FORM 27 Rev 5/22

State of Colorado
Energy & Carbon Management Commission

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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 INFORMATON

Name of Operator: NOBLE ENERGY INC Operator No: 100322
Address: 1099 18TH STREET SUITE 1500
City: DENVER State: CO Zip: 80202
Contact Person: Dan Peterson Email: RBUEUF27@chevron.com

Phone Numbers
Phone: (970) 304-5000
Mobile: ( )

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 24016 Initial Form 27 Document #: 403097635

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.
- [X] 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.
- [X] 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 #: 123-17225 County Name: WELD
Facility Name: SPIKE STATE D 12-3 Latitude: 40.245310 Longitude: -104.501860
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: NENW Sec: 12 Twp: 3N Range: 64W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE Facility ID: 491275 API #: County Name: WELD
Facility Name: Spike State D12-03 Latitude: 40.245312 Longitude: -104.501846
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: NENW Sec: 12 Twp: 3N Range: 64W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SW

Most Sensitive Adjacent Land Use Prairie Land

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

Pronghorn Winter Concentration

SITE INVESTIGATION PLAN

TYPE OF WASTE:

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

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
UNDETERMINED	GROUNDWATER	NA	Lab analysis and field screening, if encountered
Yes	SOILS	Refer to Tables & Figures	Lab analysis and field screening

INITIAL ACTION SUMMARY

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

Pursuant to ECMC Rule 911 a site investigation was conducted pertaining to the Spike State D12-03 wellhead cut and cap and flowline abandonment. The wellhead was cut and capped per ECMC rules on 11/9/22. Approximately 724' of flowline was removed per ECMC rules on 2/8/23. Additionally, soil samples were collected/field screened at the N-E-S-W sides of the wellhead, at the floor of the wellhead excavation and along the flowline at any points of material change and/or hammer unions, directional changes, as well as at the bell holes on either side of a waterway.

PROPOSED SAMPLING PLAN

Proposed Soil Sampling

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

Soil samples were collected for laboratory analysis at the base of the wellhead excavation and at a directional change in the flowline during the decommissioning activities. Additionally, soil samples were field screened at the N-E-S-W sides of the wellhead and approximately every 250 feet along the flowline. Soil samples were 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, EC, SAR, pH, and boron. The soil sample collected at the wellhead was also analyzed for Table 915-1 metals. All samples collected were analyzed by a certified laboratory using approved ECMC laboratory analysis methods.

Proposed Groundwater Sampling

[X] 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 wellhead and flowline areas occurred during abandonment activities. Field personnel screened all disturbed areas using visual and olfactory senses to determine if laboratory confirmation sampling was required.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil **NA / ND**

Number of soil samples collected 10

Number of soil samples exceeeding 915-1 1

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

Approximate areal extent (square feet) 100

ND Highest concentration of TPH (mg/kg)

-- Highest concentration of SAR 3.01

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 2

Groundwater

Number of groundwater samples collected 0

Was extent of groundwater contaminated delineated? Yes

Depth to groundwater (below ground surface, in feet)

Number of groundwater monitoring wells installed

Number of groundwater samples exceeding 915-1

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?

[X] Were background samples collected as part of this site investigation?

One background soil sample was collected at approximately 2 feet below ground surface (ft bgs) near the wellhead and analyzed for SAR. An additional 16 background samples from four soil boring locations were collected along the flowline and adjacent to the wellhead on 8/27/25 and analyzed for inorganics and metals in soil per ECMC Table 915-1. The background soil samples were collected at samples depth of approximately 4, 5, 6, and 7 ft bgs. The maximum pH concentration was observed to be 8.61. The maximum background concentrations for arsenic and barium, with the 1.25x multiplier applied, were 18.00 milligrams per kilogram (mg/kg) and 345.0 mg/kg, respectively. Lead was not detected in the background samples. All constituents at the site in samples collected during the decommissioning and Supplemental Site Investigation (SSI) are within Table 915-1 standards/maximum background concentrations, except for lead at WH01-SB@2'.

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

Volume of solid waste (cubic yards)

Volume of liquid waste (barrels)

[X] Is further site investigation required?

Montrose is working with Noble to conduct a Supplemental Site Investigation (SSI) to vertically and horizontally delineate the lead exceedance observed in sample WH01-SB@2' collected during the SSI on 8/27/25. The delineation soil samples will be analyzed for the full ECMC Table 915-1. Concurrently with the SSI, additional background samples (3+) will be collected from soil of native/similar lithologic material not impacted by oil and gas activity to determine if the elevated lead is attributable to native soil conditions at the site. The background samples will be analyzed for metals and inorganics in soil per ECMC Table 915-1. A proposed sample location map is attached to this form.

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.

No impacted material caused by oil and gas operations was identified at this time.

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.

