

<div style="text-align: center;"> Tank Battery Closure Checklist COGCC Rule 911.a.(4) Environmental Site Closure Assessment Field Form </div>									
Additional attachments (optional):		Pit Closure		Wellhead Closure		Flowline Closure	X	Partially Buried Vault Closure	
<i>Site Name & COGCC Facility Number:</i> HSR Kirkham Tudor T4N-R65W-S31 L01 Facility ID: 327866		<i>Date:</i> 10/20/2023					<i>Remediation Project #:</i> 30378		
<i>Associated Wells:</i> HSR-Kirkham 12-31A HSR-Tudor 11-31A		<i>Age of Site:</i> 1991					<i>Number of Photos Attached:</i> 11 Photos		
<i>Location: (GPS coordinates of southeaster berm)</i> 40.266193, -104.710852							<i>Estimated Facility Size (acres):</i> ~1 Acre		
<i>General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.)</i> Good housekeeping. General condition for all the on-site equipment looked fine. Waste management well maintained.									
<i>USCS Soil Type:</i> SW					<i>Estimated Depth to Groundwater:</i> N/A				
<i>Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)</i> None observed									
<i>Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)</i> None observed									
Tanks									
<i>Tank Contents</i>	Oil								
<i>Size (barrels)</i>	300 BBLS								
<i>Age</i>	1991								
<i>Construction Material</i>	Steel								
<i>Tank type (AST/DRU, etc.)</i>	AST								
<i>Visual Integrity of Tank</i>	No Damage								
<i>Condition of tank footprint</i>	No Impacts Noted								
<i>PID Readings</i>	High @ 2.4ppm								
<i>Soil impacts present at valves or hatches?</i>	No Impacts Noted								
<i>PID Readings</i>	N/A								
<i>Sample taken? Location/ Sample ID#</i>	40.2660428, -104.7107449 AST01@6.0"								
<i>Photo Number(s)</i>	Photo 1A								
<i>Other observations regarding tanks:</i> Tank removed prior to sampling event. An exceedance in pH and Arsenic was discovered at the above ground storage tank (AST01@6.0"). Refer to the inorganic soil chemistry table (Table 3) and metals in soil chemistry table (Table 4) for reference. Additionally, exceedances and pH and Arsenic were found in local background samples as well. Thus, these exceedance should be contributed to native soil conditions.									
Separators									
<i>Separator size</i>	UNK	UNK							
<i>Vertical or Horizontal</i>	Horizontal	Horizontal							
<i>Age</i>	1991	1991							
<i>Soil impacts observed? If yes</i>	No Impacts Noted	No Impacts Noted							
<i>PID Readings</i>	High @ 0.0ppm	High @ 0.0ppm							
<i>Sample taken? Location/ Sample ID#</i>	40.2663231, -104.7108927 SEP01@3.5'	40.2662922, -104.7108773 SEP02@3.5'							
<i>Photo Number(s)</i>	Photo 2A	Photo 3A							
<i>Other observations regarding separators</i> Separators in good condition and no damage. An exceedance in Arsenic was discovered at both separator sample locations (SEP01@3.5' & SEP02@3.5'). Refer to the metals in soil chemistry table (Table 4) for reference. Additionally, exceedances in Arsenic were found in all local background samples as well. Thus, these exceedance should be contributed to native soil conditions.									
Third Party Equipment									
<i>Type</i>	Meter Shed	Meter Shed							
<i>Age</i>	1991	1991							

