



Facility Closure Investigation and Environmental Summary

Guttersen USX D21-17 Wellhead

ECMC Remediation Project #36262

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

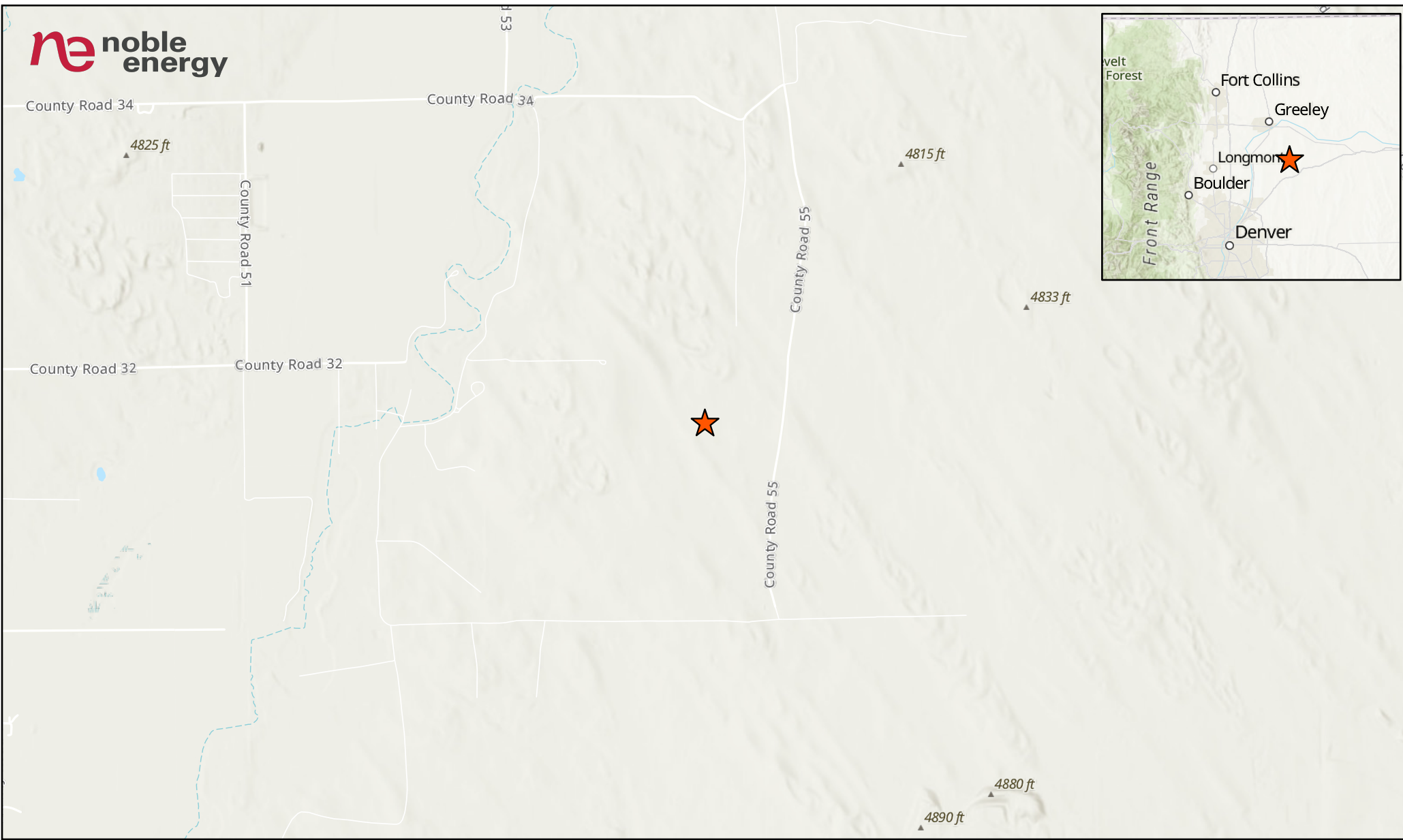
Table 4 – Soil Analytical Results Summary Table – Soil Suitability

