



CDH Consulting, LLC  
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## **Wellhead Closure Investigation and Environmental Summary**

Taylor USX AA07-14 Wellhead  
ECMC Remediation Project #36478  
Weld County, Colorado

### **Attachments:**

**Figure 1 – Site Location Map**

**Figure 2 – Soil Sample and Field Screening Locations Map**

**Figure 3 – Supplemental Site Investigation Map**

**Table 1 – Field Data Summary Table**

**Table 2 – Summary of Volatile Organic Soil Chemistry Data**

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**Table 6 – Summary of Elevation Data and organic Chemistry Data**

**Table 7 – Summary of Inorganic Groundwater Chemistry Data**

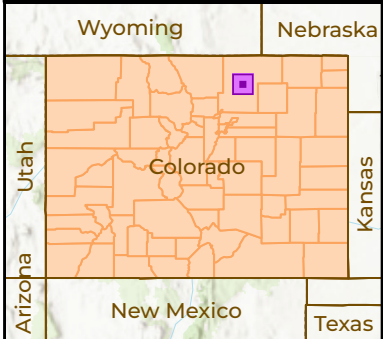
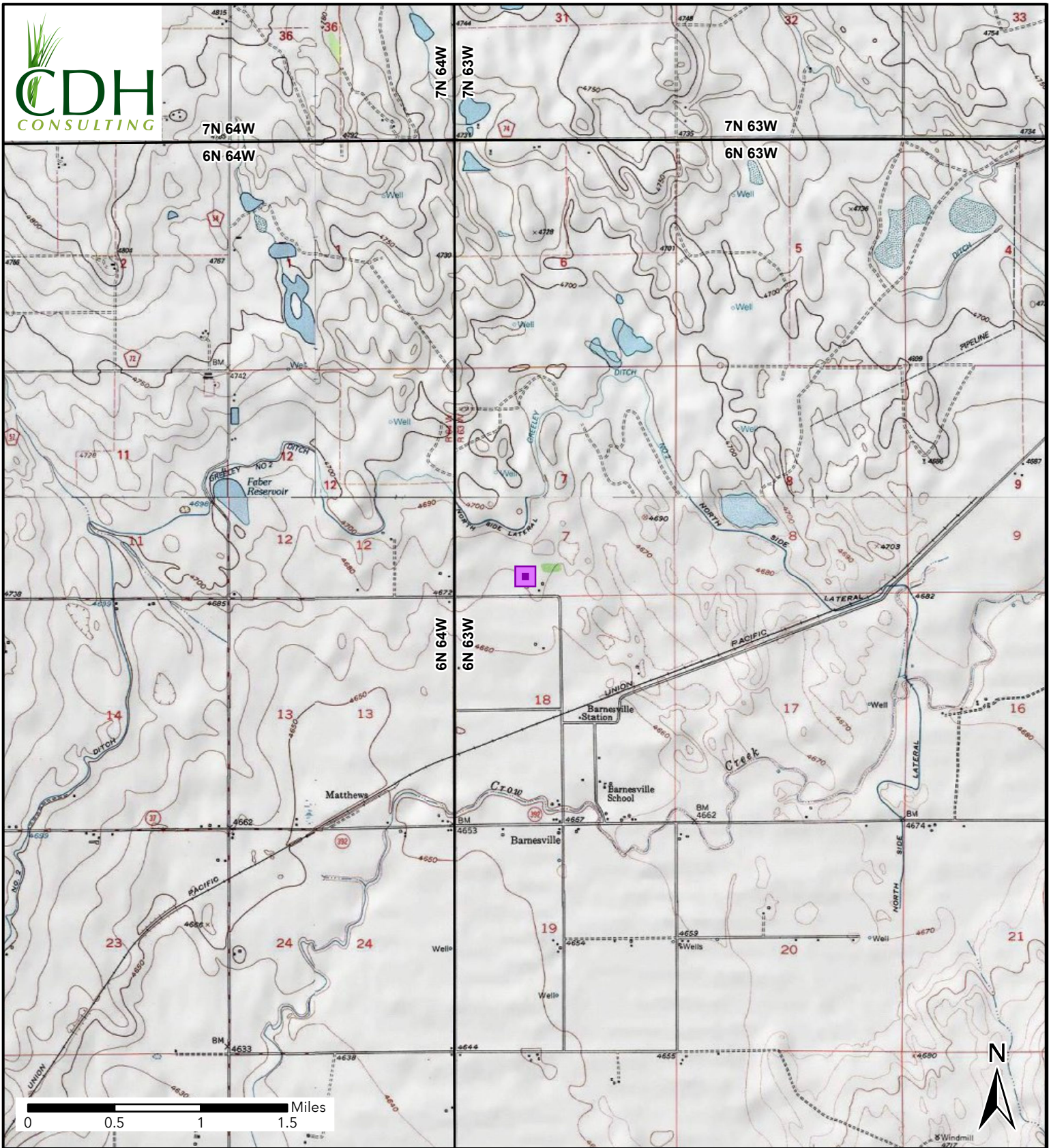
**Attachment A: Photographic Log**

