

State of Colorado
Energy & Carbon Management Commission

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404432323
Receive Date:
11/29/2025
Report taken by:
Julie Rothey

Site Investigation and Remediation Workplan (Initial Form)

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. However, this shall not preclude the Operator from taking immediate action to protect public health or safety, the environment, wildlife, or livestock.

This Form 27 describes site conditions as currently understood by the Operator; approval of this Form 27 by ECMC is based on the site conditions accurately described herein; any changes in site conditions identified during or subsequent to the performance of the approved workplan may necessitate additional investigation or remediation which shall be described on a supplemental Form 27. This Form 27 is intended to provide basic information regarding the proposed site investigation and remediation actions, but the workplan may be more fully described in attached documentation.

Closure request is not available for an Initial Site Investigation and Remediation Workplan.

OPERATOR INFORMATION

Name of Operator: <u>AXIS EXPLORATION LLC</u>	Operator No: <u>10646</u>	Phone Numbers
Address: <u>555 17TH STREET SUITE 3700</u>		
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80202</u>
Contact Person: <u>Jacob Evans</u>	Email: <u>jevans@civiresources.com</u>	Phone: <u>(303) 294-7864</u>
		Mobile: <u>()</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 43561 Initial Form 27 Document #: 404432323

PURPOSE INFORMATION

- Rule 913.c.(1): Pit or Cuttings Trench closure.
- Rule 913.c.(2): Buried or partially buried vessel closure, which will be by removal.
- Rule 913.c.(3): Remediation of Spill and Releases pursuant to Rule 912.
- Rule 913.c.(4): Land treatment of Oily Waste pursuant to Rule 905.e.
- Rule 913.c.(5): Closure of Centralized E&P Waste Management Facilities pursuant to Rule 907.h.
- Rule 913.c.(6): Remediation of impacted Groundwater pursuant to Rule 915.e.(3).D, and the contaminant concentrations in Table 915-1.
- Rule 913.c.(7): Investigation and remediation of natural gas in soil or Groundwater.
- Rule 913.c.(8): When requested by the Director due to any potential risk to soil, Groundwater, or surface water.
- Rule 913.c.(9): Decommissioning of Oil and Gas Facilities.
- Rule 913.g: Changes of Operator.
- Rule 915.b: Request to leave elevated inorganics in situ.
- Other: _____

SITE INFORMATION

Yes Multiple Facilities

Facility Type: <u>WELL</u>	Facility ID: _____	API #: <u>005-07087</u>	County Name: <u>ARAPAHOE</u>
Facility Name: <u>HSR O'BRIEN 14-27</u>	Latitude: <u>39.667225</u>	Longitude: <u>-104.427190</u>	
	** correct Lat/Long if needed: Latitude: <u>39.667175</u>	Longitude: <u>-104.427625</u>	
QtrQtr: <u>SESW</u>	Sec: <u>27</u>	Twp: <u>4S</u>	Range: <u>63W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: <u>LOCATION</u>	Facility ID: <u>320792</u>	API #: _____	County Name: <u>ARAPAHOE</u>
Facility Name: <u>HSR O'BRIEN-64S63W 27SESW</u>	Latitude: <u>39.667175</u>	Longitude: <u>-104.427625</u>	
	** correct Lat/Long if needed: Latitude: <u>39.667225</u>	Longitude: <u>-104.427190</u>	
QtrQtr: <u>SESW</u>	Sec: <u>27</u>	Twp: <u>4S</u>	Range: <u>63W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: OFF-LOCATION FLOWLINE	Facility ID: 460550	API #:	County Name: ARAPAHOE
Facility Name: HSR O'BRIEN-64S63W 27SESW	Latitude: 39.667156	Longitude: -104.426812	
** correct Lat/Long if needed: Latitude:		Longitude:	
QtrQtr: SESW	Sec: 27	Twp: 4S	Range: 63W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SP Most Sensitive Adjacent Land Use Residential

Is domestic water well within 1/4 mile? Yes Is surface water within 1/4 mile? Yes

Is groundwater less than 20 feet below ground surface? No

Other Potential Receptors within 1/4 mile

The Kiowa Creek is 1385-ft to the W.
 The Domestic Well (DWR Receipt 0392731, Permit 192012-) is approx. 230-ft to the S. This well was constructed to 555-ft. Static water level was recorded at 200-ft.
 The Domestic Well (DWR Receipt 0398776, Permit 197807-) is approx. 400-ft to the N. This well was constructed to 350-ft. Static water level was recorded at 170-ft.
 The Residential Well (DWR Receipt 0414297, Permit 203152-) is approx. 935-ft to the NE. This well was constructed to 512-ft. Static water level was recorded at 230-ft.
 Groundwater less than 20 ft is not expected at the disturbance location.
 This location is within a HPH Pronghorn Winter Concentration, Mule Deer Severe Winter Range, and Mule Deer Winter Concentration Area. Per NTO from Jan. 4, 2023 titled CPW CONSULTATION PROCESS FOR OPERATIONS IN WILDLIFE HABITATS AT EXISTING OIL AND GAS LOCATIONS, CPW consultation not required.

