

State of Colorado Oil and Gas Conservation Commission

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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 COGCC 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>XTO ENERGY INC</u>	Operator No: <u>100264</u>	Phone Numbers
Address: <u>210 PARK AVENUE STE 2240</u>		Phone: <u>(405) 594-9457</u>
City: <u>OKLAHOMA CITY</u> State: <u>OK</u> Zip: <u>73102</u>		Mobile: <u>(970) 462-1948</u>
Contact Person: <u>Erin Clark</u>	Email: <u>erin.k.clark@exxonmobil.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 22832 Initial Form 27 Document #: 402979959

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>071-09126</u>	County Name: <u>LAS ANIMAS</u>
Facility Name: <u>APACHE CANYON 6-9V</u>	Latitude: <u>37.112225</u>	Longitude: <u>-104.924301</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NESE</u>	Sec: <u>6</u>	Twp: <u>34S</u>	Range: <u>67W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>
Facility Type: <u>PIT</u>	Facility ID: <u>292612</u>	API #: _____	County Name: <u>LAS ANIMAS</u>
Facility Name: <u>APACHE CANYON 06-09V</u>	Latitude: <u>37.112225</u>	Longitude: <u>-104.924301</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NESE</u>	Sec: <u>6</u>	Twp: <u>34S</u>	Range: <u>67W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SC

Most Sensitive Adjacent Land Use Forest

Is domestic water well within 1/4 mile? No

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

NA

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- ☒ E&P Waste ☐ Other E&P Waste ☐ Non-E&P Waste
- ☒ Produced Water ☐ Workover Fluids
- ☐ Oil ☐ Tank Bottoms
- ☐ Condensate ☐ Pigging Waste
- ☐ Drilling Fluids ☐ Rig Wash
- ☐ Drill Cuttings ☐ Spent Filters
- ☐ Pit Bottoms
- ☐ Other (as described by EPA)

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
Yes	SOILS	To be determined.	Laboratory analysis of soil samples.

INITIAL ACTION SUMMARY

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

This form is being submitted to report initial sampling supporting the APACHE CANYON 6-9V (API# 05-071-09126) well P&A and associated pit closure (COGCC Facility ID 292612). On 9/6/2022, soil samples were collected per the approved Initial Form 27 #402979959. Twelve soil samples were collected from the pit, wellhead excavation, associated flowline connection points, and equipment footprints. Laboratory results of initial characterization samples indicate compliance with COGCC Table 915-1 Residential Screening Levels except for SAR, pH, arsenic, and chromium (VI). Additionally, one composite soil sample was collected of the soil removed from the pit. Laboratory results of the composite sample indicate compliance with COGCC Table 915-1 Residential Screening Levels except for TPH and arsenic. The soil represented by this sample will be transported off location for disposal at an approved facility.

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):

SAR, pH, arsenic, and chromium (VI) exceedances remain within the project area. However, a produced water sample (COGCC Sample Site ID 288598) collected from the APACHE CANYON 6-9V (API# 05-071-09126) well indicates a pH of 7.6, and arsenic and chromium (VI) values below the laboratory detection limit. Based on this analysis, the elevated concentrations in the project area appear to be naturally occurring and XTO requests a reduced analyte suite of SAR for future confirmation samples associated with this remediation project. If this request is approved, XTO plans to excavate SAR impacts in the area represented by pit base sample 220906_Apache_Bottom-Hole_CS1(1015)13.5' and confirm removal through laboratory analysis. A Site Diagram illustrating sample locations is attached. Laboratory reports are included and summarize in the attached table.

Proposed Groundwater Sampling

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

No groundwater was encountered during initial investigation.

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

Number of soil samples collected 13

Number of soil samples exceeding 915-1 13

Was the areal and vertical extent of soil contamination delineated? No

Approximate areal extent (square feet) 250

Groundwater

Number of groundwater samples collected 0

Was extent of groundwater contaminated delineated? No

Depth to groundwater (below ground surface, in feet)

Number of groundwater monitoring wells installed

Number of groundwater samples exceeding 915-1

NA / ND

-- Highest concentration of TPH (mg/kg) 638

-- Highest concentration of SAR 8.09

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 14

Highest concentration of Benzene (µg/l)

Highest concentration of Toluene (µg/l)

Highest concentration of Ethylbenzene (µg/l)

Highest concentration of Xylene (µg/l)

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?

