



Facility Closure Investigation and Environmental Summary

Schmerge 44-4 Wellhead

ECMC Remediation Project #38713

Weld County, Colorado

Attachments:

Figure 1 – General Location Map

Figure 2 – Wellhead Soil Sample and Field Screening Locations

Table 1 – Soil Sample and Field Screening Location Information

Table 2 – Soil Analytical Results Summary Table – Volatile Organics

Table 3 – Soil Analytical Results Summary Table – PAHs

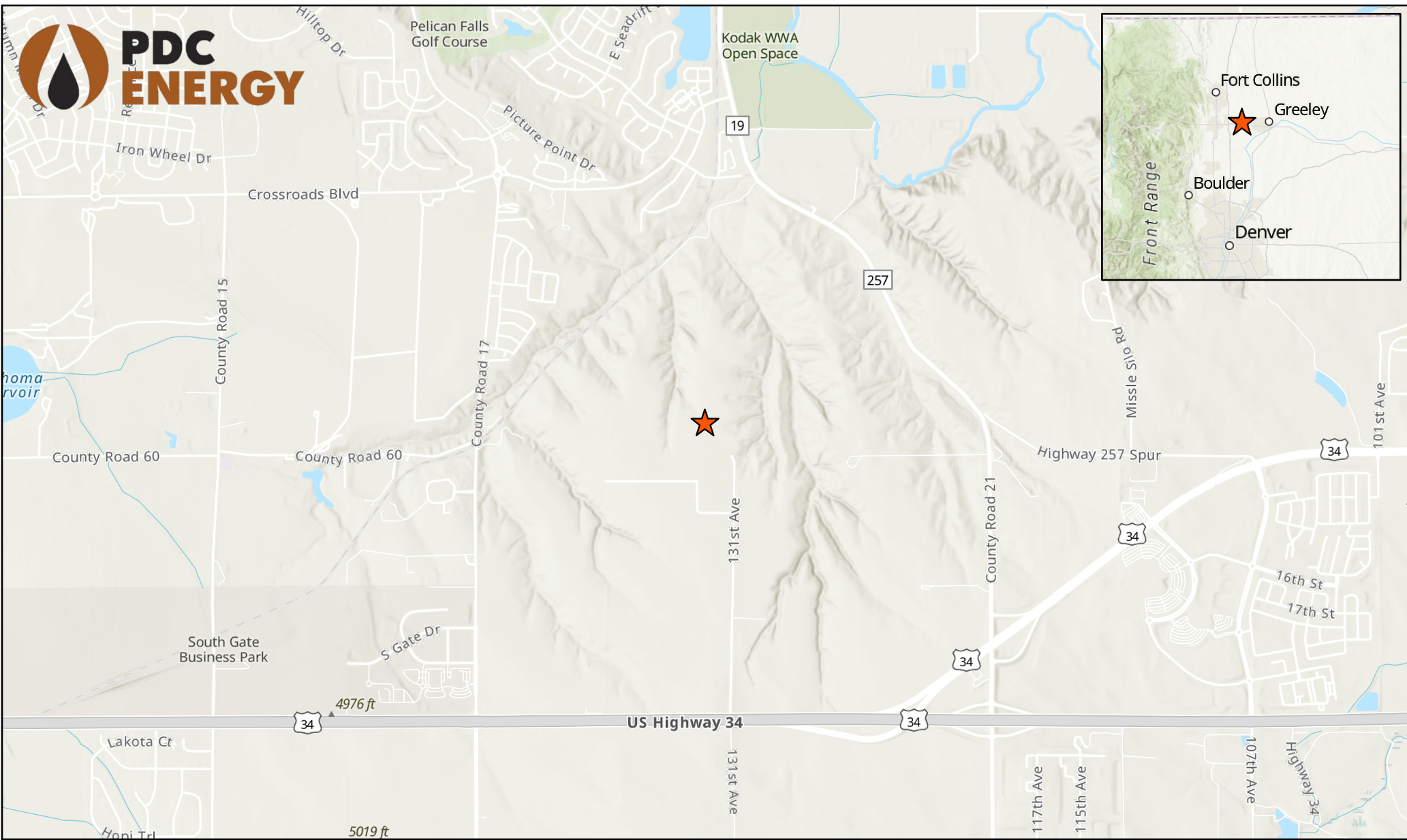
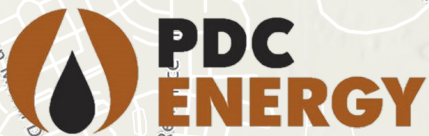
Table 4 – Soil Analytical Results Summary Table – Soil Suitability