Table 5 – Soil Analytical Results Summary Table – Metals

Attachment A: Photographic Log

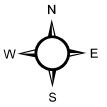
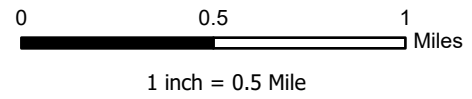
Attachment B: Facility Closure Checklists

FIGURES



LEGEND

 Site Location



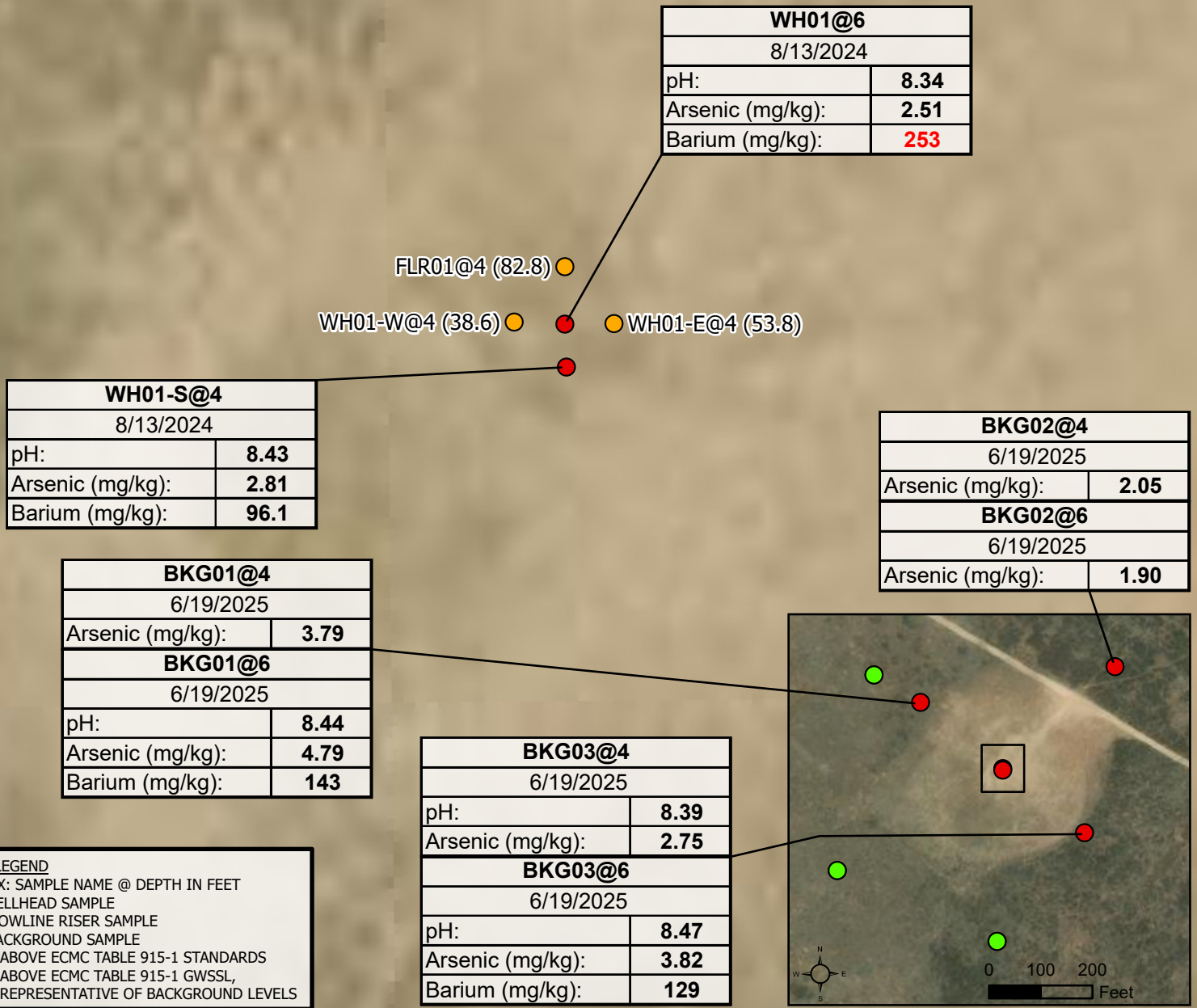
Project No:	024-431
Map By:	JW
Date:	10/09/2024

