

State of Colorado  
Energy & Carbon Management Commission

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Document Number:  
404442150

Receive Date:

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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 ECOM 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>NOBLE ENERGY INC</u>	Operator No: <u>100322</u>	<b>Phone Numbers</b>
Address: <u>1099 18TH STREET SUITE 1500</u>		Phone: <u>(970) 304-5000</u>
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80202</u>		Mobile: <u>( )</u>
Contact Person: <u>Lauren Hoff</u>	Email: <u>RBUEUF27@chevron.com</u>	

**PROJECT, PURPOSE & SITE INFORMATION**

**PROJECT INFORMATION**

Remediation Project #: 34772 Initial Form 27 Document #: 403703630

**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**

No Multiple Facilities

Facility Type: <u>WELL</u>	Facility ID: _____	API #: <u>123-13493</u>	County Name: <u>WELD</u>
Facility Name: <u>OCOMA C17-15</u>	Latitude: <u>40.306560</u>	Longitude: <u>-104.572390</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SWSE</u>	Sec: <u>17</u>	Twps: <u>4N</u>	Range: <u>64W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

**SITE CONDITIONS**

General soil type - USCS Classifications SW Most Sensitive Adjacent Land Use Grassland

Is domestic water well within 1/4 mile? Yes 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**

Riverine 0.02/0.15mi N

Residential 0.07mi SW, 0.15mi S, 0.09/0.19mi SE, 0.2mi W, 0.07mi NE

Farm Structure 0.03/0.17/0.18mi S, 0.2/0.21mi SE, 0.07/0.09/0.19mi E, 0.07/0.1mi N, 0.1/0.11mi NE

Apparent Pond 0.23/0.24mi NW

# 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 checked="" 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 and Field Screening if encountered
Yes	SOILS	Refer to Tables and 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 OCOMA C17-15 wellhead cut and cap and flowline removal. 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 removed with a portion of the flowline was abandoned-in-place due to field constraints and private utility and third party pipeline crossings. So as to not disturb the area of field constraint, soil samples were taken at the start and endpoint of the flowline where the area exists, and at the direction change where the flowline was removed. The ECMC was notified in the Form 44 Document Number 404127831.

## 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 ):

The confirmation soil samples collected during wellhead cut and cap activities were determined to be outside of the required temperature preservation range when delivered to the laboratory. Re-sampling was conducted. Soil samples were 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 and will be analyzed for analysis of metals per ECMC Table 915-1 and soil suitability parameters including pH, EC, SAR, and boron. All sample analysis was performed by a certified laboratory using approved ECMC laboratory analysis methods.

### Proposed Groundwater Sampling

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

If groundwater is encountered, a grab groundwater sample will be collected and analyzed for all organic and inorganic compounds per ECMC Table 915-1; this sample analysis includes, but is not limited to BTEX, naphthalene, 1,2,4-trimethylbenzene (TMB), and 1,3,5-TMB, chloride and sulfate anions and total dissolved solids (TDS).

### 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 field screened all disturbed areas using visual and olfactory senses to determine if laboratory confirmation sampling was required. The ECMC Wellhead and Flowline Closure Checklists were utilized and filled out during the abandonment process. Photologs were included with respective site investigation reports.

# SITE INVESTIGATION REPORT

## SAMPLE SUMMARY

**Soil**

Number of soil samples collected 1  
Number of soil samples exceeding 915-1 1  
Was the areal and vertical extent of soil contamination delineated? No  
Approximate areal extent (square feet) 100

**NA / ND**

ND Highest concentration of TPH (mg/kg) \_\_\_\_\_  
-- Highest concentration of SAR 10.6  
BTEX > 915-1 No  
Vertical Extent > 915-1 (in feet) 6

**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?

\_\_\_\_\_

Were background samples collected as part of this site investigation?

Six site specific background soil samples collected from approximately 4 ft-bgs and 6 ft-bgs from three soil borings (BKG01 through BKG03) were submitted for analysis of pH, EC, SAR, and total metals (Table 915-1 List) by ECOM approved methods.  
The confirmation soil samples and field screenings collected from the wellhead excavation were all classified as silty sands (SM). The six background soil samples were collected from the same depths as the confirmation soil samples with the similar soil classification as the wellhead sample, well-graded sands (SW), clayey sands (SC), and poorly graded sands (SP).  
All analytical results for soil samples submitted for analysis are compliant with their respective Table 915-1 GWSSLs or below the highest background value for boron (4.02 mg/L) or below 1.25x the highest background concentrations for arsenic (13.1 mg/kg) and selenium (0.831 mg/kg), except for SAR (10.6) in WH01@6.5.

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?

Noble proposes to conduct additional background soil sampling from boring locations at similar depths and soil horizons as confirmation soil samples, in areas away from oil and gas infrastructure to further investigate residual inorganic concentrations in soil at the wellhead.

**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 not encountered during excavation of the wellhead or flowline during decommissioning activities.

# 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 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? 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?

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. 05/20/2024

Proposed date of completion of Reclamation. 05/20/2026

## 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. 02/29/2024

Actual Spill or Release date, or date of discovery. \_\_\_\_\_

### **SITE INVESTIGATION DATES**

Date of Initial Actions described in Site Investigation Plan (start date). 05/20/2024

Proposed site investigation commencement. 05/20/2024

Proposed completion of site investigation. 02/20/2026

### **REMEDIAL ACTION DATES**

Proposed start date of Remediation. 02/20/2026

Proposed date of completion of Remediation. 08/20/2026

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:

The implementation schedule has been changed due to the necessity for supplemental site investigation activities adjacent to the wellhead and the flowline.

**OPERATOR COMMENT**

This 4Q25 Supplemental Form 27 summarizes the supplemental site investigation and background soil sampling activities conducted at the former Ocoma C17-15 wellhead conducted on July 2 and August 4, 2025.

Initial facility closure activities and confirmation soil sampling were conducted at the wellhead and flowline on May 20, and September 10, 2024, and were summarized in Supplemental Form 27 Document Numbers 403916560 and 404225225 (In Process), respectively. The ECMC was notified of flowline abandonment in Form 44 #404127831.

The laboratory report for confirmation sample WH01@6, collected on May 20, 2024, indicated that there was no evidence of cooling having begun for the samples. As a result, WH01@6.5 was re-collected on July 2, 2025. Additionally, background soil samples were collected on August 4, 2025.

All analytical results for soil samples submitted for analysis at the former wellhead are compliant with their respective Table 915-1 GWSSLs or below the highest background value for boron (4.02 mg/L) or below 1.25x the highest background concentrations for arsenic (13.1 mg/kg) and selenium (0.831 mg/kg), except for SAR (10.6) in WH01@6.5.

Noble proposes to conduct additional background soil sampling from boring locations at similar depths and soil horizons as confirmation soil samples, in areas away from oil and gas infrastructure to further investigate residual inorganic concentrations in soil along the flowline. Background soil samples will be analyzed for analysis of metals per ECMC Table 915-1 and soil suitability parameters including pH, EC, SAR, and boron. Additional background soil sampling is expected to commence in 1Q26. Refer to the attached Figure 2 for proposed background soil sample locations.

Please refer to the attached site investigation assessment and analytics for a detailed description of supplemental site investigation activities conducted at the former wellhead. 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: Lindsey Blankenship

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: 34772

**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**

404442428	LABORATORY ANALYTICAL REPORT
404442429	LABORATORY ANALYTICAL REPORT
404447580	SITE INVESTIGATION REPORT

Total Attach: 3 Files

**General Comments**

**User Group**

**Comment**

**Comment Date**

		Stamp Upon Approval
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Total: 0 comment(s)