Table 5 – Soil Analytical Results Summary Table – Metals

Attachment A: Photographic Log

Attachment B: Facility Closure Checklists

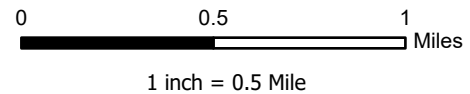
FIGURES



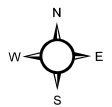
LEGEND



Site Location



1 inch = 0.5 Mile



Project No: 025-202

Map By: JW

Date: 06/27/2025

**SCHMERGE 44-4 WELLHEAD
GENERAL LOCATION MAP**
PDC ENERGY
SE 1/4 SE 1/4 SECTION 4
T5N R67W, 6TH PM
WELD COUNTY, COLORADO



610 Garrison St., Unit T
Lakewood, CO 80215
303.378.4036

Figure

1

FLR01@4 (0.3) ●
 WH01-W@4 (2.5) ● ● WH01-E@4 (2.7)
 WH01-S@4 (2.9) ●

WH01@6	
4/3/2025	
pH:	8.50
Arsenic (mg/kg):	1.93
Barium (mg/kg):	183
Lead (mg/kg):	16.2

LABEL LEGEND

XXXX@X: SAMPLE NAME @ DEPTH IN FEET
 WH: WELLHEAD SAMPLE
 FLR: FLOWLINE RISER SAMPLE
BOLD: ABOVE ECMC TABLE 915-1 GWSSL

Maxar, Microsoft

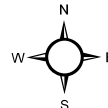
Legend

● Soil Sample ● Screening Location

NOTES:

- Sample Label (PID Result in ppm)
- ppm = parts per million
- PID = photoionization detector

0 5 10
 Feet
 1 inch = 10 Feet



Project No: 025-202

Map By: JW

Date: 06/27/2025

SCHMERGE 44-4 WELLHEAD
SOIL SAMPLE AND FIELD SCREENING LOCATIONS
 PDC ENERGY
 SE 1/4 SE 1/4 SECTION 4
 T5N R67W, 6TH PM
 WELD COUNTY, COLORADO



610 Garrison St., Unit T
 Lakewood, CO 80215
 303.378.4036

Figure

2

TABLE 1
FIELD DATA SUMMARY TABLE
PDC 69175
SCHMERGE 44-4 WELLHEAD, WELD COUNTY, COLORADO
REM # 38713

Sample ID	Sample Date	Depth (ft-bgs)	GPS Data Latitude/Longitude		VOC Concentration (ppm)
WH01@6	4/3/2025	6	40.423163	-104.890455	0.4
FLR01@4	4/3/2025	4	40.423172	-104.890456	0.3
WH01-E@4	4/3/2025	4	40.423163	-104.890448	2.7
WH01-W@4	4/3/2025	4	40.423163	-104.890463	2.5
WH01-S@4	4/3/2025	4	40.423155	-104.890454	2.9

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).

ppm - Parts per million

ft-bgs - feet below ground surface

TABLE 2
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA
PDC 69175
SCHMERGE 44-4 WELLHEAD, WELD COUNTY, COLORADO
REM # 38713

Sample ID	Sample Date	Depth (ft-bgs)	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**		
WH01@6	4/3/2025	6	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<100.50	<0.50	<50	<50

1. Grey highlighted soil analytical values indicate result is less than laboratory reporting limit

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

TPH-GRO = Total petroleum hydrocarbons - gasoline range organics

TPH-DRO = Total petroleum hydrocarbons - diesel range organics

TPH-ORO = Total petroleum hydrocarbons - oil range organics

ft-bgs - feet below ground surface

mg/kg - milligrams per kilogram

Analyzed out of hold time

TABLE 3
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA
PDC 69175
SCHMERGE 44-4 WELLHEAD, WELD COUNTY, COLORADO
REM # 38713

