

State of Colorado
Energy & Carbon Management Commission

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Document Number:
404518513

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 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>	Phone Numbers
Address: <u>1099 18TH STREET SUITE 1500</u>		
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80202</u>
Contact Person: <u>Lauren Hoff</u>	Email: <u>rbueuf27@chevron.com</u>	Phone: <u>(970) 304-5000</u>
		Mobile: <u>()</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 39449 Initial Form 27 Document #: 403965332

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>123-18025</u>	County Name: <u>WELD</u>
Facility Name: <u>RITCHEY 1-27 1</u>	Latitude: <u>40.199128</u>	Longitude: <u>-104.653319</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SENW</u>	Sec: <u>27</u>	Twps: <u>3N</u>	Range: <u>65W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SP 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? No

Other Potential Receptors within 1/4 mile

Riverine 0.19mi E

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.

On 07/31/2025, a site investigation was conducted pursuant to ECMC Rule 911 at the RITCHEY 1-27 1 flowline. Approximately 1908' of flowline was abandoned in place (ABIP) due to crops in field (Form 44 Doc #404428022). On 11/21/2025, operator returned to the site to complete flowline removal. During flowline removal, field personnel noted the path of the flowline differed from that shown in the map attached to the Form 27 Initial (ECMC Doc #403965332). Therefore, sampling completed during flowline removal will not follow the IF27 map. A soil sample was taken at the start point of the flowline at the wellhead and at the flowline directional change. Soil samples were also field screened along the flowline. On 11/14/2025, the wellhead was cut and capped. Additionally, soil samples were field screened at the N-E-S-W sides of the wellhead.

On 07/29/2025, a soil sample was collected along the flowline beneath the separator riser (SEP01-FL@3') during the decommissioning of the associated Ritchey H-63N65W 27NWNW Tank Battery (REM # 39935; ECMC Document # 404350548).

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):

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 (WH01-N@3'). A grab confirmation soil sample was taken at the wellhead riser (FL01R-W@3') and at the flowline directional change (FL01-07@4'). 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 the site investigation a grab groundwater 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 flowline and wellhead areas occurred during decommissioning activities. Field personnel field screened all disturbed areas using visual and olfactory senses to determine if laboratory confirmation sampling is required. A detailed summary of flowline abandonment activities including field notes, site photos, figures, and laboratory analytical results is attached to a previous Form 27 (ECMC Doc #404385062). A detailed summary of flowline removal and wellhead decommissioning activities, including field notes, site photos, figures, and laboratory analytical results, is attached to this Form 27.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 2

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

-- Highest concentration of TPH (mg/kg) 59.2

-- Highest concentration of SAR 5.03

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 3

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 11/14/2025 and 11/21/2025, four background soil samples were collected from four discrete locations (BKG01, BKG01-BKG03) adjacent to the flowline during wellhead decommissioning and flowline removal activities. Due to its proximity to former oil and gas operations, soil sample BKG02@3.5' collected on 11/14/2025 will be omitted from maximum background concentration calculations. On 07/29/2025 and 11/19/2025, a total of 23 background soil samples were collected from seven discrete locations (BKG01-BKG07) adjacent to the flowline during site investigation activities at the associated Ritchey H-63N65W 27NWNW Tank Battery (REM # 39935; ECMC Document #404069658 & in-process #404515331). Background soil samples were analyzed for metals in soil per ECMC Table 915-1, pH, SAR, EC, and boron. Background soil samples were collected from depths ranging between 0-1 to 6 ft bgs.

A detailed discussion of background sampling results is included in the Operator Comment section of this form.

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?

A supplemental site investigation (SSI) will be completed to collect an analytical sample at the midpoint of each of the two segments of flowline running north-south and east-west. Soil samples will be analyzed for full ECMC Table 915-1 contaminants of concern. As of the submittal date of this form, only three background samples were collected adjacent to the former wellhead infrastructure. Therefore, concurrently with the SSI, additional background samples will be collected adjacent to the wellhead to determine if elevated lead and chromium concentrations at the wellhead are attributed to native soil conditions at the site. The SSI will be completed in accordance with the proposed implementation schedule, and the results of the SSI will be submitted on a subsequent Form 27.

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.

Wellhead and flowline decommissioning analytical results indicated that organic compound concentrations were in compliance with the applicable ECMC regulatory standards at all soil sample locations. All soil suitability values were within the applicable ECMC Table 915-1 standards or below background levels.

The sample collected from FL01R-W@3' exhibited an elevated lead concentration above the ECMC Table 915-1 Protection of Groundwater Soil Screening Level (PGSSL) and 1.25x maximum background concentrations. The sample collected from WH01-W@3' exhibited an elevated chromium concentration above the ECMC Table 915-1 Residential Soil Screening Level (RSSL) and 1.25x maximum background concentrations.