**Attachment B: Field Decommissioning Form**



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## FIGURES



**Figure 1**  
**Site Location**  
**TAYLOR USX AA07-14**  
SEW-SEC 7-T6N-R63W  
Weld County, Colorado  
Chevron

 Site Location



**Figure 2**  
**Soil Sample Location Map**  
 TAYLOR USX AA07-14  
 SESW-SEC 7-T6N-R63W  
 Weld County, Colorado  
 Chevron

- Soil Sample
- Soil and Groundwater Background Sample
- Grab Groundwater Sample
- Confirmation Sample



**Figure 3**  
**Supplemental Site Investigation Map**  
**TAYLOR USX AA07-14**  
 SESW-SEC 7-T6N-R63W  
 Weld County, Colorado  
 Chevron

- Soil Sample
- Background Sample
- Grab Groundwater Sample
- Confirmation Sample
- Proposed Background Sample



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## **TABLES**

**TABLE 1**  
**FIELD DATA SUMMARY TABLE**  
**NOBLE 100322**  
**TAYLOR USX AA07-14 WELLHEAD, WELD COUNTY, COLORADO**  
**REM # 36478**

Sample ID	Sample Date	Depth (ft)	GPS Data Latitude/Longitude		PDOP Value	VOC Concentration (ppm)
WH01@6	9/10/2024	6	40.494973	-104.482853	NM	7.1
WH01-N@4	9/10/2024	4	40.494990	-104.482854	NM	1.1
WH01-E@4	9/10/2024	4	40.494973	-104.482834	NM	1.4
WH01-W@4	9/10/2024	4	40.494973	-104.482875	NM	1.5
WH01-S@4	9/10/2024	4	40.494958	-104.482852	NM	0.9
BKG01@6'	3/26/2025	6	40.494657	-104.482872	1.000000	0.0
BKG02@6'	3/26/2025	6	40.495185	-104.482614	1.000000	0.0
BKG03@6'	3/26/2025	6	40.495098	-104.483186	0.900000	0.0
GW01	9/10/2024	5.5	40.494983	-104.482847	NM	NM
BKG01-GW	3/26/2025	4	40.494657	-104.482872	1.000000	NM
BKG02-GW	3/26/2025	1.5	40.495185	-104.482614	1.000000	NM
BKG03-GW	3/28/2025	4	40.495098	-104.483186	0.900000	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).

PDOP = Position Dilution of Precision

ppm = Parts per million

ft = Feet

TABLE 2  
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA  
NOBLE 100322  
TAYLOR USX AA07-14 WELLHEAD, WELD COUNTY, COLORADO  
REM # 36478

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**		
WH01@6	9/10/2024	6	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.002	<125.200	<0.200	<25.0	<100

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

TABLE 3  
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA  
NOBLE 100322  
TAYLOR USX AA07-14 WELLHEAD, WELD COUNTY, COLORADO  
REM # 36478

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
WH01@6	9/10/2024	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

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

**TABLE 4**  
**SUMMARY OF SOIL SUITABILITY FOR RECLAMATION**  
**NOBLE 100322**  
**TAYLOR USX AA07-14 WELLHEAD, WELD COUNTY, COLORADO**  
**REM # 36478**

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
WH01@6	9/10/2024	6	<b>8.58</b>	0.946	2.64	0.675
BKG01@6'	3/26/2025	6	<b>8.43</b>	0.243	1.68	<0.200
BKG02@6'	3/26/2025	6	8.04	0.630	2.18	<0.200
BKG03@6'	3/26/2025	6	8.15	1.090	2.72	0.281
Maximum Background Concentration			8.43	1.090	2.72	0.281

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.