Sample ID	Sample Date	Depth (ft-bgs)	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
WH01@6	4/3/2025	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

1. Grey highlighted soil analytical values indicate result is less than laboratory reporting limit
ft-bgs - feet below ground surface
mg/kg - milligrams per kilogram

TABLE 4
SUMMARY OF SOIL SUITABILITY FOR RECLAMATION
PDC 69175
SCHMERGE 44-4 WELLHEAD, WELD COUNTY, COLORADO
REM # 38713

Sample ID	Sample Date	Depth (ft-bgs)	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
WH01@6	4/3/2025	6	8.50	0.646	1.58	<2.00

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

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

3. Grey highlighted soil analytical values indicate result is less than laboratory reporting limit

ft-bgs - feet below ground surface

EC - Electrical Conductivity

SAR - Sodium adsorption ratio

mmhos/cm - millimhos per centimeter

mg/L - milligrams per liter

TABLE 5
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
PDC 69175
SCHMERGE 44-4 WELLHEAD, WELD COUNTY, COLORADO
REM # 38713

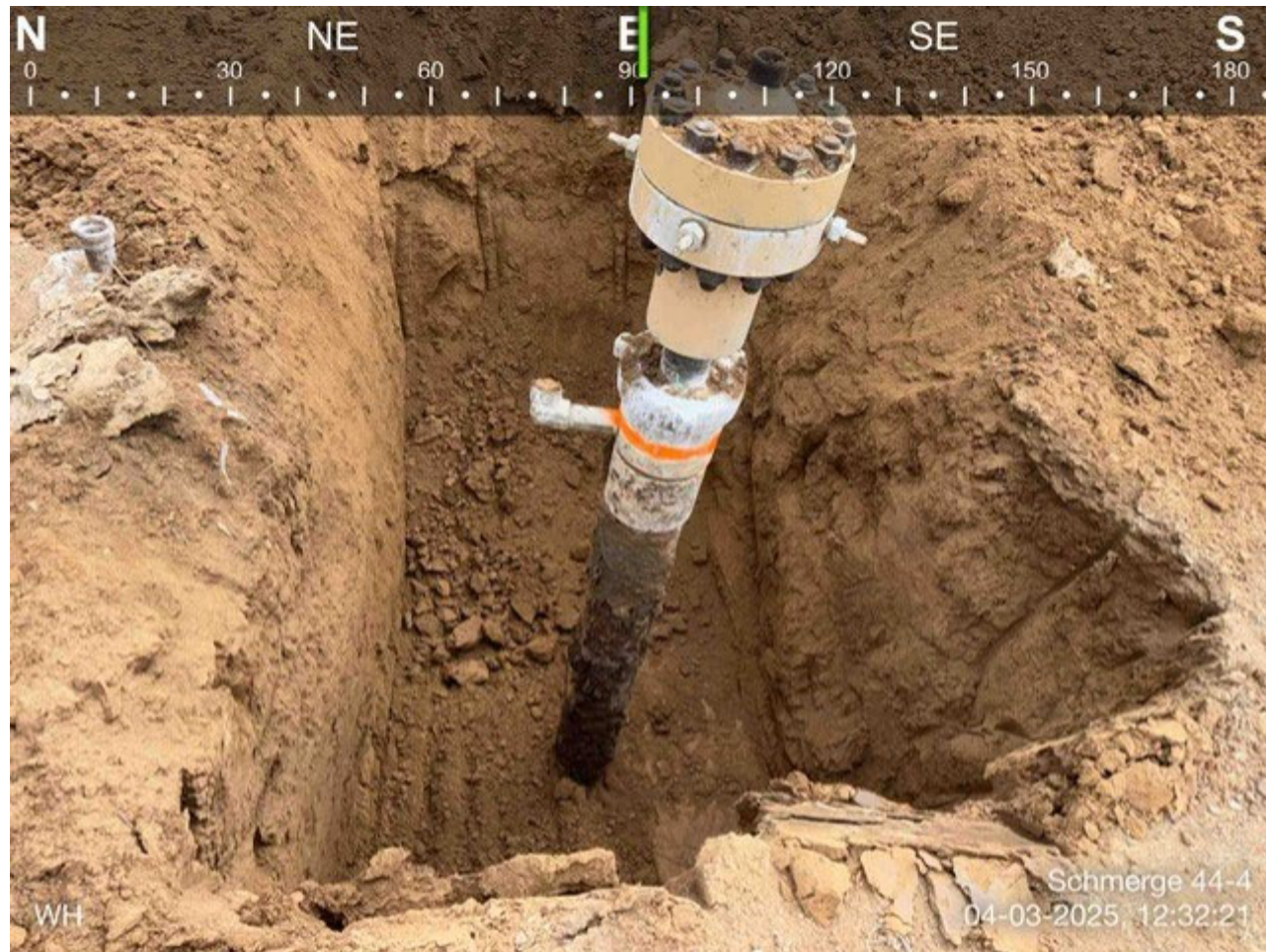
Sample ID	Sample Date	Depth (ft-bgs)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
ECMC Table 915-1 Limits (Residential SSL)			0.68	15000	71	0.3	3100	400	1500	390	390	23000
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
WH01@6	4/3/2025	6	1.93	183	0.257	<0.30*	7.18	16.2	5.52	<0.260	0.0940	18.7

