

SITE NAME/REM: Sater C13-27D TANK BATTERY / REM 32439							DATE: 2/14/2025	WEATHER: 20S, PARTLY CLOUDY
TYPE OF WORK: FACILITY DECOMMISSIONED/EXCAVATION BACKFILL							CLIENT: CHEVRON	
LAT/LONG: 40.319445, -104.496682							PERSONNEL: RJ & JW	
ESTIMATED DEPTH TO GROUNDWATER: NO GROUNDWATER PRESENT							OTHER OBSERVATIONS:	
SOIL SAMPLING							FACILITY INFRASTRUCTURE	
Date	Soil Sample ID	Soil Type	PID (ppm)	Staining (Y/N)	Odor (Y/N)	Time	EQUIPMENT	Quantity
							Above Ground Storage Tank (AST)	1
2/14/2025	AST01@0-6"	CL	12.7	N	N	10:40	Buried or Partially Buried Vessel	1
2/14/2025	PWV01-N@3'	CL	61.0	N	Y	10:30	Separator	1
2/14/2025	PWV01-E@3'	CL	11.2	N	Y	NA	Emission Control Device (ECD)	2
2/14/2025	PWV01-S@3'	CL	12.8	N	Y	NA	Dump Line	1
2/14/2025	PWV01-W@3'	CL	21.6	N	Y	NA	Wellhead	0
2/14/2025	PWV01@5'	CL	22.1	N	N	10:35	Flowline	1
2/14/2025	ECD01@0-6"	SP	0.1	N	N	NA	Third Party Equipment:	0
2/14/2025	ECD02@0-6"	SP	0.3	N	N	NA	Other:	0
2/14/2025	SEP01-DL@3'	CL	0.6	N	Y	10:20	Soil Loads Removed	
2/14/2025	SEP01-FL@3'	CL	9.7	Y	Y	10:25	IMPACTED SOIL IDENTIFIED? YES	
							ESTIMATED VOLUME OF IMPACTS: 95 CY	
							Date	Number
								CY
							Total Removed	
							Disposal Facility:	
							Groundwater Recovery	
							DATE GW ENCOUNTERED: NO	DEPTH:
							GROUNDWATER IN CONTACT WITH IMPACTED SOIL?	
							LNAPL OR SHEEN OBSERVED ON GW?	
GROUNDWATER SAMPLING							Date	BBLS
Date/Time	Groundwater Sample ID	Depth Collected	Turbid?	Sheen?	Odor?	Photo?		
							Total Removed	
							Disposal Facility:	

TABLE 1
FIELD DATA SUMMARY TABLE
NOBLE 100322
SATER C13-27D, WELD COUNTY, COLORADO
REM # 32439

Sample ID	Sample Date	Depth (ft)	GPS Data Latitude/Longitude		PDOP Value	VOC Concentration (ppm)
AST01@0-6"	2/14/2025	0-0.5	40.319435	-104.496523	0.867566	12.7
PWV01-N@3'	2/14/2025	3	40.319468	-104.496561	-	61.0
PWV01-E@3'	2/14/2025	3	40.319435	-104.496536	0.979850	11.2
PWV01-S@3'	2/14/2025	3	40.319426	-104.496562	0.928209	12.8
PWV01-W@3'	2/14/2025	3	40/319444	-104.496585	0.928582	21.6
PWV01@5'	2/14/2025	5	40.319435	-104.496554	0.951501	22.1
ECD01@0-6"	2/14/2025	0-0.5	40.319511	-104.496219	0.858299	0.1
ECD02@0-6"	2/14/2025	0-0.5	40.319502	-104.496882	0.866259	0.3
SEP01-DL@3'	2/14/2025	3	40.319467	-104.496766	0.836808	0.6
SEP01-FL@3'	2/14/2025	3	40.319453	-104.496812	0.836416	9.7
PH01@3'	2/14/2025	3	40.318658	-104.497052	0.917159	1.2

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

ft = Feet

TABLE 2
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA
NOBLE 100322
SATER C13-27D, WELD COUNTY, COLORADO
REM # 32439

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**		
AST01@0-6"	2/14/2025	0-0.5	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
PWV01-N@3'	2/14/2025	3	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
PWV01@5'	2/14/2025	5	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
PW01-N@3'	2/14/2025	3	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
AST01@0-6"	2/14/2025	0-0.5	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
SEP01-DL@3'	2/14/2025	3	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
SEP01-FL@3'	2/14/2025	3	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP

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
- (<) = Analytical result is less than the indicated laboratory reporting limit.
- TPH-GRO = Total petroleum hydrocarbons - gasoline range organics
- TPH-DRO = Total petroleum hydrocarbons - diesel range organics
- TPH-ORO = Total petroleum hydrocarbons - oil range organics
- mg/kg = Milligrams per kilogram
- ft = Feet
- bgs = Below ground surface
- NA - Not analyzed

TABLE 3
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA
NOBLE 100322
SATER C13-27D, WELD COUNTY, COLORADO
REM # 32439

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
AST01@0-6"	2/14/2025	0-0.5	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
PWV01-N@3'	2/14/2025	3	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
PWV01@5'	2/14/2025	5	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
PW01-N@3'	2/14/2025	3	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
AST01@0-6"	2/14/2025	0-0.5	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
SEP01-DL@3'	2/14/2025	3	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
SEP01-FL@3'	2/14/2025	3	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP

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
(<) = Analytical result is less than the indicated laboratory reporting limit.
TPH-GRO = Total petroleum hydrocarbons - gasoline range organics
TPH-DRO = Total petroleum hydrocarbons - diesel range organics
TPH-ORO = Total petroleum hydrocarbons - oil range organics
mg/kg = Milligrams per kilogram
ft = Feet
bgs = Below ground surface
NA - Not analyzed

TABLE 4
SUMMARY OF SOIL SUITABILITY FOR RECLAMATION
NOBLE 100322
SATER C13-27D, WELD COUNTY, COLORADO
REM # 32439

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
AST01@0-6"	2/14/2025	0-0.5	AP	AP	AP	AP
PWV01-N@3'	2/14/2025	3	AP	AP	AP	AP
PWV01@5'	2/14/2025	5	AP	AP	AP	AP
PW01-N@3'	2/14/2025	3	AP	AP	AP	AP
AST01@0-6"	2/14/2025	0-0.5	AP	AP	AP	AP
SEP01-DL@3'	2/14/2025	3	AP	AP	AP	AP
SEP01-FL@3'	2/14/2025	3	AP	AP	AP	AP
Maximum Background Concentration			NA	NA	NA	NA

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

TABLE 5
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
NOBLE 100322
SATER C13-27D, WELD COUNTY, COLORADO
REM # 32439

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
AST01@0-6"	2/14/2025	0-0.5	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
PWV01-N@3'	2/14/2025	3	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
PWV01@5'	2/14/2025	5	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
PW01-N@3'	2/14/2025	3	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
AST01@0-6"	2/14/2025	0-0.5	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
SEP01-DL@3'	2/14/2025	3	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
SEP01-FL@3'	2/14/2025	3	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
1.25x Maximum Background Concentration			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

1. **Bold** faced values exceed the ECMC Table 915-1 limit(s), but are within 1.25x background concentrations.

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

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

4. 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

Chevron Rockies Business Unit

Field Qualitative Criteria for ECMC Reporting Associated with the Discovery of Potentially Impacted Material

If answered **Yes** to any of the questions listed below, this may suggest the presence of potentially impacted materials as outlined in ECMC Rule 912. Out of an abundance of caution, a “Yes” response will be reported to the ECMC within 24 hours after discovery, regardless of laboratory results. **Immediately notify the RBU Remediation Team.** Include a copy of this Field Qualitative Spill Criteria Checklist in the field Report.

Please answer the following questions when on-site:

1. Is there visible petroleum hydrocarbon staining in the soil?
(Yes / **No**)
2. Does the soil sample from the stained area have a petroleum odor?
(Yes / **No**)
3. Is there a petroleum hydrocarbon sheen on the nearby surface water?
(Yes / **No**)
4. Does there appear to be a sheen of the surface of accumulated groundwater or seeps within the excavation indicative of petroleum?
(Yes / **No**)
5. Is stained soil in contact with groundwater?
(Yes / **No**)

Please Include relevant photos of the site conditions for items 1-5.

Location name: SATER C13-27D (REM #32439)

