

State of Colorado  
Energy & Carbon Management Commission

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Document Number:  
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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 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: <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 #: 30474 Initial Form 27 Document #: 403462830

**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>123-34394</u>	County Name: <u>WELD</u>
Facility Name: <u>NEI C18-32D</u>	Latitude: <u>40.311880</u>	Longitude: <u>-104.594850</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NESW</u>	Sec: <u>18</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? No 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 0.11mi SW, 0.11mi E  
NA

SITE INVESTIGATION PLAN

TYPE OF WASTE:

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

DESCRIPTION OF IMPACT

Table with 4 columns: Impacted?, Impacted Media, Extent of Impact, How Determined. Rows include UNDETERMINED and Yes for GROUNDWATER and SOILS.

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 9/15/2023, pursuant to ECMC Rule 911, a site investigation was conducted during the NEI C18-32D flowline removal and wellhead decommissioning.

On 8/15/24, the wellhead was cut and capped per ECMC rules. Screening samples were collected at the base of the wellhead excavation (WH01-B@6) and the sidewalls in each cardinal direction (WH01-N through WH01-W).

Analytical results from the wellhead and flowline decommissioning indicated that concentrations of Table 915-1 organic compounds were below regulatory standards. Groundwater was not encountered during decommissioning.

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 sampling was conducted as described in the Initial Action Summary. During the initial decommissioning, sampling deviated from the approved sampling plan as a sample was not collected at the wellhead flowline riser or the directional change east of the tank battery.

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, EC, SAR, pH, metals, and boron.

Proposed Groundwater Sampling

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. This sample analysis includes, but is not limited to: BTEX, naphthalene, 1,2,4-trimethylbenzene (TMB), and 1,3,5-TMB by EPA Method 8260; chloride and sulfate anions by EPA Method 300.0; and total dissolved solids (TDS) by Method SM 2540C.

Proposed Surface Water Sampling

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

Empty box for surface water sampling details.

**Additional Investigative Actions**

Additional alternative investigative actions described in attached Site Investigation Plan ( summary ):

Visual inspection of the flowline & wellhead occurred during decommissioning activities. Field personnel screened all disturbed areas using visual and olfactory senses to determine if laboratory confirmation sampling was required. A detailed summary of the flowline removal, including an ECMC Flowline Closure Checklist, site photos, figures, and laboratory analytical results, was submitted as an attachment to Form 27 #403706748. A detailed summary of the wellhead decommissioning, including an ECMC Wellhead Closure Checklist, site photos, figures, and laboratory analytical results, was submitted as an attachment to Form 27 #404114705. Additionally, a detailed summary of SSI activities, including field notes, site photos, and figures is attached to pending Form 27 Document #404482203.

**SITE INVESTIGATION REPORT**

**SAMPLE SUMMARY**

**Soil**

Number of soil samples collected     0      
Number of soil samples exceeding 915-1     0      
Was the areal and vertical extent of soil contamination delineated?           
Approximate areal extent (square feet)     0    

**NA / ND**

         Highest concentration of TPH (mg/kg)           
         Highest concentration of SAR           
BTEX > 915-1           
Vertical Extent > 915-1 (in feet)         

**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?

On 10/09/25, 10 background soil samples were collected from five discrete soil borings (BKG06-BKG10). Backgrounds were collected from 1-4 feet below ground surface (ft. bgs) and analyzed for Table 915-1 metals, pH, EC, SAR, and boron. The maximum background concentration for pH was 8.44. The maximum background concentrations with a 1.25 multiplier applied for arsenic and barium were 6.5 mg/kg and 243 mg/kg, respectively. The Operator is requesting an additional quarter to conduct a quality control review of all site data that has been collected to date, in order to determine if the site qualifies for a No Further Action (NFA) designation.

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?

Based on the information presented herein, no additional site investigation activities are required at this time.