An SSI will be completed to collect an analytical sample at the midpoint of each of the two segments of flowline running north-south and east-west. Soil samples will be analyzed for full ECMC Table 915-1 contaminants of concern. As of the submittal date of this form, only three valid background samples exist adjacent to the former wellhead infrastructure. Therefore, concurrently with the SSI, additional background samples will be collected adjacent to the wellhead to determine if elevated lead and chromium concentrations at the wellhead are attributed to native soil conditions at the site. The SSI will be completed in accordance with the proposed implementation schedule, and the results of the SSI will be submitted on a subsequent Form 27.

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 was not encountered during decommissioning or site investigation 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 Decommissioning & Supplemental Site Investigation Sample Summary _____

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? _____

Does the previous reply indicate consideration of background concentrations? _____

Does Groundwater meet Table 915-1 standards? _____

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. 07/29/2025

Proposed date of completion of Reclamation. 06/30/2028

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. 10/17/2024

Actual Spill or Release date, or date of discovery. _____

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 07/29/2025

Proposed site investigation commencement. 06/24/2026

Proposed completion of site investigation. 06/24/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 06/24/2026

Proposed date of completion of Remediation. 12/24/2026

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 completion of wellhead decommissioning and flowline removal activities at the Ritchey 1-27 1 location and necessity for SSI activities adjacent to the flowline and wellhead. The proposed site investigation is tentatively scheduled for 06/24/2026.

OPERATOR COMMENT

This Form 27 is being submitted to include the wellhead decommissioning and flowline removal results and propose supplemental site investigation (SSI) activities at the Ritchey 1-27 1 flowline location (REM # 39449).

The above referenced flowline was initially abandoned in place (ABIP) on 07/31/2025 (Form 44 Doc #404428022). Flowline removal activities occurred on 11/14/2025. During flowline removal, field personnel noted the path of the flowline differed from that shown in the map attached to the Initial Form 27 (ECMC Doc #403965332). Therefore, sampling completed during flowline removal will not follow the IF27 map. A soil sample was taken at the start point of the flowline at the wellhead and at the directional change. Soil samples were also field screened along the flowline. On 11/14/2025 during wellhead cut and cap activities, soil samples were collected from beneath the former wellhead infrastructure as described in the approved Initial Form 27. Groundwater was not encountered during site investigation activities.

On 11/14/2025 and 11/21/2025, four background soil samples were collected from four discrete locations (BKG01, BKG01-BKG03) adjacent to the flowline during wellhead decommissioning and flowline removal activities. Due to its proximity to former oil and gas operations, soil sample BKG02@3.5' collected on 11/14/2025 will be omitted from maximum background concentration calculations. Between 07/29/2025 and 11/19/2025, a total of twenty three background soil samples were collected from seven discrete locations (BKG01-BKG07) adjacent to the flowline during site investigation activities at the associated Ritchey H-63N65W 27NWNW Tank Battery as detailed in the Site Investigation Report section of this form.

The maximum background concentration for EC was observed to be 16.1 mmhos/cm. The maximum background concentrations with a 1.25x multiplier applied for the arsenic, chromium, and lead were calculated to be 6.9 mg/kg, 0.50 mg/kg, and 18.0 mg/kg, respectively. All EC concentrations observed during decommissioning were below maximum background levels. All arsenic concentrations observed during decommissioning were below 1.25x the maximum background levels.

Wellhead and flowline decommissioning analytical results indicated that organic compound concentrations were in compliance with the applicable ECMC regulatory standards at all soil sample locations. All soil suitability values were within the applicable ECMC Table 915-1 standards or below background levels.

The sample collected from FL01R-W@3' exhibited an elevated lead concentration above the ECMC Table 915-1 Protection of Groundwater Soil Screening Level (PGSSL) and 1.25x maximum background concentrations. The sample collected from WH01-W@3' exhibited an elevated chromium concentration above the ECMC Table 915-1 Residential Soil Screening Level (RSSL) and 1.25x maximum background concentrations.

An SSI will be completed to collect an analytical sample at the midpoint of each of the two segments of flowline running north-south and east-west. Soil samples will be analyzed for full ECMC Table 915-1 contaminants of concern.

In response to the COA on ECMC Doc #404385062, only three valid background samples have been collected adjacent to the former wellhead infrastructure at similar depths to site samples. As such, additional background samples will be collected adjacent to the wellhead to determine if elevated lead and chromium concentrations at the wellhead are attributed to native soil conditions near the former wellhead. If additional background sampling adjacent to the wellhead does not indicate elevated metals are indicative of background concentrations additional site investigation or remedial actions will be proposed.

Pursuant to Rule 913.e, quarterly reporting will continue until the closure criteria for the remediation area are achieved. The results of the SSI 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: Michael Liston

Title: Environmental Consultant

Submit Date: _____

Email: tas-chevron-3@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: 39449

COA Type

Description

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

404518740	LABORATORY ANALYTICAL REPORT
404518741	LABORATORY ANALYTICAL REPORT
404518742	LABORATORY ANALYTICAL REPORT
404518748	LABORATORY ANALYTICAL REPORT
404518923	SITE INVESTIGATION REPORT
404518926	SITE INVESTIGATION PLAN

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)