

**TABLE 1**  
**FIELD DATA SUMMARY TABLE**  
**NOBLE 100322**  
**HOWARD USX A09-13 FLOWLINE, WELD COUNTY, COLORADO**  
**REM # 32969**

Sample ID	Sample Date	Depth (ft)	GPS Data		PDOP Value	VOC Concentration (ppm)
			Latitude	Longitude		
BKG04@0.5'	03/07/2024	0.5'	40.4948992	-104.5632637	-	1.2
BKG04@2'	03/07/2024	2'	40.4948992	-104.5632637	-	1.4
BKG04@5'	03/07/2024	5'	40.4948992	-104.5632637	-	1.1
BKG05@0.5'	03/07/2024	0.5'	40.4951318	-104.5625985	-	1.2
BKG05@2'	03/07/2024	2'	40.4951318	-104.5625985	-	1.3
BKG05@5'	03/07/2024	5'	40.4951318	-104.5625985	-	1.4
FL01 2FT	03/07/2024	2'	40.4950771	-104.5620942	1.0	5.7
FL02 2FT	03/07/2024	2'	40.4947779	-104.5621657	0.8	4.9
FL03 2FT	03/07/2024	2'	40.4948793	-104.5629537	0.9	4.8
FL04 2FT	03/07/2024	2'	40.4956708	-104.5637477	1.2	3.9
FL05 2FT	03/07/2024	2'	40.4960238	-104.5641878	0.9	4.7

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

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

  = Material excavated and transported off site for disposal.

TABLE 2  
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA  
NOBLE 100322  
HOWARD USX A09-13 FLOWLINE, WELD COUNTY, COLORADO  
REM # 32969

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**		
FL01 2FT	03/07/2024	2'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
FL02 2FT	03/07/2024	2'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<b>0.021</b>	<500	<0.50	<50	<50
FL03 2FT	03/07/2024	2'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
FL04 2FT	03/07/2024	2'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
FL05 2FT	03/07/2024	2'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50

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 3  
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA  
NOBLE 100322  
HOWARD USX A09-13 FLOWLINE, WELD COUNTY, COLORADO  
REM # 32969

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
FL01 2FT	03/07/2024	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
FL02 2FT	03/07/2024	2'	0.0151	0.0198	<b>0.0269</b>	0.016	0.0211	0.00764	0.0237	<0.00500	0.0678	0.0166	0.0304	0.101	<0.00500	<0.00500
FL03 2FT	03/07/2024	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
FL04 2FT	03/07/2024	2'	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00755	<0.00500	<0.00500	0.0149	<0.00500	<0.00500
FL05 2FT	03/07/2024	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

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 4**  
**SUMMARY OF SOIL SUITABILITY FOR RECLAMATION**  
**NOBLE 100322**  
**HOWARD USX A09-13 FLOWLINE, WELD COUNTY, COLORADO**  
**REM # 32969**

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
BKG04@0.5'	03/07/2024	0.5'	8.28	0.442	1.29	<2.00
BKG04@2'	03/07/2024	2'	<b>8.39</b>	0.847	2.46	<2.00
BKG04@5'	03/07/2024	5'	8.24	0.544	1.46	<2.00
BKG05@0.5'	03/07/2024	0.5'	7.88	0.582	1.37	<2.00
BKG05@2'	03/07/2024	2'	8.17	0.564	2.70	<2.00
BKG05@5'	03/07/2024	5'	<b>8.38</b>	0.670	1.45	<2.00
FL01 2FT	03/07/2024	2'	<b>8.45</b>	0.818	0.608	<2.00
FL02 2FT	03/07/2024	2'	<b>8.39</b>	3.02	1.98	<2.00
FL03 2FT	03/07/2024	2'	<b>8.46</b>	1.12	<b>6.90</b>	<2.00
FL04 2FT	03/07/2024	2'	8.10	0.206	1.77	<2.00
FL05 2FT	03/07/2024	2'	<b>8.70</b>	0.603	0.83	<2.00
Maximum Root Background Concentration (0 - 3 ft)			<b>8.39</b>	0.847	2.70	NA
Average Root Background Concentration (0 - 3 ft)			8.18	0.609	1.96	NA
Maximum Background Concentration			<b>8.39</b>	0.847	2.70	NA
Average Background Concentration			8.22	0.608	1.79	NA

