

State of Colorado  
Energy & Carbon Management Commission

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Document Number:  
404417032

Receive Date:  
\_\_\_\_\_

Report taken by:  
\_\_\_\_\_

Site Investigation and Remediation Workplan (Supplemental 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>EXTRACTION OIL &amp; GAS INC</u>	Operator No: <u>10459</u>	<b>Phone Numbers</b>
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) 8293811</u>
		Mobile: <u>(303) 8293811</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 38361 Initial Form 27 Document #: 403986433

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>001-08859</u>	County Name: <u>ADAMS</u>
Facility Name: <u>AMOCO 44-17</u>	Latitude: <u>39.960580</u>	Longitude: <u>-104.682950</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>S2SE</u>	Sec: <u>17</u>	Twp: <u>1S</u>	Range: <u>65W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: <u>LOCATION</u>	Facility ID: <u>320283</u>	API #: _____	County Name: <u>ADAMS</u>
Facility Name: <u>AMOCO-61S65W 17N2S2SE</u>	Latitude: <u>39.960580</u>	Longitude: <u>-104.682950</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>N2S2S</u>	Sec: <u>17</u>	Twp: <u>1S</u>	Range: <u>65W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>
<u>E</u>			

Facility Type: OFF-LOCATION FLOWLINE Facility ID: 465174 API #: \_\_\_\_\_ County Name: ADAMS  
 Facility Name: Wellhead Line 17N2S2SE Latitude: 39.960433 Longitude: -104.683427  
 \*\* correct Lat/Long if needed: Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_  
 QtrQtr: N2S2S Sec: 17 Twp: 1S Range: 65W Meridian: 6 Sensitive Area? Yes  
 E

Facility Type: SPILL OR RELEASE Facility ID: 489292 API #: \_\_\_\_\_ County Name: ADAMS  
 Facility Name: Amoco 44-17 Latitude: 39.960580 Longitude: -104.682950  
 \*\* correct Lat/Long if needed: Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_  
 QtrQtr: S2SE Sec: 17 Twp: 1S Range: 65W Meridian: 6 Sensitive Area? Yes

**SITE CONDITIONS**

General soil type - USCS Classifications SM Most Sensitive Adjacent Land Use Cropland  
 Is domestic water well within 1/4 mile? Yes Is surface water within 1/4 mile? No  
 Is groundwater less than 20 feet below ground surface? No

**Other Potential Receptors within 1/4 mile**

No surface water within 1/4 of a mile.  
 The Residential Well (DWR Receipt 0542106, Permit 265959-) approx. 535-ft to the NW is the nearest permitted water well. This well was constructed to 415-ft, static water level recorded at 140-ft. Residential Well (DWR Receipt 0531524, Permit 261212-) is approx. 805-ft to the SE. This well was constructed to 416-ft, static water level recorded at 95-ft. Residential Well (DWR Receipt 3667070, Permit 296636-) is approx. 1050-ft to the NE. This well was constructed to 380-ft, static water level recorded at 120-ft.  
 Groundwater less than 20 ft is not expected at the disturbance location.  
 This location is not within a HPH area. 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 type="checkbox"/> Non-E&P Waste |
| <input checked="" type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids             | _____                                  |
| <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	GROUNDWATER	NA	Laboratory Analytical if Encountered
Yes	SOILS	40' X 20' X 6' bgs	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 COGCC rule 911 at the AMOCO-61S65W 17N2S2SE (320283) oil and gas location pertaining to the cut/cap of the AMOCO 44-17 (05-001-08859), decommission of production facilities, decommission of the AMOCO 44-17 (00108859FL) wellhead line, and decommission of all on-location flowlines. 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 ):

Ten grab soil samples were collected from the decommissioned facilities and two composite soil samples were collected from the stockpiled overburden. All soil samples were submitted to a certified laboratory for analysis of Table 915-1 metals and organic compounds, TPH C6-36, EC, SAR, pH, and boron.

### Proposed Groundwater Sampling

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

If groundwater is encountered, a grab groundwater sample will be collected from the base of the excavation and submitted to a certified laboratory for analysis of BTEX, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, chlorides, sulfates, and TDS.

### 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 ):

# SITE INVESTIGATION REPORT

## SAMPLE SUMMARY

Soil

NA / ND

Number of soil samples collected 10

-- Highest concentration of TPH (mg/kg) 3547

Number of soil samples exceeding 915-1 7 -- Highest concentration of SAR 22.4

Was the areal and vertical extent of soil contamination delineated? No BTEX > 915-1 Yes

Approximate areal extent (square feet) 800 Vertical Extent > 915-1 (in feet) 6

**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?

Ten background soil samples were collected from homogenous soil horizons and/or corresponding excavation confirmation soil sample depths.