See attached Site Diagram and table detailing background soil sampling.

☐ 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?

See Remediation Summary.

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.

Visually impacted soil from the pit was excavated and will be transported to an approved disposal facility.

REMEDIAL ACTION 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.

On 9/6/2022, soil samples were collected in per the approved Initial Form 27 #402979959. Twelve soil samples were collected from the pit, wellhead excavation, associated flowline connection points, and equipment footprints. Laboratory results of initial characterization samples indicate compliance with OCGCC Table 915-1 Residential Screening Levels except for SAR, pH, arsenic, and chromium (VI). Exceedances of pH rang from 8.43 to 9.12. Arsenic exceedances range from 1.89 mg/kg to 29.4 mg/kg. Chromium (VI) exceedances range from 0.406 mg/kg to 0.562 mg/kg. However, a produced water sample (COGCC Sample Site ID 288598) collected from the APACHE CANYON 6-9V (API# 05-071-09126) indicates a pH of 7.6, and arsenic and chromium (VI) values below the laboratory detection limit. Based on this analysis, the elevated concentrations of these constituents in the project area appear to be naturally occurring and XTO requests a reduced analyte suite of SAR for future confirmation samples associated with this remediation project.

Additionally, one composite soil sample was collected of the soil removed from the pit. Laboratory results of composite sample indicate compliance with OCGCC Table 915-1 Residential Screening Levels except for TPH and arsenic. The soil represented by this sample will be transported off location for disposal at an approved facility. A Site Diagram illustrating sample locations is attached. Laboratory reports are included and summarize in the attached table.

Upon approval of the requested reduced analyte suite, XTO plans to excavate SAR impacts in the area represented by pit base sample 220906_Apache_Bottom-Hole_CS1(1015)13.5' and confirm removal through laboratory analysis.

Soil Remediation Summary

☐ In Situ

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

☐ Ex Situ

_____ Excavate and offsite disposal
 _____ If Yes: Estimated Volume (Cubic Yards) _____
 _____ Name of Licensed Disposal Facility or COGCC Facility ID # _____
 _____ Excavate and onsite remediation
 _____ 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

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.

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

WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation?

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

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility:

Volume of E&P Waste (liquid) in barrels

E&P waste (liquid) description

COGCC Disposal Facility ID #, if applicable:

Non-COGCC 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?

Does the previous reply indicate consideration of background concentrations?

Does Groundwater meet Table 915-1 standards?

Is additional groundwater monitoring to be conducted? _____

Operator shall comply with the COGCC 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.

All disturbance areas will be returned to grade with suitable material in preparation for final reclamation activities pursuant to the 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. _____

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

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 09/06/2022

Proposed site investigation commencement. 09/06/2022

Proposed completion of site investigation. 10/06/2022

REMEDIAL ACTION DATES

Proposed start date of Remediation. 10/06/2022

Proposed date of completion of Remediation. 10/06/2022

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 is being submitted to report initial P&A sampling results of the APACHE CANYON 6-9V (API# 05-071-09126) well and associated Pit (COGCC Facility ID 292612). Additionally, this form serves to request a reduced analyte suite of SAR based on initial characterization samples and produced water analysis. Upon approval of this form, XTO plans to continue excavation of the identified SAR exceedance in the pit base.

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

Signed: Erin Clark

Title: Lead Reg. Coordinator

Submit Date: _____

Email: erin.k.clark@exxonmobil.com

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

COGCC Approved: _____

Date: _____

Remediation Project Number: 22832

COA Type**Description**

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Attachment Check 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**

403186381	SITE MAP
403186387	SITE MAP
403186409	ANALYTICAL RESULTS
403186431	ANALYTICAL RESULTS

Total Attach: 4 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)