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 5  
SUMMARY OF METALS IN SOIL CHEMISTRY DATA  
NOBLE 100322  
HOWARD USX A09-13 FLOWLINE, WELD COUNTY, COLORADO  
REM # 32969

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
BKG04@0.5'	03/07/2024	0.5'	6.48	71.2	0.308	<0.30	17.4	11.5	6.80	<0.260	0.0526	39.5
BKG04@2'	03/07/2024	2'	7.49	31.0	0.294	<0.30	6.62	11.5	8.89	<0.260	0.0323	34.2
BKG04@5'	03/07/2024	5'	1.90	24.0	<0.200	<0.30	5.07	6.51	4.95	<0.260	0.0225	29.2
BKG05@0.5'	03/07/2024	0.5'	5.35	80.7	0.329	<0.30	16.40	11.6	7.19	<0.260	0.0538	40.3
BKG05@2'	03/07/2024	2'	8.28	33.0	0.279	<0.30	7.39	10.4	6.03	<0.260	0.0355	33.6
BKG05@5'	03/07/2024	5'	1.95	37.8	0.209	<0.30	5.02	10.2	5.99	<0.260	0.0244	31.4
FL01 2FT	03/07/2024	2'	15.3	55.9	<0.200	<0.30	4.90	10.1	4.16	<0.260	0.0269	24.5
FL02 2FT	03/07/2024	2'	23.0	45.7	<0.200	<0.30	4.51	7.83	3.04	<0.260	0.0224	21.4
FL03 2FT	03/07/2024	2'	7.65	63.5	0.319	<0.30	10.3	19.2	4.81	0.305	0.0828	30.5
FL04 2FT	03/07/2024	2'	3.35	60.6	0.259	<0.30	6.15	11.5	6.36	<0.260	0.0328	29.8
FL05 2FT	03/07/2024	2'	4.72	94.0	0.266	<0.30	5.92	8.52	6.69	<0.260	0.0393	23.2
Maximum Root Zone Background Concentration (0 - 3 ft)			8.28	80.7	0.329	NA	17.4	11.60	8.89	NA	0.0538	40.3
125% Average Root Zone Background Concentration (0 - 3 ft)			8.63	67.5	0.378	NA	14.9	14.06	9.03	NA	0.0544	46.1
Maximum Background Concentration			8.28	80.7	0.329	NA	17.4	11.60	8.89	NA	0.0538	40.3
125% Average Background Concentration			6.55	57.9	0.355	NA	12.1	12.86	8.30	NA	0.0461	43.4

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.

