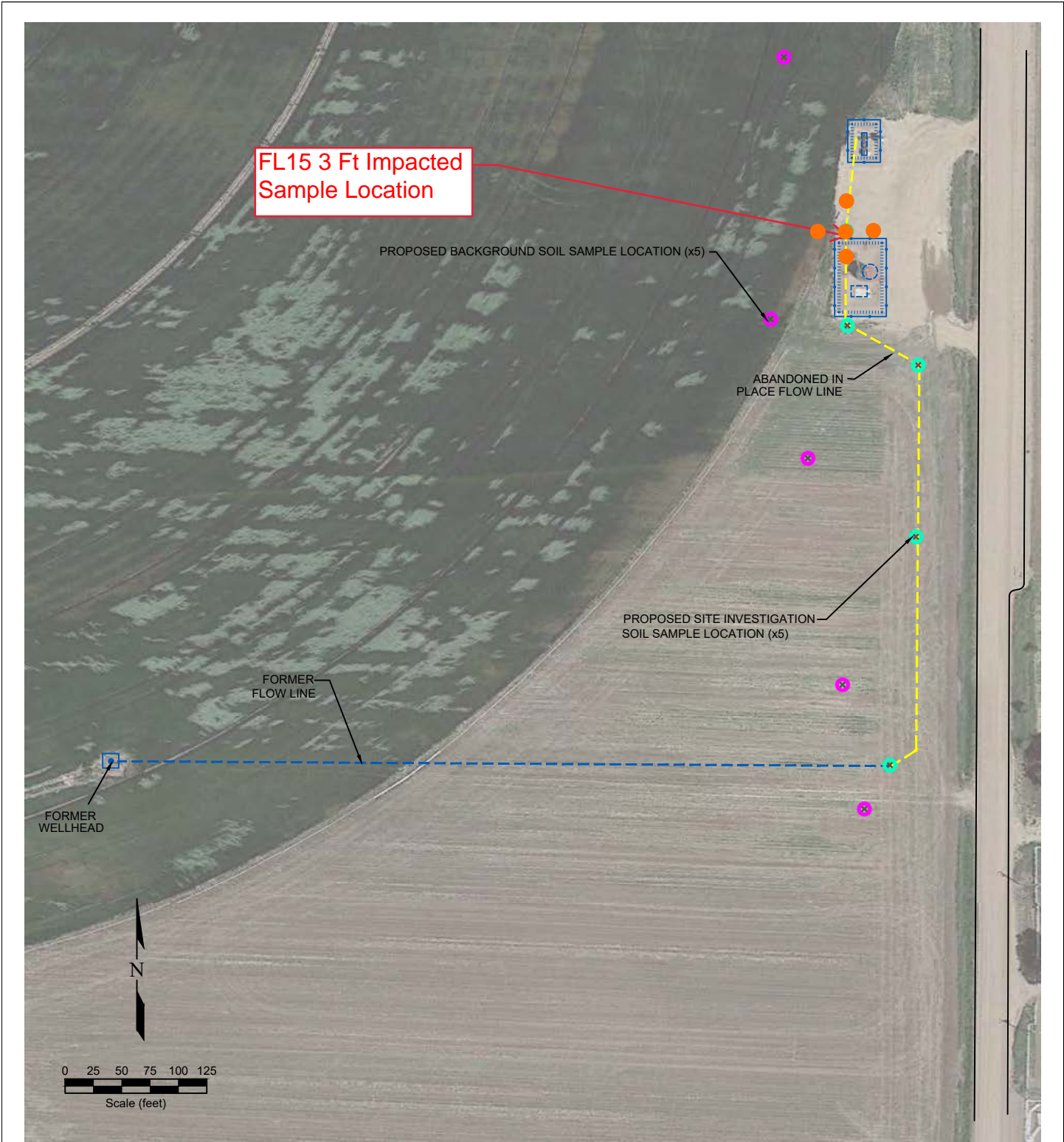


Figure 5

PROPOSED SOIL SAMPLE LOCATION MAP

Noble Energy, Inc. ~ Pappenheim 2-32
 SENE Sec. 32, T7N, R65W, 6th PM
 Weld County, Colorado
 40.532940°, -104.680130°

LEGEND

- WELL HEAD LOCATION
- ABOVE GROUND STORAGE TANK
- ✕ PROPOSED SITE INVESTIGATION SOIL SAMPLE LOCATION
- ✕ PROPOSED BACKGROUND SOIL SAMPLE LOCATION
- PROPOSED IMPACT DELINEATION SOIL BORING
- FORMER FACILITY
- BUILDING
- ABANDONED IN PLACE FLOW LINE
- FORMER FLOW LINE
- FENCE LINE
- CONTAINMENT BERM
- CONTAINMENT WALL

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