Third Party <i>Owner</i>	Unknown	Unknown												
Removal Date	Still On-site	Still On-Site												
Sample taken? <i>Location/Depth</i>	MET01@6.0"	MET02@6.0"												
PID Readings	High @ 0.0ppm	High @ 0.0ppm												
Photo Number(s)	Photo 5A	Photo 6A												
Other Facility Equipment														
Equipment type	Combustion Unit	Combustion Unit												
Equipment <i>Condition</i>	No Damage	No Damage												
Age	1991	1991												
Soil impacts <i>Observed during</i>	No Impacts Noted	No Impacts Noted												
PID Readings	High @ 0.0ppm	High @ 0.0ppm												
Sample taken? <i>Location/Depth</i>	ECD01@6.0"	ECD02@6.0"												
Photo Number(s)	Photo 7A	Photo 8A												
Other observations regarding other facility or third party equipment: Combustion Units removed prior to sampling event														
Summary														
Was impacted soil identified? No Yes - less than 10 cubic yards Yes - more than 10 cubic yards														
Total number of samples field screened: 4 Samples					Total number of samples collected: 22 Samples									
Highest PID Reading: High at 2.4ppm (AST01@6.0")					Total number of samples submitted to lab for analysis: 18 Samples									
If more than 10 cubic yards of impacted soil were observed:														
Vertical extent: N/A					Estimated spill volume: N/A									
Lateral extent: N/A					Volume of soil removed: N/A									
Is additional investigation required? N/A														
Was groundwater encountered during the investigation? No Yes - not impacted or in contact with impacted soils Yes - groundwater impacted and/or in contact with impacted soils														
Measured depth to groundwater: N/A					Was remedial groundwater removal conducted? Yes No									
Date Groundwater was encountered: N/A					Commencement date of removal: N/A									
Sheen on groundwater? Yes No					Volume of groundwater removed prior to sampling: N/A									
Free product observed? Yes No					Volume of groundwater removed post sampling: N/A									
Total number of samples collected: N/A					Total Volume of groundwater removed: N/A									
Total number of samples submitted to lab for analysis: N/A														

Buried or Partially Buried Vessel Closure Checklist

COGCC Rule 911.a.(4) Environmental Site Closure Assessment Field Form

Additional attachments (optional):		Pit Closure		Wellhead Closure		Flowline Closure	X	Tank Battery Closure
Site Name & COGCC Facility Number: HSR Kirkham Tudor T4N-R65W-S31 L01 Facility ID: 327866		Date: 10/20/2023						Remediation Project #: 30378
Associated Wells: HSR-Kirkham 12-31A HSR-Tudor 11-31A		Age of Site: 1991						Number of Photos Attached: 5 Photos
Location: (GPS coordinates of vault or southeastern tank berm for multiple) 40.2660845, -104.7107764								Estimated Facility Size (acres): ~1 acre
General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.) Good housekeeping. General condition for all the on-site equipment looked fine. Waste management well maintained.								
USCS Soil Type: SW					Estimated Depth to Groundwater: N/A			
Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) None observed								
Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) None observed								
Buried or Partially Buried Vessels								
Tank Contents	Produced Water							
Size (barrels)	<100 BBLS							
Age	1991							
Construction Material	PBV Concrete							
Visual Integrity of Tank	No Damage							
Condition of tank Foundation	No Impacts Noted							
PID Readings	High @ 0.2ppm							
Condition of Dimple Lines	No Damage							
PID Readings	N/A							
Sample taken? Location/Sample ID#	PWVB01 @ 6.0' PWVE01 @ 5.0'							
Photo Number(s)	Photo 4A-4E							
<u>Other observations regarding partially buried vessels:</u> Dumlplines were not trenched. The dunpline tie-in for the separators was at sample location SEP01@3.5' and the dunpline tie-in point to the tanks was at the east sidewall of the produced water vault excavation. An exceedance in Arsenic was discovered at the floor and eastern sidewall of the PWV excavation, and an exceedance in barium was discovered at the eastern sidewall of the PWV excavation. Refer to the metals in soil chemistry table (Table 4) for reference. Additionally, exceedances in Arsenic were found in local background samples as well. Thus, these exceedance should be contributed to native soil conditions.								
Summary								
Was impacted soil identified? <div style="display: flex; justify-content: space-between;"> No Yes - less than 10 cubic yards Yes - more than 10 cubic yards </div>								
Total number of samples field screened: 3 samples					Total number of samples collected: 5 samples			
Highest PID Reading: High @ 0.2ppm (PWVB01 @ 6.0')					Total number of samples submitted to lab for analysis: 2 samples			
If more than 10 cubic yards of impacted soil were observed:								
Vertical extent: N/A					Estimated spill volume: N/A			
Lateral extent: N/A					Volume of soil removed: N/A			
Is additional investigation required? N/A								
Was groundwater encountered during the investigation? <div style="display: flex; justify-content: space-between;"> No Yes - not impacted or in contact with impacted soils Yes - groundwater impacted and/or in contact with impacted soils </div>								
Measured depth to groundwater: N/A					Was remedial groundwater removal conducted? Yes No			
Date Groundwater was encountered: N/A					Commencement date of removal: N/A			
Sheen on groundwater? Yes No					Volume of groundwater removed prior to sampling: N/A			
Free product observed? Yes No					Volume of groundwater removed post sampling: N/A			
Total number of samples collected: N/A					Total Volume of groundwater removed: N/A			
Total number of samples submitted to lab for analysis: N/A								