**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 10/09/25, a supplemental site investigation (SSI) was completed to collect additional decommissioning samples and background samples. The samples omitted during the initial flowline decommissioning were collected at the flowline direction change (FL01-01) and wellhead flowline riser (FL01R-W). Soil samples were analyzed for all Table 915-1 constituents. 10 background soil samples were collected from 5 discrete soil borings (BKG06-BKG10). Backgrounds were collected from 1-4 ft. bgs and analyzed for Table 915-1 metals, pH, EC, SAR, and boron. Groundwater was not encountered during SSI activities.

A comparison of site samples to native soil conditions indicates that Table 915-1 inorganics and metals exceed regulatory standards and background levels. Concentrations of pH exceed background levels at sample location WH01-W@4 and barium exceeds background levels at sample locations FL01R-W@3-4' and WH01-W@4'. Table 915-1 organic compounds are below regulatory standards and site concentrations of arsenic are below 1.25x the maximum background level.

The Operator is requesting an additional quarter to conduct a compliance quality control review of all site data collected to date in order to determine if the site qualifies for a No Further Action (NFA) request. Background data from adjacent wellheads, flowlines, and tank batteries will be analyzed to determine if the remaining pH and barium exceedances can be attributed to native soil conditions. The results of this review will be provided in a subsequent Form 27 submission.

### Soil Remediation Summary

In Situ

Ex Situ

\_\_\_\_\_ Bioremediation ( or enhanced bioremediation )

\_\_\_\_\_ Excavate and offsite disposal

\_\_\_\_\_ Chemical oxidation

\_\_\_\_\_ If Yes: Estimated Volume (Cubic Yards) \_\_\_\_\_

\_\_\_\_\_ Air sparge / Soil vapor extraction

\_\_\_\_\_ Name of Licensed Disposal Facility or ECMC Facility ID # \_\_\_\_\_

\_\_\_\_\_ Natural Attenuation

\_\_\_\_\_ Excavate and onsite remediation

\_\_\_\_\_ Other \_\_\_\_\_

\_\_\_\_\_ 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 has not been encountered during decommissioning or SSI activities to date.

# 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 Timeline 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 (policy MWZZ316714) 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? 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. 09/14/2023

Proposed date of completion of Reclamation. 10/10/2026

## 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. 05/11/2023

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

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 09/14/2023

Proposed site investigation commencement. 10/09/2025

Proposed completion of site investigation. 10/10/2025

### REMEDIAL ACTION DATES

Proposed start date of Remediation. 10/10/2025

Proposed date of completion of Remediation. 04/10/2026

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 updated due to the completion of the October 9th, 2025 SSI and background soil sampling at the NEI C18-32D Wellhead and Flowline (REM #30474). The Operator is requesting another quarter to conduct a review of all site data that has been collected to date. The results of the review will be submitted on a subsequent Form 27, and additional site investigation activities will be proposed if necessary. The ECMC will be notified of any updates to the implementation schedule in a subsequent Form 27 submittal.

**OPERATOR COMMENT**

This Form 27 is being submitted as a second quarter 2026 timeline update for the NEI C18-32D Wellhead and Flowline (REM #30474).

The Operator is requesting an additional quarter to conduct a compliance quality control review of all the site data that has been collected to date, in order to determine if the site qualifies for a No Further Action (NFA) designation. Background data from adjacent wellheads, flowlines, and tank batteries will be analyzed to determine if the remaining pH and barium exceedances can be attributed to native soil conditions. The subsequent Form 27 submission will provide the results of this review and will propose additional site investigation activities, if necessary.

Pursuant to Rule 913.e, quarterly reporting will be conducted until closure criteria are achieved for the remediation project.

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

Signed: William Irby

Title: Environmental Consultant

Submit Date: \_\_\_\_\_

Email: tas-chevron-7@tasman-geo.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: 30474

**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**

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Total Attach: 0 Files

**General Comments**

**User Group**

**Comment**

**Comment Date**

		Stamp Upon Approval
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Total: 0 comment(s)