**GUTTERSEN USX D21-17 WELLHEAD
GENERAL LOCATION MAP**
NOBLE ENERGY
NE 1/4 NE 1/4 SECTION 21
T3N R64W, 6TH PM
WELD COUNTY, COLORADO



1843 Sunlight Dr.
Longmont, CO 80504
303.378.4036

Figure
1



Project No: 024-431
Map By: JW
Date: 12/13/2025

**GUTTERSEN USX D21-17 WELLHEAD
SOIL SAMPLE AND FIELD SCREENING LOCATIONS**
NOBLE ENERGY
NE 1/4 NE 1/4 SECTION 21
T3N R64W, 6TH PM
WELD COUNTY, COLORADO



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

Figure
2

Chiron, Figure 2 - Template Noble Wellhead - Soil Sample and Field Screening Locations

TABLES

TABLE 1
FIELD DATA SUMMARY TABLE
NOBLE 100322
GUTTERSEN USX D21-17 WELLHEAD, WELD COUNTY, COLORADO
REM # 36262

Sample ID	Sample Date	Depth (ft-bgs)	GPS Data Latitude/Longitude		VOC Concentration (ppm)
WH01@6	8/13/2024	6	40.214605	-104.551351	83.8
FLR01@4	8/13/2024	4	40.214615	-104.551351	82.8
WH01-W@4	8/13/2024	4	40.214605	-104.551363	38.6
WH01-E@4	8/13/2024	4	40.214605	-104.551340	53.8
WH01-S@4	8/13/2024	4	40.214597	-104.551351	117.8
BKG01	6/19/2025	4,6	40.214960	-104.551917	NM
BKG02	6/19/2025	4,6	40.215139	-104.550568	NM
BKG03	6/19/2025	4,6	40.214258	-104.550790	NM

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

NM - Not Measured

TABLE 2
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA
NOBLE 100322
GUTTERSEN USX D21-17 WELLHEAD, WELD COUNTY, COLORADO
REM # 36262

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	8/13/2024	6	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.002	<125.200	<0.200	<25.0	<100
WH01-S@4	8/13/2024	4	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.002	<125.200	<0.200	<25.0	<100

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

TABLE 3
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA
NOBLE 100322
GUTTERSEN USX D21-17 WELLHEAD, WELD COUNTY, COLORADO
REM # 36262

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	8/13/2024	6	<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
WH01-S@4	8/13/2024	4	<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. 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
NOBLE 100322
GUTTERSEN USX D21-17 WELLHEAD, WELD COUNTY, COLORADO
REM # 36262

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	8/13/2024	6	8.34	0.619	2.37	0.124
WH01-S@4	8/13/2024	4	8.43	0.424	2.11	0.110
BKG01@4	6/19/2025	4	7.59	0.0423	0.335	<0.100
BKG01@6	6/19/2025	6	8.44	0.206	0.450	0.269
BKG02@4	6/19/2025	4	7.36	0.0700	0.133	<0.100
BKG02@6	6/19/2025	6	7.62	0.0400	0.119	<0.0999
BKG03@4	6/19/2025	4	8.39	0.175	0.109	0.179
BKG03@6	6/19/2025	6	8.47	0.231	0.257	0.105
Maximum Background Concentration			8.47	0.231	0.450	0.269

