

State of Colorado
Energy & Carbon Management Commission

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Report taken by:
Chris Sanchez

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: CITATION OIL & GAS CORP	Operator No: 17180	Phone Numbers Phone: (281) 891-1550 Mobile: (713) 702-7534
Address: 14077 CUTTEN RD		
City: HOUSTON	State: TX	Zip: 77069
Contact Person: Bob Redweik	Email: bredweik@cogc.com	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 35562 Initial Form 27 Document #: 403800217

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: WELL	Facility ID: _____	API #: 017-06554	County Name: CHEYENNE
Facility Name: SAYLES 33-29 4	Latitude: 38.886510	Longitude: -102.692754	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NWSE	Sec: 29	Twp: 13S	Range: 47W Meridian: 6 Sensitive Area? Yes
Facility Type: LOCATION	Facility ID: 321640	API #: _____	County Name: CHEYENNE
Facility Name: SAYLES 33-29-613S47W 29NWSE	Latitude: 38.886510	Longitude: -102.692754	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NWSE	Sec: 29	Twp: 13S	Range: 47W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SM

Most Sensitive Adjacent Land Use Rangeland

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

Surface water within a mile radius radius of the site is present in the form of an FWS wetlands classified as a riverine habitat located 1,175 ft west of the site and Eureka Creek is located 0.88 miles west. The closest water well is a stock well located approximately 1.03 miles E-SE of the site and has a static WL of 30 feet bgs. There is no well within a 1-mile radius of the site. There are no occupied buildings or livestock within a mile of the site. The location is within the CPW HPH lesser prairie chicken connectivity area and estimated occupied range.

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 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	TBD	Soil Sampling

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 serves as notification for the decommissioning of the Sayles 33-29 #4 wellhead. The ground and subsurface shall be inspected for hydrocarbon impacts during equipment removal. At a minimum, soil sampling shall be conducted in the proposed locations discussed below and shown on the attached proposed soil sample location map.

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):

One (1) discrete grab soil sample will be collected as shown in the proposed sample location diagram, adjacent to the capped well casing. Four (4) field screening surface soil samples be collected in each cardinal direction surrounding the wellhead and one (1) background sample will be collected from an adjacent, upgradient location. The grab sample will be utilized for full Table 915-1 listed constituents. The background sample will be analyzed for EC, SAR, pH, boron, and metals.

Proposed Groundwater Sampling

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

Should groundwater be encountered, a sample will be collected as soon as practical and shall be submitted for laboratory analysis of Table 915-1 Inorganic Parameters and Organic Compounds in Groundwater.

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):

Soil on location will be field screened with a photoionization device (PID).

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil	NA / ND
Number of soil samples collected <u>2</u>	ND Highest concentration of TPH (mg/kg) _____
Number of soil samples exceeding 915-1 <u>2</u>	-- Highest concentration of SAR <u>3.7</u>
Was the areal and vertical extent of soil contamination delineated? <u>No</u>	BTEX > 915-1 <u>No</u>

Approximate areal extent (square feet) 100

Vertical Extent > 915-1 (in feet) 8

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?

One (1) background sample was collected offsite and upgradient in an undisturbed location adjacent to the site at depths of 96" (S4-BG-01). The sample was analyzed for EC, SAR, pH, Boron, and metals. The background sample exhibited an arsenic concentration of 3.62 mg/kg. Based on this value, arsenic levels are determined to naturally occur at higher concentrations than the Table 915 limit.

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.

Site was investigated on October 8, 2024. One (1) background sample (S4-BG-01) was taken from an area offsite and upgradient from the well. One (1) soil sample (S4-SS-01) was taken from the pad location per the original sample plan. Both samples exceeded Table 915 results for arsenic, see analytical results attached. Areas around the wellhead were field screened with a PID and found to need excavation for impaired soils.

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.

Remediation activities for substantial impacts will involve the excavation of impaired soils for transport to an approved disposal facility. Following excavation and removal of any impacted soils, confirmation sampling will be conducted to confirm successful remediation. Excavated areas will then be backfilled with clean soil as necessary and seeding of the remediated area to re-establish a proper seedbed will be conducted.

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.

Does Groundwater meet Table 915-1 standards? _____

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.

A reclamation plan will be prepared pending the outcome of the site investigation.

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). 10/08/2024

Proposed site investigation commencement. 10/08/2024

Proposed completion of site investigation. 08/31/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 07/01/2025

Proposed date of completion of Remediation. 09/30/2025

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:

See operator comment

OPERATOR COMMENT

This is the 1Q2025 quarterly update for this location. Due to local resource limitations and the need to address higher priority sites, Citation was unable to keep up with quarterly progress for this project. Moving forward, Citation has addressed the situation and will continue with quarterly reporting as required by the ECMC to progress this project. During 4Q2024, the location was inspected to document the status and further evaluate a plan of action. Citation is currently developing this plan and will be increasing remediation efforts for 2025 by retaining additional third-party contractor support starting 2Q2025.

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

Signed: Joel Mason

Title: Agent

Submit Date: 03/29/2025

Email: joel.mason@absarokasolutions.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: Chris Sanchez

Date: 09/17/2025

Remediation Project Number: 35562

COA Type**Description**

	Approval of this Form 27 does not imply approval of pre-abandonment in place notice required by Rule 1105.d.(2). for Flowline abandonment. If the Operator proposes the abandonment or removal of an off-location flowline(s), a Pre-abandonment notice in the form of a Form 44 is required per ECMC Rule 1105.d.(3).
	Arsenic concentrations in confirmation soil samples exceed the Table 915-1 Residential Soil Screening Level Concentrations and are greater than 1.25 times the arsenic concentration in the background sample. Operator will provide additional data to characterize arsenic concentrations at the site and to determine its source.
	Prior to closure of this Remediation Project, Operator shall provide all laboratory analytical report(s) as a stand-alone attachment(s) via Supplemental Form 27. The Laboratory Report PDF(s) must be secured by the issuing laboratory; If there is a difference between the creation date and secured date of the PDF, Operator shall provide an explanation in the case narrative of the associated report.

3 COAs

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**

403974959	INVESTIGATION/REMEDATION WORKPLAN (SUPPLEMENTAL)
404135946	ANALYTICAL RESULTS
404135948	ANALYTICAL RESULTS
404135949	PHOTO DOCUMENTATION
404135951	SOIL SAMPLE LOCATION MAP
404357195	FORM 27-SUPPLEMENTAL-SUBMITTED

Total Attach: 6 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)