On August 27, 2025, the potential presence of impacted material(s) was identified via hydrocarbon staining during Supplemental Site Investigation (SSI) activities at the Spike State D12-03 wellhead in samples WH01-SB and WH01-SB02. Soil sampling was conducted to determine whether any constituents were present at levels in excess of Table 915-1 standards. Analytical results of soil sampling confirmed the samples are non-detect for all Table 915-1 organic constituents indicating a release did not occur. A Form 19 was submitted to the ECMC (Document 404334180), and Spill ID 491275 was assigned to the site.

Montrose is working with Noble to conduct a Supplemental Site Investigation (SSI) to vertically and horizontally delineate the lead exceedance observed in sample WH01-SB@2' collected during the SSI on 8/27/25. The delineation soil samples will be analyzed for the full ECMC Table 915-1. Concurrently with the SSI, additional background samples (3+) will be collected from soil of native/similar lithologic material not impacted by oil and gas activity to determine if the elevated lead is attributable to native soil conditions at the site. The background samples will be analyzed for metals and inorganics in soil per ECMC Table 915-1. A proposed sample location map is attached to this form.

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 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.

Groundwater was not encountered during the decommissioning or SSI activities.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

[X] 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

[X] Other Supplemental Site Investigation Report and SSI Proposal

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.

Noble intends to directly address the costs of remediation at the locations as part of our asset retirement obligation process and operations. Noble has general liability insurance (policies MWZZ316714 and MWZX316724) and financial assurance in compliance with ECMC rules. Records are available on the ECMC's website. The cost for remediation is an estimate only, costs may change upwards or downward based on site-specific information. Noble makes no representation or guarantees as to the accuracy of the estimate.

Operator anticipates the remaining cost for this project to be: $ 50000

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? Yes

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

[X] 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. 11/09/2022

Proposed date of completion of Reclamation. 03/31/2028

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. 06/07/2022

Actual Spill or Release date, or date of discovery. 08/27/2025

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 11/09/2022

Proposed site investigation commencement. 01/02/2025

Proposed completion of site investigation. 03/31/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 03/31/2026

Proposed date of completion of Remediation. 09/30/2026

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.

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

Basis for change in implementation schedule:

The implementation schedule has been modified to reflect the completion of decommissioning and SSI activities at the Spike State D12-03 wellhead and flowline and necessity for additional SSI activities. This work is tentatively scheduled to take place by the end of 1Q2026.

OPERATOR COMMENT

This Form 27 is being submitted to provide the Supplemental Site Investigation (SSI) activity summary and 3Q2025 update for the Spike State D12-03 wellhead and flowline (REM #24016). Teo previously submitted Form 27's (Documents #404145239 and #404261037) are currently "In Process" on WebForms. On 8/27/25, a Supplemental Site Investigation (SSI) was completed to resample the base of the wellhead excavation, resample a directional change along the flowline, and horizontally and vertically delineate the SAR exceedance identified at the wellhead. The soil samples were analyzed for the full ECMC Table 915-1. Concurrently with the SSI, 16 background samples were collected from four locations and submitted for ECMC Table 915-1 inorganic and metals analysis. Upon receipt of the analytical results, only lead at WH01-SB@2' was identified in excess of Table 915-1/maximum background concentrations. A detailed summary of the SSI and associated laboratory analytical data is attached to this form.

During hand auguring activities at the Spike State D12-03 wellhead on 8/27/25, the potential presence of impacted material(s) was identified via hydrocarbon staining and/or odor at soil sample locations WH01-SB and WH01-SB02. The soil samples were submitted to the laboratory for full Table 915-1 analysis to determine whether any constituents were present at levels in excess of applicable standards. Analytical results of soil sampling confirmed the suspected spill did not occur and all sample locations were below Table 915-1 standards for organic constituents. A Form 19 was submitted to the ECMC (Document 404334180), and Spill ID 491275 was assigned to the site.

Montrose is working with Noble to conduct a Supplemental Site Investigation (SSI) to vertically and horizontally delineate the lead exceedance observed in sample WH01-SB@2' collected during the SSI on 8/27/25. The delineation soil samples will be analyzed for the full ECMC Table 915-1. Concurrently with the SSI, additional background samples (3+) will be collected from soil of native/similar lithologic material not impacted by oil and gas activity to determine if the elevated lead is attributable to native soil conditions at the site. The background samples will be analyzed for metals and inorganics in soil per ECMC Table 915-1. A proposed sample location map is attached to this form.

Pursuant to Rule 913.e, quarterly reporting will be conducted until closure criteria are achieved for the remediation project. The results of the site investigation will be submitted on a subsequent Form 27.

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

Signed: Scott Williamson Title: Environmental Consultant

Submit Date: Email: NorthernColoradoPM@montrose-env.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: 24016

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
404370814	LABORATORY ANALYTICAL REPORT
404370815	LABORATORY ANALYTICAL REPORT
404372163	SITE INVESTIGATION PLAN
404372185	SITE INVESTIGATION REPORT

Total Attach: 4 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)