

State of Colorado  
Energy & Carbon Management Commission

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Document Number:  
404606449  
Receive Date:  
04/03/2026

Report taken by:  
Nick Cholas

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

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 38979 Initial Form 27 Document #: 404053654

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: LOCATION	Facility ID: 470437	API #: _____	County Name: WELD
Facility Name: CHRISTINE-64N65W 15SWSE	Latitude: 40.305427	Longitude: -104.639995	
** correct Lat/Long if needed: Latitude: 40.305350		Longitude: -104.640634	
QtrQtr: SWSE	Sec: 15	Twp: 4N	Range: 65W Meridian: 6 Sensitive Area? Yes
Facility Type: SPILL OR RELEASE	Facility ID: 492249	API #: _____	County Name: WELD
Facility Name: Christine-64N65W 15SWSE	Latitude: 40.305439	Longitude: -104.640628	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: SWSE	Sec: 15	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? 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**

Within Aquatic Native Species Conservation Waters HPH  
Freshwater Emergent Wetland 0.02mi SE  
Riverine 0.01mi E  
Residential 0.19/0.2mi W, 0.24mi N  
Farm Structure 0.14/0.15/0.16/0.17/0.18/0.19/0.2/0.21mi W, 0.19/0.2/0.23mi SW, 0.23mi N

**DENIED**

# 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 Christine-64N65W 15SWSE Facility and Tank Battery location on 9/3/25. Soil samples were taken from the produced water vessel excavation, beneath the above ground surface oil tanks, and at the associated flowline terminuses for the riser and dump line at the oil-water separator. Field screening samples were collected at the produced water vessel excavation sidewalls and at the flare.

## 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 ):

Grab confirmation samples were collected from the produced water vessel excavation, beneath the above ground surface oil tanks, and at the risers for the flowline and dumpline of the separator. The flowline riser at the separator (SEP01-FLR) will be reported under the associated Arens 15-09G wellhead/flowline (REM #42295, Doc. #404428913). In addition, the on-site dump line located between the separator and tank battery was removed by pulling from either end. 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. All samples collected were analyzed 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 during site investigation activities, 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 tank battery area occurred during decommissioning 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 6 -- Highest concentration of TPH (mg/kg) 7400  
 Number of soil samples exceeding 915-1 4 -- Highest concentration of SAR 7.1  
 Was the areal and vertical extent of soil contamination delineated? No BTEX > 915-1 Yes  
 Approximate areal extent (square feet) 400 Vertical Extent > 915-1 (in feet) 5

**Groundwater**

Number of groundwater samples collected 0 Highest concentration of Benzene (µg/l) \_\_\_\_\_  
 Was extent of groundwater contaminated delineated? Yes 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?  
 Nine (9) background soil samples were collected from three (3) soil borings (BKG01, BKG02, BKG03) during tank battery decommissioning activities and were analyzed for metals and inorganics in soil per ECMC Table 915-1. Background soil samples were collected from depths of 0.5, 3, and 5 feet below ground surface (ft bgs). The maximum background concentrations for pH and SAR were observed to be 8.61 and 23.9, respectively. The maximum background concentrations, with the 1.25x multiplier applied, for arsenic, barium, and chromium were calculated to be 10.27 milligrams per kilogram (mg/kg), 303.7 mg/kg, and 0.325 mg/kg, respectively. All constituents in the samples collected at the site are within Table 915-1/maximum background limits, except for pH in sample PWV01-WC (8.62).

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?  
 The organic compound exceedances identified during facility/tank battery decommissioning at soil sample locations PWV01, PWV01-SS04, PWV01-WC, and PWV01-COMP and where staining/odors were identified at field screening locations PWV01-SS01, PWV01-SS02, and PWV-SS03 during the facility decommissioning will be removed through remedial excavation and the impacted soil will be segregated for proper off-site disposal. Remedial excavation confirmation soil samples will be collected and analyzed for full ECMC Table 915-1 constituents. The remedial excavation and confirmation sample locations are shown are attached to the supplemental Form 27 (Doc. #404436662), which is currently "In-Process" on Webforms.

**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.  
 A remedial excavation is proposed to remove the organic exceedances observed at soil sample locations PWV01@5' and PWV01-SS04@4' as well as the visually impacted soils identified during the tank battery decommissioning and the impacted soil will be segregated for proper off-site disposal. The excavation size is anticipated to be 20 feet (ft) x 20 ft x 7 ft. Remedial excavation confirmation samples will be collected and analyzed for Full ECMC Table 915-1 constituents.