Please Circle Facility Type: Well / Flowline / **Production Facility** / Other

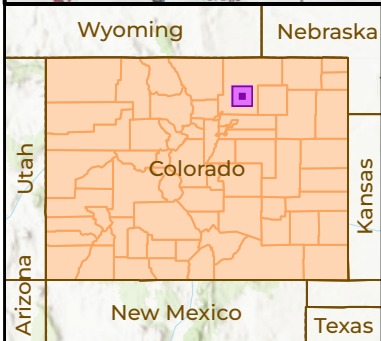
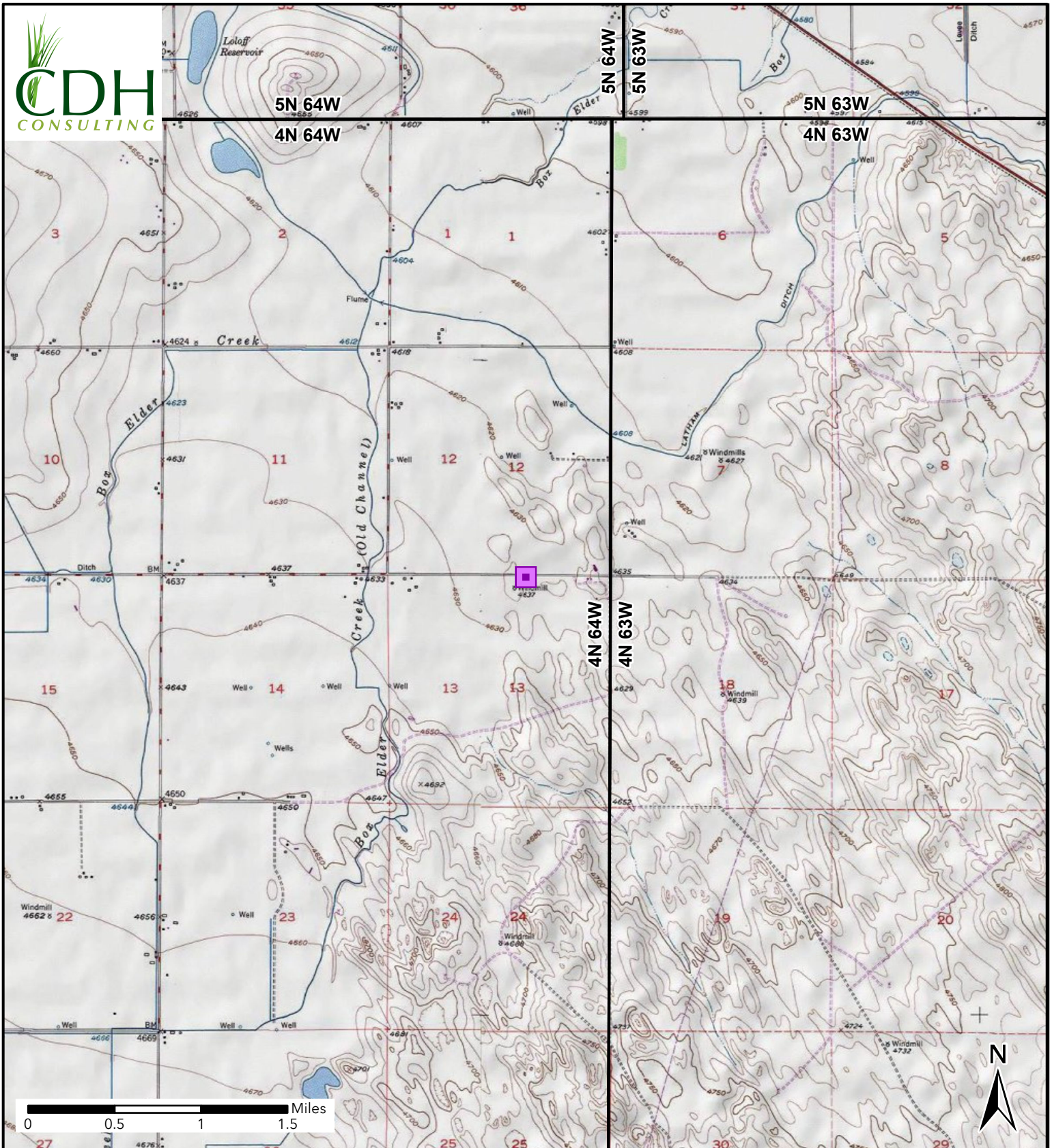


Figure 1
Site Location
SATER C13-27D TB
 NWNE-SEC 13-T4N-R64W
 Weld County, Colorado
 Chevron