# Howard A09-13 Flowline

Date of Incident: 3/7/24

API#/Facility#: 05-123-24494

Legal Description: SWSW Sec: 9 Twp: 6N Rng: 64W M:6

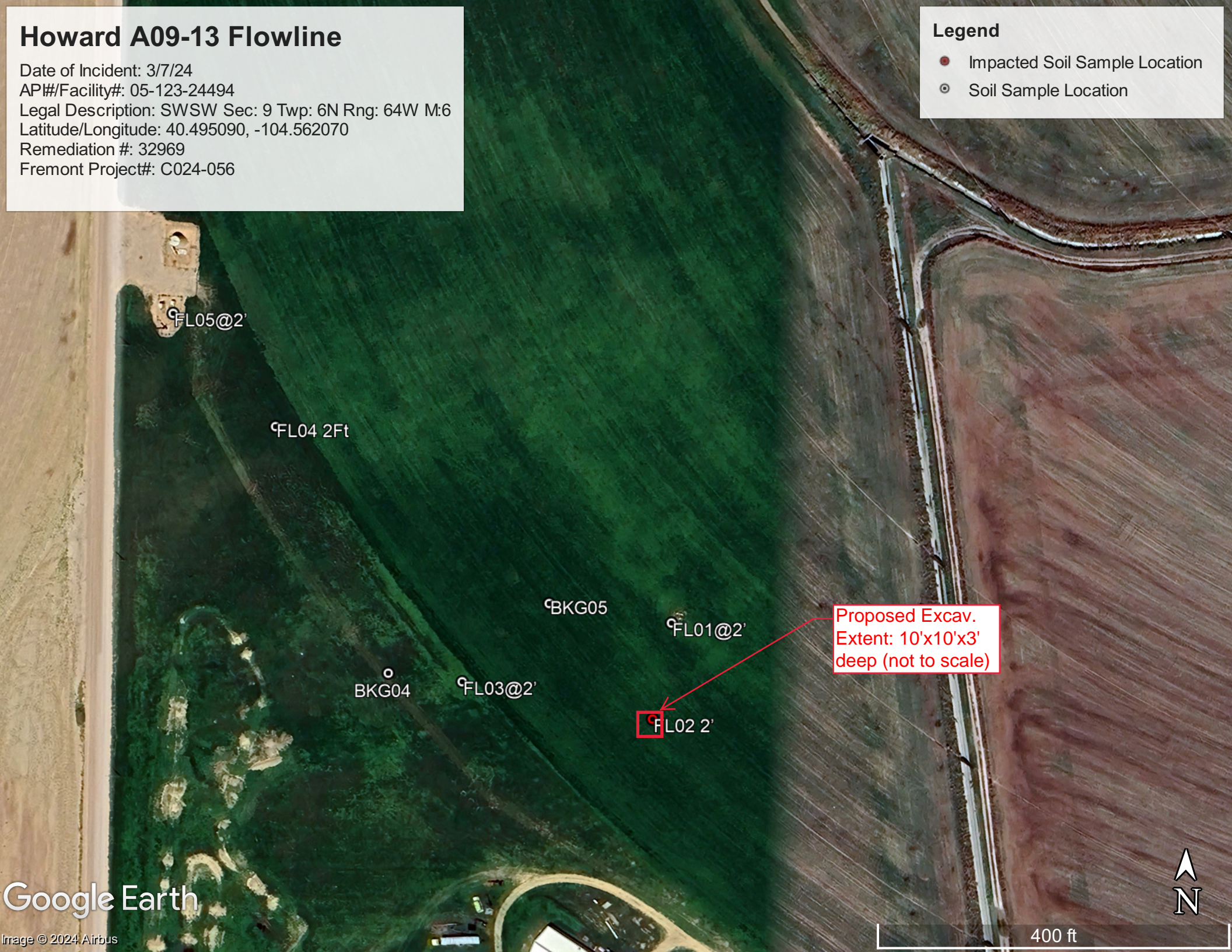
Latitude/Longitude: 40.495090, -104.562070

Remediation #: 32969

Fremont Project#: C024-056

**Legend**

- Impacted Soil Sample Location
- Soil Sample Location



FL05@2'

FL04 2Ft

BKG05

FL01@2'

Proposed Excav.  
Extent: 10'x10'x3'  
deep (not to scale)

BKG04

FL03@2'

FL02 2'





***Description:***

Howard A09-13 Flowline: FL05 - No Visual Staining or Odor



***Description:***

Howard A09-13 Flowline: FL01 - No Visual Staining or Odor

# Photo Log



***Description:***

Howard A09-13 Flowline: FL02 - No Visual Staining or Odor



***Description:***

Howard A09-13 Flowline: FL03 - No Visual Staining or Odor

# Photo Log



**Description:**

Howard A09-13 Flowline: FL04 - No Visual Staining or Odor