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

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
NOBLE 100322
GUTTERSEN USX D21-17 WELLHEAD, WELD COUNTY, COLORADO
REM # 36262

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	8/13/2024	6	2.51	253	<0.0925	<0.314*	<9.25	5.43	5.28	<0.240	<0.0925	<34.2
WH01-S@4	8/13/2024	4	2.81	96.1	<0.0872	<0.364*	<8.72	5.31	6.07	<0.227	<0.0872	<32.3
BKG01@4	6/19/2025	4	3.79	<78.9	<0.365	<0.30*	<44.2	<13.5	<25.0	<0.250	<0.769	<356
BKG01@6	6/19/2025	6	4.79	143	<0.321	<0.29*	<38.9	<11.8	<22.0	<0.220	<0.677	<313
BKG02@4	6/19/2025	4	2.05	<72.7	<0.337	<0.29*	<40.8	<12.4	<23.1	<0.231	<0.710	<328
BKG02@6	6/19/2025	6	1.90	<76.9	<0.356	<0.29*	<43.1	<13.1	<24.4	<0.244	<0.750	<347
BKG03@4	6/19/2025	4	2.75	72.7	<0.336	<0.30*	<40.6	<12.4	<23.0	<0.230	<0.707	<327
BKG03@6	6/19/2025	6	3.82	129	<0.377	<0.30*	<45.6	<13.9	<25.8	<0.258	<0.794	<367
Maximum Background Concentration X 1.25			5.99	179	-	-	-	-	-	-	-	-

1. **Bold** faced values exceed the ECMC Table 915-1 limit(s), but are within 1.25x background concentrations.
 2. **Red** faced values exceed the ECMC Table 915-1 limit(s)
 3. Red & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL)
 4. 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

**ATTACHMENT A
PHOTOGRAPHIC LOG**

Guttersen USX D21-17 Wellhead Photographic Log



Guttersen USX D21-17 Wellhead Photographic Log



Guttersen USX D21-17 Wellhead Photographic Log



Guttersen USX D21-17 Wellhead Photographic Log





Photo Log

GUTTERSEN USX D21-17

June 19, 2025

Initial BKG01 Photo



BKG01 Closure Photo



Initial BKG02 Photo



BKG02 Closure Photo



Initial BKG03 Photo



BKG03 Closure Photo



**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: Guttersen USX D21-17,427058		Date: 8/13/2024				Remediation Project #: 36262			
Associated Wells:		Age of Site: 3/28/2012-spud date				Number of Photos Attached: 10			
Location: (GPS coordinates of wellhead or southeastern most wellhead for multiple) 40.214610 / -104.551350							Estimated Facility Size (acres): ~0.01		
General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.) Overall good									
USCS Soil Type: Silty Sand (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	05-123-34844								
Age	3/28/2012-spud date								
Condition of surface around wellhead	Good								
PID Readings	38.6 to 82.8 ppm								
Condition of subsurface	Good								
PID Readings	83.8 and 117.8 ppm								
Sample taken? Location/Sample ID#	WH01@6, WH01-S@4								
Photo Number(s)	1-10								
Other observations regarding wellheads:									
Summary									
Was impacted soil identified? <input checked="" type="checkbox"/> No Yes - less than 10 cubic yards Yes - more than 10 cubic yards									
Total number of samples field screened: 5					Total number of samples collected: 5				
Highest PID Reading: 117.8 ppm					Total number of samples submitted to lab for analysis: 2				
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 Yes - not impacted or in contact with impacted soils Yes - groundwater impacted and/or in contact with impacted soils									
Measured depth to groundwater:					Was remedial groundwater removal conducted? Yes No				
Date Groundwater was encountered:					Commencement date of removal:				
Sheen on groundwater? Yes No					Volume of groundwater removed prior to sampling:				
Free product observed? Yes 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:									