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> E&P Waste | <input type="checkbox"/> Other E&P Waste | <input checked="" type="checkbox"/> Non-E&P Waste |
| <input checked="" type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids | No waste has been generated to date. |
| <input checked="" type="checkbox"/> Oil | <input type="checkbox"/> Tank Bottoms | |
| <input checked="" type="checkbox"/> Condensate | <input type="checkbox"/> Pigging Waste | |
| <input type="checkbox"/> Drilling Fluids | <input type="checkbox"/> Rig Wash | |
| <input type="checkbox"/> Drill Cuttings | <input type="checkbox"/> Spent Filters | |
| | <input type="checkbox"/> Pit Bottoms | |
| | <input type="checkbox"/> Other (as described by EPA) | |

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
UNDETERMINED	SOILS	N/A	Laboratory Analytical

INITIAL ACTION SUMMARY

Description of initial action or emergency response measures take to abate, investigate, and/or remediate impacts associated with E&P Waste.

A site investigation will be conducted pursuant to ECMC rule 911 at the HSR O'BRIEN-64S63W/27SESW (320792) oil and gas location pertaining to the cut/cap of the HSR O'BRIEN 14-27 (05-005-07087), decommission of production facilities, decommission of the off-location HSR O'BRIEN 14-27 (00507087FL) Wellhead line, and decommission of associated on-location flowline(s). See site map exhibit for details.

PROPOSED SAMPLING PLAN

Proposed Soil Sampling

Will soil samples be collected as part of this investigation? (Number, type (grab/composite), analyses, and locations of samples):

Complete "Proposed Soil Sampling" information is provided in the "Operator Comments and Submittal" section.

Proposed Groundwater Sampling

Will groundwater samples be collected as part of this investigation? (Number, analyses, and locations of samples):

If groundwater is encountered during the site investigation a grab groundwater sample will be collected and analyzed for all organic and inorganic compounds per ECMC Table 915-1.

Proposed Surface Water Sampling

Will surface water samples be collected as part of this investigation? (Number, analyses, and locations of samples):

Additional Investigative Actions

Additional alternative investigative actions described in attached Site Investigation Plan (summary):

Visual inspection of the location will occur during decommission activities. Field personnel will field screen all disturbed areas using visual and olfactory senses to determine if laboratory confirmation sampling is required. The ECMC Flowline Closure, Tank Battery Closure, and Wellhead Closure Checklists will be utilized and filled out during the decommission process. A photolog will be submitted on the Subsequent Form 27.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

NA / ND

Number of soil samples collected <u> 0 </u>	Highest concentration of TPH (mg/kg) <u> </u>
Number of soil samples exceeding 915-1 <u> </u>	Highest concentration of SAR <u> </u>
Was the areal and vertical extent of soil contamination delineated? <u> </u>	BTEX > 915-1 <u> </u>

Approximate areal extent (square feet) _____

Vertical Extent > 915-1 (in feet) _____

Groundwater

Number of groundwater samples collected _____ 0

Highest concentration of Benzene (µg/l) _____

Was extent of groundwater contaminated delineated? No _____

Highest concentration of Toluene (µg/l) _____

Depth to groundwater (below ground surface, in feet) _____

Highest concentration of Ethylbenzene (µg/l) _____

Number of groundwater monitoring wells installed _____

Highest concentration of Xylene (µg/l) _____

Number of groundwater samples exceeding 915-1 _____

Highest concentration of Methane (mg/l) _____

Surface Water

_____ 0 Number of surface water samples collected

_____ Number of surface water samples exceeding 915-1

If surface water is impacted, other agency notification may be required.

OTHER INVESTIGATION INFORMATION

Were impacts to adjacent property or offsite impacts identified?

Were background samples collected as part of this site investigation?

Was investigation derived waste (IDW) generated as part of this investigation?

Volume of solid waste (cubic yards) _____

Volume of liquid waste (barrels) _____

Is further site investigation required?

REMEDIAL ACTION PLAN

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

N/A

REMEDIATION SUMMARY

Describe how remediation of existing impacts to soil and groundwater is to be accomplished (i.e. summarize remedial action plan). Provide a brief narrative description including: technical justification, schedule for implementation, estimated time to attain NFA status, plus plans and specifications for the selected remedial action technology.

N/A

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation)

_____ Excavate and offsite disposal

_____ Chemical oxidation

_____ If Yes: Estimated Volume (Cubic Yards) _____

_____ Air sparge / Soil vapor extraction

_____ Name of Licensed Disposal Facility or ECMC Facility ID # _____

_____ Natural Attenuation

_____ Excavate and onsite remediation

_____ Other _____

_____ Land Treatment

_____ Bioremediation (or enhanced bioremediation)

_____ Chemical oxidation

Groundwater Remediation Summary

- _____ Bioremediation (or enhanced bioremediation)
- _____ Chemical oxidation
- _____ Air sparge / Soil vapor extraction
- _____ Natural Attenuation
- _____ Other _____

GROUNDWATER MONITORING

If groundwater has been impacted, describe proposed monitoring plan, including # of wells or sample points, monitoring schedule, analytical methods, points of compliance. Attach a groundwater monitoring location diagram.