**REMEDICATION 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.  
 The organic compound exceedances identified during facility/tank battery decommissioning at soil sample locations PWV01, PWV01-SS04, PWV01-WC, and PWV01-COMP and where staining/odors were identified at field screening locations PWV01-SS01, PWV01-SS02, and PWV-SS03 during the facility decommissioning will be removed through remedial excavation and the impacted soil will be segregated for proper off-site disposal. Remedial excavation confirmation soil samples will be collected and analyzed for full ECMC Table 915-1 constituents. The remedial excavation and confirmation sample locations are shown are attached to the supplemental Form 27 (Doc. #404436662), which is currently "In-Process" on Webforms.

**Soil Remediation Summary**

In Situ

Ex Situ

- \_\_\_\_\_ Bioremediation ( or enhanced bioremediation )
- \_\_\_\_\_ Chemical oxidation
- \_\_\_\_\_ Air sparge / Soil vapor extraction
- \_\_\_\_\_ Natural Attenuation
- \_\_\_\_\_ Other \_\_\_\_\_

- \_\_\_\_\_ 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 initial 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 Quarterly Update

## 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? \_\_\_\_\_

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. 09/03/2025

Proposed date of completion of Reclamation. 12/31/2029

## 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. 09/03/2024

Actual Spill or Release date, or date of discovery. 09/03/2025

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 09/03/2025

Proposed site investigation commencement. 09/03/2025

Proposed completion of site investigation. 09/30/2026

### REMEDIAL ACTION DATES

Proposed start date of Remediation. 09/30/2026

Proposed date of completion of Remediation. 03/31/2027

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 completion of decommissioning of the Christine-64N65W 15SWSE Facility and Tank Battery, and the necessity for remedial excavation adjacent to the facility and tank battery. A qualified excavation crew is not immediately available but are expected to commence by the end of 3Q 2026.

**OPERATOR COMMENT**

This Form 27 has been submitted to provide a 2Q 2026 update for the Christine-64N65W 15SWSE Facility and Tank Battery (REM#38979). The review status of the previously submitted remediation workplan and associated data (Doc. #404436662), which summarizes the facility decommissioning conducted in November 2025, is currently "In Process" on Web Forms. No work has been completed since the previous quarterly update.

In response to the ECMC comment 3/9/2026 (Denied Doc. #404566964), a qualified excavation crew is not immediately available but are expected to commence by the end of 3Q 2026.

The organic compound exceedances identified during facility/tank battery decommissioning at soil sample locations PWV01, PWV01-SS04, PWV01-WC, and PWV01-COMP and where staining/odors were identified at field screening locations PWV01-SS01, PWV01-SS02, and PWV-SS03 during the facility decommissioning will be removed through remedial excavation and the impacted soil will be segregated for proper off-site disposal. Remedial excavation confirmation soil samples will be collected and analyzed for full ECMC Table 915-1 constituents. The remedial excavation and confirmation sample locations are shown are attached to the supplemental Form 27 (Doc. #404436662), which is currently "In-Process" on Webforms.

Pursuant to Rule 913.e., quarterly reporting will be conducted until closure criteria are achieved for the remediation project. The results of the remedial excavation 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: 04/03/2026

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: 38979

**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**

404606449	FORM 27-SUPPLEMENTAL-SUBMITTED
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Total Attach: 1 Files

**General Comments**

**User Group**

**Comment**

**Comment Date**

Environmental	<p>ECMC has denied this form without technical review as Operator has provided no analytical or site investigation data showing progress of remediation of impacts documented at this location.</p> <p>Per Rule 912.a.(1-2): Operators will investigate, clean up, and document impacts resulting from Spills and Releases as soon as the impacts are discovered. Operator shall not delay execution of remedial or investigative actions while waiting for ECMC approval and may request expedited review if necessary.</p> <p>Operator shall conduct work in compliance with approved workplans and the 900 Series Rules. Operator shall provide a replacement form documenting investigation and clean up of these impacts; if a form providing this information is in process no replacement Form is due. If Operator is requesting a schedule change under Rule 913.d.(2) Operator shall attach adequate justification for the request. All ongoing/unaddressed comments/COAs from previous Forms remain applicable.</p>	04/16/2026
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Total: 1 comment(s)