1. **Bold** faced 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. Grey highlighted soil analytical values indicate result is less than laboratory reporting limit
* Indicates laboratory reporting or minimum detection limit in excess of SSL
ft-bgs - feet below ground surface
mg/kg - milligrams per kilogram

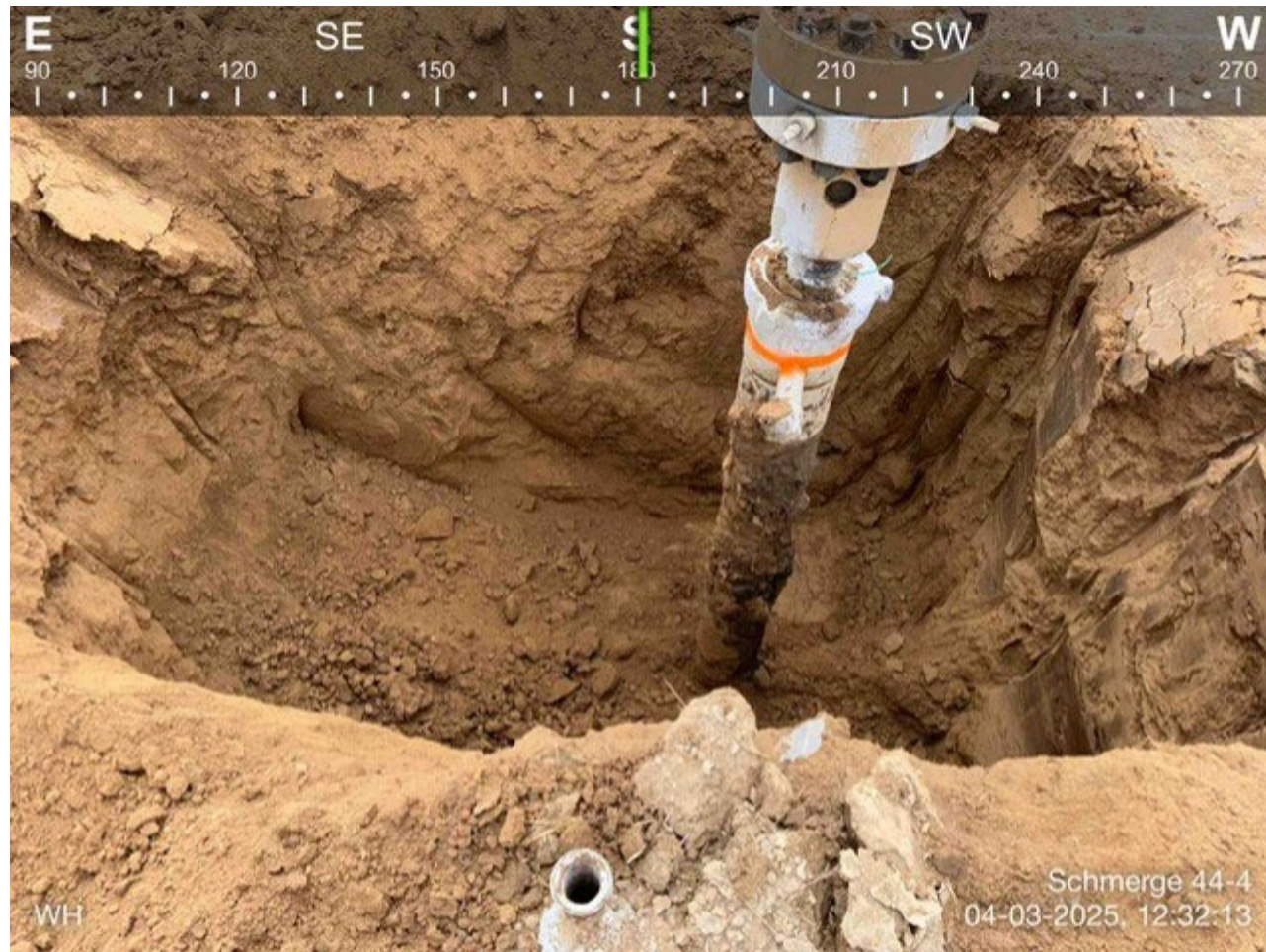
TABLES

ATTACHMENT A
PHOTOGRAPHIC LOG

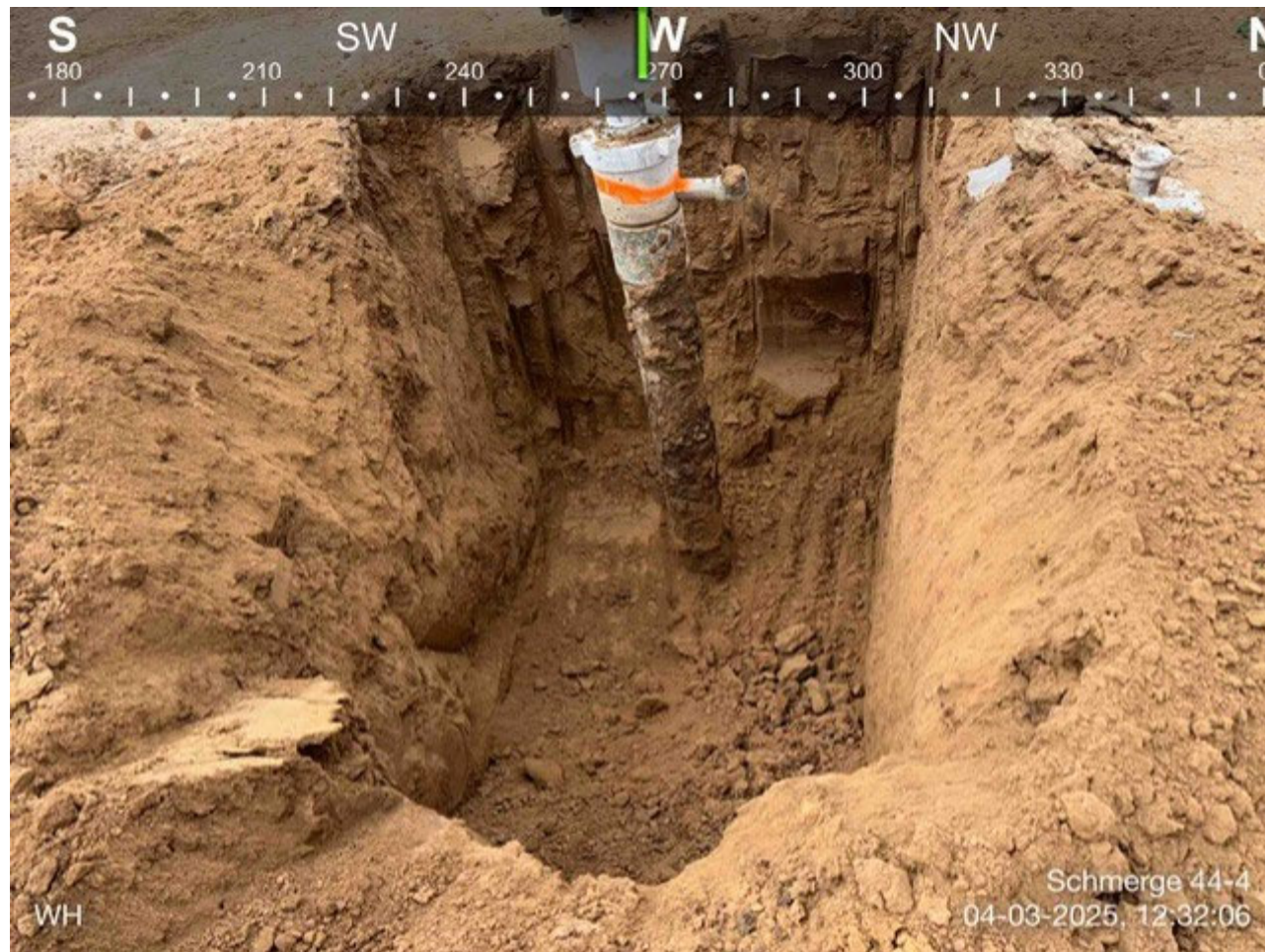
SCHMERGE 44-4 Wellhead Photographic Log



SCHMERGE 44-4 Wellhead Photographic Log



SCHMERGE 44-4 Wellhead Photographic Log



ATTACHMENT B
FACILITY CLOSURE CHECKLISTS

Wellhead Closure Checklist COGCC Rule 911.a.(4) Environmental Site Closure Assessment Field Form							
Additional attachments (optional):		Pit Closure		Tank Battery Closure		Flowline Closure	Partially Buried Vault Closure
Site Name & COGCC Facility Number: Schmerge 44-4, 279124		Date: 04/03/2025					Remediation Project #: 38713
Associated Wells: NA		Age of Site: 08/14/2005 - Spud Date					Number of Photos Attached: 3
Location: (GPS coordinates of wellhead or southeastern most wellhead for multiple) 40.423140 / -104.890420						Estimated Facility Size (acres): ~0.01	