RECLAMATION PLAN

RECLAMATION PLANNING

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing.

Reclamation will be in accordance with COGCC 1000 Series Rules.

Is the described reclamation complete? No _____

Does the reclamation described herein constitute interim or final reclamation of the Oil and Gas Location?

Interim Final

Did the Surface Owner provide the seed mix? _____

If YES, does the seed mix comply with local soil conservation district recommendations? _____

Did the local soil conservation district provide the seed mix? _____

SITE RECLAMATION DATES

Proposed date of commencement of Reclamation. _____

Proposed date of completion of Reclamation. _____

IMPLEMENTATION SCHEDULE

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

PRIOR DATES

Date of Surface Owner notification/consultation, if required. 11/21/2025

Actual Spill or Release date, or date of discovery. _____

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 12/28/2025

Proposed site investigation commencement. 12/31/2025

Proposed completion of site investigation. _____

REMEDIAL ACTION DATES

Proposed start date of Remediation. _____

Proposed date of completion of Remediation. _____

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

Change from approved implementation schedule per Rule 913.d.(2).

Basis for change in implementation schedule:

OPERATOR COMMENT

This Form 27 Intent is submitted prior to decommissioning the following assets:
-HSR O'BRIEN-64S63W/27SESW (320792) oil and gas location
-Cut/cap of the HSR O'BRIEN 14-27 (05-005-07087)
-Decommission of all on-location flowlines at HSR O'BRIEN-64S63W/27SESW (320792)
-Decommission of off-location HSR O'BRIEN 14-27 (00507087FL) Wellhead line
Please see related flowline pre-abandonment notices for specifics on planned field operations
See attached Site Map for details.

Proposed Soil Sampling: (Yes)

Grab confirmation soil samples will be collected from beneath the above ground oil tanks, fiberglass water vault, separator, wellhead. A grab confirmation soil sample will be collected from the center of the fiberglass water vault footprint, or areas of observed impact based on visual and olfactory observation. A minimum of four sidewalls and the base will be field screened. Soil samples will be analyzed by a certified laboratory for TPH (total volatile [C6-C10] and extractable [C10-C36] hydrocarbons), organic compounds in soil per ECMC Table 915-1, and EC, SAR, pH, metals, and boron. All samples collected will be analyzed by a certified laboratory using approved ECMC laboratory analysis methods.

Grab confirmation soil samples will be collected from beneath the flowline start/end points. Additional soil samples will be collected when flowline repairs are observed, changes in flow direction, or when there is a change in the flowline material type. Soil samples will be analyzed by a certified laboratory for TPH (total volatile [C6-C10] and extractable [C10-C36] hydrocarbons), organic compounds in soil per COGCC Table 915-1, and EC, SAR, pH, metals, and boron. All samples collected will be analyzed by a certified laboratory using approved ECMC laboratory analysis methods. If line removed, grab soil samples will be collected at the bell hole locations during flowline removal for submittal to a certified laboratory. If abandoned in place, a site assessment will be completed along the flowline. Soil samples will be collected at 250' intervals and will be field screened with a PID. If a suspected release is discovered, grab soil samples will be collected for laboratory analysis.

I hereby certify all statements made in this form are to the best of my knowledge true, correct, and complete.

Signed: Stephany Olsen

Title: Sr. Regulatory Analyst

Submit Date: 11/29/2025

Email: regulatory@civiresources.com

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with ECMC Rules and applicable orders and is hereby approved.

ECMC Approved: Julie Rothey

Date: 12/18/2025

Remediation Project Number: 43561

COA Type

Description

COA Type	Description
1 COA	Operator will visually inspect and field screen the area around the Well in all four directions as well as the associated pumping equipment area, if present. Operator will inspect both surface and subsurface soil near the Well. If petroleum impacted soils are encountered during cut and cap operations, the impacted soil will be segregated for proper off site disposal and the lateral and vertical extent of impact determined with appropriate confirmation soil sampling. Operator will submit a sample from an area exhibiting the highest degree of impact, or in the absence of apparent impacts, Operator will submit a sample from the base of the excavation adjacent to the Well along with photo logs of the excavation and surface areas.

ATTACHMENT LIST

Upon approval, the approved Form 27 and all listed attachments will be indexed to the Remediation Project file. Only the approved Form 27 will also be indexed to the related Facilities.

Att Doc Num	Name
404432323	INVESTIGATION/REMEDATION WORKPLAN (INITIAL)
404453712	SITE MAP
404479748	FORM 27-INITIAL-SUBMITTED

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Environmental	Location and/or its associated flowlines lie within mapped High Priority Habitat(s). Please note that Approval of this Form 27 does not supersede any Federal, State or Local regulations. ECMC recommends consultation with Colorado Parks and Wildlife.	12/18/2025

Total: 1 comment(s)