AP = Analysis pending

NA = Not analyzed

TABLE 5  
SUMMARY OF METALS IN SOIL CHEMISTRY DATA  
NOBLE 100322  
TAYLOR USX AA07-14 WELLHEAD, WELD COUNTY, COLORADO  
REM # 36478

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
WH01@6	9/10/2024	6	<b>2.35</b>	72.4	0.106	<0.247*	<8.82	5.98	5.15	<0.229	<0.0882	<32.7
BKG01@6'	3/26/2025	6	<b>3.91</b>	40.2	0.0892	<1.00 *	2.92	3.01	3.10	<b>0.270</b>	<0.500	16.3
BKG02@6'	3/26/2025	6	<b>3.53</b>	61.7	<1.00	<1.00 *	5.55	6.07	7.60	0.244	<0.500	26.9
BKG03@6'	3/26/2025	6	<b>7.68</b>	<b>237</b>	0.198	<1.00 *	9.94	8.08	10.3	<b>0.851</b>	<0.500	42.6
1.25x Maximum Background Concentration			9.60	296.3	0.248	NA	12.43	10.10	12.88	1.064	NA	53.3

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) 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

\* Indicates laboratory minimum detection limit in excess of SSL

AP = Analysis pending

NA = Not analyzed

**TABLE 6**  
**SUMMARY OF GROUNDWATER ELEVATION DATA AND ORGANIC CHEMISTRY DATA**  
**NOBLE 100322**  
**TAYLOR USX AA07-14 WELLHEAD, WELD COUNTY, COLORADO**  
**REM # 36478**

Sample ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Xylenes (µg/L)	Naphthalene (µg/L)	1,2,4- Trimethyl- Benzene (µg/L)	1,3,5- Trimethyl- Benzene (µg/L)	Depth to Groundwater Below Ground Surface (ft)
ECMC Table 915-1 Limits		5.0	560	700	1400	140	67	67	
GW01	9/10/2024	<1.00	<1.00	<1.00	<1.00	<2.00	<2.00	<2.00	5.5

1. Bold values exceed the ECMC limit(s)

2. Red highlighted groundwater analytical values indicate a regulatory exceedance

NP - No measurable LNAPL, NA - Not Analyzed, NL - No Limit, INA - Inaccessible, IW - Insufficient Water, DES - Destroyed

**TABLE 7**  
**SUMMARY OF INORGANIC GROUNDWATER CHEMISTRY DATA**  
**NOBLE 100322**  
**TAYLOR USX AA07-14 WELLHEAD, WELD COUNTY, COLORADO**  
**REM # 36478**

Sample ID	Sample Date	Total Dissolved Solids (mg/L)	Chloride Ion (mg/L)	Sulfate Ion (mg/L)
ECMC Table 915-1 Limits*		<1.25 x local background	250 or <1.25 x local background	250 or <1.25 x local background
GW01	9/10/2024	1880	80.9	790
BKG01-GW	3/26/2025	2100	89.3	1030
BKG02-GW	3/26/2025	1440	53.6	548
BKG03-GW	3/28/2025	2790	365	3530
Background Concentration (Current)		2790	365	3530

1. Bold values exceed the ECMC limit(s)

2. Blue highlighted groundwater analytical values indicate a regulatory exceedance

NP = No measurable LNAPL, NA = Not Analyzed, INA = Inaccessible, IW = Insufficient Water, DES = Destroyed

\*Dissolved metals refer to Colorado Regulation 41 Standards



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**ATTACHMENT A**  
**PHOTOGRAPHIC LOG**

Attachment A - Photographic Log

TAYLOR USX AA07-14

Chevron REM #36478

3/26/2025, 3/28/2025



Photo 1: View of background sample location 1, facing east

Attachment A - Photographic Log

TAYLOR USX AA07-14

Chevron REM #36478

3/26/2025, 3/28/2025



Photo 2: View of background sample location 2, facing west

Attachment A - Photographic Log

TAYLOR USX AA07-14

Chevron REM #36478

3/26/2025, 3/28/2025



Photo 3: View of background sample location 3, facing west-northwest



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**ATTACHMENT B**  
**Field Decommissioning Form**

