

State of Colorado
Energy & Carbon Management Commission

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Receive Date:
01/16/2026
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: MURFIN DRILLING COMPANY INC	Operator No: 61650	Phone Numbers
Address: 250 N WATER ST STE 300		Phone: (316) 858-8664
City: WICHITA State: KS Zip: 67202		Mobile: ()
Contact Person: Cristina Goodrich	Email: cgoodrich@murfininc.com	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 34350 Initial Form 27 Document #: 403644059

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 #: 009-06376	County Name: BACA
Facility Name: S E CAMPO UNIT 402W	Latitude: 37.030923	Longitude: -102.567803	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NWNE	Sec: 2	Twp: 35S	Range: 46W Meridian: 6 Sensitive Area? Yes
Facility Type: LOCATION	Facility ID: 321074	API #: _____	County Name: BACA
Facility Name: S E CAMPO UNIT-635S46W 2NWNE	Latitude: 37.030923	Longitude: -102.567803	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NWNE	Sec: 2	Twp: 35S	Range: 46W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE Facility ID: 487523 API #: _____ County Name: BACA
Facility Name: SE Campo Unit 402W Latitude: 37.030933 Longitude: -102.567798
** correct Lat/Long if needed: Latitude: _____ Longitude: _____
QtrQtr: NWNE Sec: 2 Twp: 35S Range: 46W 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? No

Is groundwater less than 20 feet below ground surface? No

Other Potential Receptors within 1/4 mile

Within Lesser Prairie Chicken Estimated Occupied Range HPH, within Lesser Prairie Chicken Connectivity Area HPH, within Comanche National Grassland

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 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	GROUNDWATER	NA	lab analysis if encountered
Yes	SOILS	TBD	lab analysis

INITIAL ACTION SUMMARY

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

On 8/28/25, additional excavation and confirmation soil sampling occurred on the east sidewall. Confirmation grab soil sample EX01-SS-08@4' was collected and submitted to Origins Laboratory in Denver, Colorado for full ECMC Table 915-1 analysis. Lab results confirm compliance with Table 915-1 and local background comparison levels where applicable. See attached figures, tables, photo log, and laboratory analytical reports for all work completed since previous SF27 document number 404308420 was submitted.

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):

A new wellhead excavation floor soil sample will be collected to the east of Table 915-1 compliant previous soil sample EX01-FS-01@6', underneath where previous sidewall soil sample EX01-SS-06@4' used to be prior to that material being removed for offsite disposal, and submitted to Origins per virtual meeting with Chris Sanchez and Kyle Waggoner of ECMC on 1/15/26. Murfin would like to request ECMC approval for a reduced analysis of pH and SAR only for the new wellhead excavation floor sample, as discussed in the 1/15/26 virtual meeting with ECMC.

Proposed Groundwater Sampling

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

If groundwater is encountered during site assessment, a grab groundwater sample will be collected and analyzed for ECMC Table 915-1 Organic Compounds in Groundwater and Groundwater Inorganic Parameters.

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):

Injection line assessment per approved IF27 document number 403644059 pending USFS permission. Additionally, regarding master background soil samples for the Campo Field, background grab soil samples BG-02@3' and BG-02@4' to the south of the SE Campo Unit 401 location will be re-sampled and submitted to Origins for Table 915-1 Soil Suitability for Reclamation and Metals, to confirm the original 6/26/24 results per virtual meeting with Chris Sanchez and Kyle Waggoner of ECMC on 1/15/26. Murfin may choose to also collect additional background grab soil samples from new location(s) in the Comanche National Grassland open rangeland well away from any oil and gas location.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 11
Number of soil samples exceeding 915-1 3
Was the areal and vertical extent of soil contamination delineated? Yes
Approximate areal extent (square feet) 150

NA / ND

-- Highest concentration of TPH (mg/kg) 2099
-- Highest concentration of SAR 52.8
BTEX > 915-1 No
Vertical Extent > 915-1 (in feet) 4

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 Highest concentration of Benzene (µg/l) _____
NA Highest concentration of Toluene (µg/l) _____
NA Highest concentration of Ethylbenzene (µg/l) _____
NA Highest concentration of Xylene (µg/l) _____
NA 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?

Per email correspondence with Chris Sanchez of ECMC on 5/16/25, ECMC will consider a Campo Field master background table and figure for local cleanup level comparison for Murfin's Campo field since all locations are relatively close in the same USFS Comanche National Grasslands. See attached Figure 3, Figure 4, Table 5, Table 6, and laboratory analytical reports for all Campo Field grab background soil samples collected to-date not yet previously submitted. Updated Campo Master background figures and tables are attached per virtual meeting with Chris Sanchez and Kyle Waggoner of ECMC on 1/15/26.

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 Proposed Sampling Plan

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.

Well has been P&Ad.

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.

Excavation for offsite disposal.

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation) Yes _____ Excavate and offsite disposal

_____ Chemical oxidation
_____ Air sparge / Soil vapor extraction
_____ Natural Attenuation
_____ Other _____

If Yes: Estimated Volume (Cubic Yards) _____ 15
Name of Licensed Disposal Facility or ECMC 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.

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 completed in accordance with ECMC 1000 Series Rules or per surface owner direction.

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. 01/04/2024

Actual Spill or Release date, or date of discovery. 07/23/2024

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 06/26/2024

Proposed site investigation commencement. 06/26/2024

Proposed completion of site investigation. 12/31/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 05/01/2025

Proposed date of completion of Remediation. 12/31/2026

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

Murfin would like to request ECMC approval for a reduced analysis of pH and SAR only for the new wellhead excavation floor sample, as discussed in the 1/15/26 virtual meeting with ECMC.

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

Signed: David Castro

Title: Senior Project Manager

Submit Date: 01/16/2026

Email: dcastro@eagle-enviro.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: 34350

COA Type**Description**

0 COA	
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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**

404509956	FORM 27-SUPPLEMENTAL-SUBMITTED
404510005	LABORATORY ANALYTICAL REPORT
404510009	LABORATORY ANALYTICAL REPORT
404510011	LABORATORY ANALYTICAL REPORT
404510012	LABORATORY ANALYTICAL REPORT
404510013	LABORATORY ANALYTICAL REPORT
404510014	LABORATORY ANALYTICAL REPORT
404510015	MAP
404510016	SOIL SAMPLE LOCATION MAP
404510017	SOIL SAMPLE LOCATION MAP
404510018	MAP
404510019	PHOTO DOCUMENTATION
404510020	SITE INVESTIGATION REPORT
404510021	ANALYTICAL DATA SUMMARY TABLE(S)
404510022	ANALYTICAL DATA SUMMARY TABLE(S)
404510023	ANALYTICAL DATA SUMMARY TABLE(S)
404510024	ANALYTICAL DATA SUMMARY TABLE(S)
404510025	OTHER

Total Attach: 18 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)