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**

Does this Supplemental Form 27A include changes to a previously approved Remedial Action Plan? No

**SOURCE REMOVAL SUMMARY**

Describe how source is to be removed.

Multiple source locations will be removed through mechanical excavation. Grab confirmation soil samples will be collected and submitted to a certified laboratory for analysis of Table 915-1 metals and organic compounds, TPH C6-36, EC, SAR, pH, and boron to determine the lateral and vertical extent of impacts. Background samples will be collected from homogenous soil horizons and/or corresponding excavation sample depths.

**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.

Subsequent to source removal, the estimated timeframe to achieve a no further action will be May 31, 2026.

**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

Other \_\_\_\_\_

**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.

# REMEDIATION PROGRESS UPDATE

## PERIODIC REPORTING

### Approved Reporting Schedule:

Quarterly     Semi-Annually     Annually     Other

### Request Alternative Reporting Schedule:

Semi-Annually     Annually     Other

Rule 913.e:

After initial approval of a Form 27, the Operator will provide quarterly update reports in a Supplemental Form 27 to document progress of site investigation and remediation, unless an alternative reporting schedule has been requested by the Operator and approved by the Director. The Director may request a more frequent reporting schedule based on site-specific conditions.

Report Type:     Groundwater Monitoring     Land Treatment Progress Report     O&M Report  
 Other Decommission Data

## Adequacy of Operator's General Liability Insurance and Financial Assurance

Describe the adequacy of the Operator's general liability insurance and Financial Assurance to fully address the anticipated costs of Remediation, including the estimated remaining cost for this project (below).

If this information has been provided on a Form 27 within the last 12 months, provide the Document Number of that form.

The General Liability coverage within the Civitas Resources insurance program includes coverage for bodily injury, property damage, and pollution clean-up costs arising from qualifying pollution events of a sudden and accidental nature subject to a \$1,000,000 per occurrence limit and \$2,000,000 aggregate limit. The Civitas Resources insurance program includes Excess Liability coverage of \$110,000,000 per occurrence and in the aggregate which sits over the sudden and accidental pollution within the General Liability coverage. It is the opinion of Civitas Resources that this total tower of limit is adequate to address the costs of remediation associated with any qualifying pollution event.

Operator anticipates the remaining cost for this project to be: \$ 250000

## WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? No

Describe beneficial use, if any, of E&P Waste derived from this remediation project:

Volume of E&P Waste (solid) in cubic yards \_\_\_\_\_

E&P waste (solid) description \_\_\_\_\_

ECMC Disposal Facility ID #, if applicable: \_\_\_\_\_

Non-ECMC Disposal Facility: \_\_\_\_\_

Volume of E&P Waste (liquid) in barrels \_\_\_\_\_

E&P waste (liquid) description \_\_\_\_\_

ECMC Disposal Facility ID #, if applicable: \_\_\_\_\_

Non-ECMC Disposal Facility: \_\_\_\_\_

## REMEDIATION COMPLETION REPORT

### REMEDIATION COMPLETION SUMMARY

Is this a Final Closure Request for this Remediation Project? No

If YES:

Compliant with Rule 913.h.(1).

Compliant with Rule 913.h.(2).

Compliant with Rule 913.h.(3).

Do all soils meet Table 915-1 standards? No

Does the previous reply indicate consideration of background concentrations? \_\_\_\_\_

Does Groundwater meet Table 915-1 standards? Yes

Is additional groundwater monitoring to be conducted? \_\_\_\_\_

Operator shall comply with the ECMC 1000-Series Reclamation Requirements for all impacted and disturbed areas.

## 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 ECMC 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. 02/04/2025

Actual Spill or Release date, or date of discovery. 02/04/2025

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 01/03/2025

Proposed site investigation commencement. 01/06/2025

Proposed completion of site investigation. 02/04/2025

### REMEDIAL ACTION DATES

Proposed start date of Remediation. 02/05/2025

Proposed date of completion of Remediation. 05/31/2026

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**

Source removal will be scheduled. Once data becomes available it will be submitted on a supplemental form 27.

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

Signed: Jacob Evans

Title: Environmental Advisor

Submit Date: \_\_\_\_\_

Email: jevans@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: \_\_\_\_\_

Date: \_\_\_\_\_

Remediation Project Number: 38361

**COA Type****Description**

COA Type	Description
0 COA	

**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**

Att Doc Num	Name

Total Attach: 0 Files

**General Comments****User Group****Comment****Comment Date**

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)