 Site Location

Attachment A - Photographic Log

Sater C13-27D Tank Battery

Noble 100322

February 14, 2025

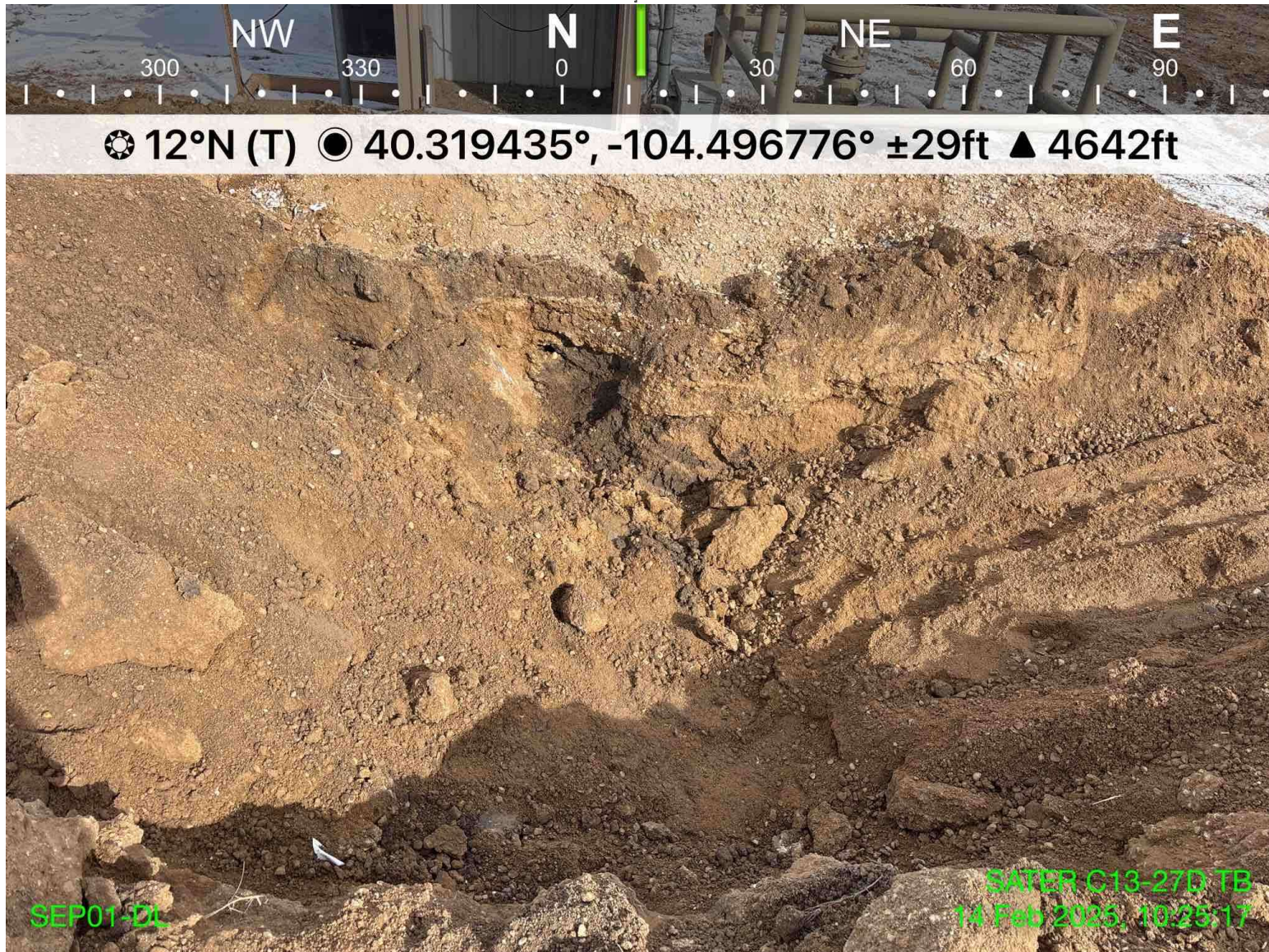


Photo 1: SEP01-DL impacts observed, facing north

Attachment A - Photographic Log

Sater C13-27D Tank Battery

Noble 100322

February 14, 2025



Photo 2: SEP01-FL impacts observed, facing southwest

Attachment A - Photographic Log

Sater C13-27D Tank Battery

Noble 100322

February 14, 2025



Photo 3: PWV01 impacts observed, facing north

Attachment A - Photographic Log

Sater C13-27D Tank Battery

Noble 100322

February 14, 2025



Photo 4: FL01-R-W impacts observed, facing south

Attachment A - Photographic Log

Sater C13-27D Tank Battery

Noble 100322

February 14, 2025



Photo 5: FL01-01 impacts observed, facing southwest

Attachment A - Photographic Log

Sater C13-27D Tank Battery

Noble 100322

February 14, 2025



Photo 6: FL01-02 impacts observed, facing southwest

Attachment A - Photographic Log

Sater C13-27D Tank Battery

Noble 100322

February 14, 2025



Photo 7: FL01-03 impacts observed, facing southeast

Attachment A - Photographic Log

Sater C13-27D Tank Battery

Noble 100322

February 14, 2025



Photo 8: FL01-04 impacts observed, facing northeast

Attachment A - Photographic Log

Sater C13-27D Tank Battery

Noble 100322

February 14, 2025



Photo 9: FL01-R-S impacts observed, facing southwest