FORM 27 Rev 5/22

State of Colorado
Energy & Carbon Management 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 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: Lauren Hoff Email: RBUEUF27@chevron.com

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

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 39039 Initial Form 27 Document #: 404058156

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.
- [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

No Multiple Facilities

Facility Type: WELL Facility ID: API #: 123-15285 County Name: WELD
Facility Name: HSR-BOTT 3-23 Latitude: 40.303850 Longitude: -104.632990
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: NENW Sec: 23 Twp: 4N Range: 65W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SW
Most Sensitive Adjacent Land Use Cropland
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? Yes

Other Potential Receptors within 1/4 mile

Aquatic Native Species Conservation Waters HPH 0.25mi W
Freshwater Emergent Wetland 0.17mi SE

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
Yes	GROUNDWATER	Refer to Tables and Figures	Lab analysis and Field Screening
No	SOILS	Not Impacted	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 HSR-BOTT 3-23 wellhead cut and cap. The wellhead was cut and capped per ECMC rules. Additionally, soil samples were field screened at the N-E-S-W sides of the wellhead. The flowline was previously abandoned on 9/14/2018, and the ECMC was notified on Form 44 Document number 402100469.

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):

A grab soil sample was collected at the base of the excavation or the area showing the highest degree of impact during field screening activities at the wellhead excavation. A grab confirmation soil sample was collected at the wellhead excavation, and soil samples were field screened at the N-E-S-W sides of the wellhead. Additional confirmation samples will be collected from the wellhead excavation sidewalls. Soil samples were and will be analyzed by a certified laboratory for the full extent of Table 915-1, including but not limited to: TPH (total volatile [C6-C10] and extractable [C10-C36] hydrocarbons) organic compounds in soil per ECMC Table 915-1, and EC, SAR, pH, metals, and boron. Background soil samples were analyzed for analysis of metals per ECMC Table 915-1 and soil suitability parameters including pH, EC, SAR, and boron. 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):

One grab groundwater sample (GW01) was collected during initial facility closure and decommissioning activities at the wellhead and submitted to the lab for analysis for all organic and inorganic compounds per ECMC Table 915-1. Please refer to the operator comments for additional information.

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 area occurred during abandonment activities. Field personnel field screened all disturbed areas using visual and olfactory senses to determine if laboratory confirmation sampling was required. The ECMC Wellhead Closure Checklist was utilized and filled out during the abandonment process. A photolog is attached.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected: 1

Number of soil samples exceeeding 915-1: 0

Was the areal and vertical extent of soil contamination delineated? Yes

Approximate areal extent (square feet): 0

NA / ND

ND — Highest concentration of TPH (mg/kg):

-- — Highest concentration of SAR: 10.1

BTEX > 915-1: No

Vertical Extent > 915-1 (in feet): 0

Groundwater

Number of groundwater samples collected: 1

Was extent of groundwater contaminated delineated? Yes

Depth to groundwater (below ground surface, in feet): 6

Number of groundwater monitoring wells installed: 0

Number of groundwater samples exceeding 915-1: 1

ND — Highest concentration of Benzene (µg/l):

ND — Highest concentration of Toluene (µg/l):

ND — Highest concentration of Ethylbenzene (µg/l):

ND — 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?

Six site specific background soil samples were collected from approximately 4 ft., and 6 ft-bgs from three soil borings (BKG01 to BKG03) and were submitted for analysis of pH, EC, SAR, and total metals (Table 915-1 List) by ECMC approved methods.

The confirmation soil samples and field screenings collected from the wellhead excavation were all classified as clayey sands (SC). The six background soil samples were collected from the same depths as the confirmation soil samples with the same soil classification as the wellhead sample, clayey sands (SC).

The highest background concentrations for pH is 8.64, and SAR is 10.1. The 1.25x maximum background concentrations for arsenic is 5.49 mg/kg and barium is 164 mg/kg.

☐ 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?

Additional confirmation soil samples will be collected from the wellhead excavation.

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.

A remediation plan will be presented as needed, following the proposed additional site assessment activities.

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 encountered at approximately 6 ft-bgs at the excavation during wellhead cut and cap activities and one grab groundwater sample (GW01) was collected. Additional information is provided in the Operator Comments section.

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 SSIP, Site Investigation Report

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? Yes

Does the previous reply indicate consideration of background concentrations? Yes

Does Groundwater meet Table 915-1 standards? No

Is additional groundwater monitoring to be conducted? Yes

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? No

If YES, does the seed mix comply with local soil conservation district recommendations?

Did the local soil conservation district provide the seed mix? No

SITE RECLAMATION DATES

Proposed date of commencement of Reclamation. 03/19/2025

Proposed date of completion of Reclamation. 03/19/2027

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. 01/14/2025

Actual Spill or Release date, or date of discovery.

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 03/19/2025

Proposed site investigation commencement. 03/19/2025

Proposed completion of site investigation. 01/31/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 01/31/2026

Proposed date of completion of Remediation. 07/19/2026

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 changed due to the necessity for site investigation activities adjacent to the wellhead.

OPERATOR COMMENT

This 4Q25 Supplemental Form 27 summarizes the decommissioning results of the HSR-Bott 3-23 wellhead activities conducted on March 19, 2025.

All analytical results for soil samples submitted for analysis are compliant with their respective Table 915-1 Protection of Groundwater Soil Screening Levels or below the highest background concentration for pH (8.64) and SAR (15.3) or 1.25x the highest background concentrations for arsenic (5.49 mg/kg) and barium (164 mg/kg).

Groundwater was encountered at approximately 6 ft-bgs during excavation of the wellhead during cut and cap activities. One grab groundwater sample (GW01) was collected and submitted to the laboratory for analysis of BTEX, naphthalene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene by EPA Method 8260B, chloride and sulfate anions by EPA-300.0 Method and total dissolved solids (TDS) by EPA Method 2540C. All analytical results for the groundwater sample submitted for analysis are compliant with their respective Table 915-1 Screening Levels except for TDS (3600 mg/L), chloride (608 mg/L), and sulfate (1610 mg/L).

Due to low PID measurements collected during initial facility closure and decommissioning at the wellhead, soil samples WH01-N@4 and WH01-E@4 were not submitted to the lab for analysis. However, based on visual observations, Noble proposes to re-sample soil samples WH01-N@4 and WH01-E@4 to confirm the absence of impacted soils at the site. Confirmation soil samples will be submitted for the full Table 915-1 analysis. Following soil sample recollection, a plan to address any residual inorganic exceedances in both soil and groundwater will be submitted in a subsequent Supplemental Form 27.

The flowline was previously abandoned on 9/14/2018, and the ECMC was notified on Form 44 Document number 402100469.

Please refer to the attached site investigation assessment and analytics for a detailed description of activities conducted during wellhead decommissioning. The data were reviewed for compliance with the analytical method and the associated quality assurance/quality control (QA/QC) procedures. Chain of custody forms were properly executed, and data were reported using the correct methods and reporting units. The results of the QA/QC assessment indicate that data precision and accuracy are acceptable.

Pursuant to Rule 913.e, quarterly reporting will continue for the location until data indicates no further action is warranted.

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

Signed: Timothy Krupa Title: Project Geologist

Submit Date: Email: chevronfr@entradainc.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: 39039

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
404444235	LABORATORY ANALYTICAL REPORT
404444240	SITE INVESTIGATION REPORT

Total Attach: 2 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)