General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.) Overall good							
USCS Soil Type: SM				Estimated Depth to Groundwater: Unknown as none encountered			
Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) None encountered or observed							
Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) None encountered or observed							
Wellhead(s)							
Well API	05-123-23143						
Age	08/14/2005 - Spud Date						
Condition of surface around wellhead	Good						
PID Readings	0.3 ppm - 2.9 ppm						
Condition of subsurface (staining present)	Good						
PID Readings	0.4 ppm						
Sample taken? Location/Sample ID#	WH01@6						
Photo Number(s)	1-3						
Other observations regarding wellheads: NA							
Summary							
Was impacted soil identified? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - less than 10 cubic yards <input type="checkbox"/> Yes - more than 10 cubic yards							
Total number of samples field screened: 5				Total number of samples collected: 5			
Highest PID Reading: 2.9 ppm				Total number of samples submitted to lab for analysis: 1			
If more than 10 cubic yards of impacted soil were observed:							
Vertical extent:				Estimated spill volume:			
Lateral extent:				Volume of soil removed:			
Is additional investigation required?							
Was groundwater encountered during the investigation? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - not impacted or in contact with impacted soils <input type="checkbox"/> Yes - groundwater impacted and/or in contact with impacted soils							
Measured depth to groundwater:				Was remedial groundwater removal conducted? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Date Groundwater was encountered:				Commencement date of removal:			
Sheen on groundwater? <input type="checkbox"/> Yes <input type="checkbox"/> No				Volume of groundwater removed prior to sampling:			
Free product observed? <input type="checkbox"/> Yes <input type="checkbox"/> No				Volume of groundwater removed post sampling:			
Total number of samples collected:				Total Volume of groundwater removed:			
Total number of samples submitted to lab for analysis:							