

State of Colorado
Energy & Carbon Management Commission

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Document Number:
404466201

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 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>	Phone Numbers
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>Dan Peterson</u>	Email: <u>rbueuf27@chevron.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 34167 Initial Form 27 Document #: 403695522

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: <u>LOCATION</u>	Facility ID: <u>319121</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>HANSCOME-64N65W 11SWNW</u>	Latitude: <u>40.328830</u>	Longitude: <u>-104.637330</u>	
	** correct Lat/Long if needed: Latitude: <u>40.328551</u>	Longitude: <u>-104.637587</u>	
QtrQtr: <u>SWNW</u> Sec: <u>11</u> Twp: <u>4N</u> Range: <u>65W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>			
Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>486576</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Hanscome K11-1</u>	Latitude: <u>40.328817</u>	Longitude: <u>-104.637695</u>	
	** correct Lat/Long if needed: Latitude: _____	Longitude: _____	
QtrQtr: <u>SWNW</u> Sec: <u>11</u> Twp: <u>4N</u> Range: <u>65W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>			

SITE CONDITIONS

General soil type - USCS Classifications SW _____

Most Sensitive Adjacent Land Use Rangeland _____

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? Yes _____

Other Potential Receptors within 1/4 mile

Mule Deer Severe Winter Range (1202.d) and Aquatic Native Species Conservation Waters (1202.c)
Facility surrounded by Emergent Wetland, Riverine 550ft W, Freshwater Pond 0.19mi S
N/A

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
Yes	GROUNDWATER	Refer to Tables and Figures	Lab analysis and field Screening
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.

A site investigation was conducted pursuant to ECMC Rule 911 at the HANSCOME T4N-R65W-S11 L03 Facility and Tank Battery location.

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 soil samples were collected from the produced water vessel(s) excavation, beneath the ground oil tank(s), at the risers for the flowline (s) and dumpline(s) of any separator(s). In addition, the on-site dump lines located between the separator and tank battery were removed by pulling from either end. Please note that the attached site photos show the dumpline was in place when the produced water vault and separator were sampled and photographed, but the dumpline was pulled following sampling. 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. Full soil analytical results will be submitted on a subsequent Form 27.

Proposed Groundwater Sampling

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

Groundwater was encountered at one location during the 04/10/2024 site investigation and a grab groundwater sample (GW01) was 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 at the tank battery area occurred during abandonment activities. Field personnel field screened all disturbed areas using visual and olfactory senses. Additionally, discrete soil samples were collected from the base of the excavation and excavation sidewall in areas most likely to be impacted and exhibiting the highest field screened VOC concentration. A photolog was included as an attachment on ECMC Form 27 Document #403841636.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 23
Number of soil samples exceeding 915-1 6
Was the areal and vertical extent of soil contamination delineated? No
Approximate areal extent (square feet) 600

NA / ND

-- Highest concentration of TPH (mg/kg) 2221.2
-- Highest concentration of SAR 7.9
BTEX > 915-1 Yes
Vertical Extent > 915-1 (in feet) 13

Groundwater

Number of groundwater samples collected 5
Was extent of groundwater contaminated delineated? Yes
Depth to groundwater (below ground surface, in feet) 2
Number of groundwater monitoring wells installed 5
Number of groundwater samples exceeding 915-1 0

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?

On 10/29/2025 fifteen background soil sample were collected from five discrete locations (BKG02 - BKG06) near the tank battery and analyzed for metals in soil per ECMC Table 915-1. Background soil samples were collected from depths ranging between 0 to 3 feet below ground surface (ft bgs). The maximum background concentrations for pH, EC, and SAR were calculated to be 8.19, 23.9 mmhos/cm, and 30.2. All EC and SAR were below maximum background levels. The maximum background concentrations with a 1.25x multiplier applied for arsenic, barium, cadmium, lead, and selenium were calculated to be 8.25 mg/kg, 404, mg/kg, 0.429 mg/kg, 30.1 mg/kg, and 22.5 mg/kg, respectively. All arsenic, barium, cadmium, lead, and selenium concentrations observed were below background levels.

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 analytical results collected during October 2025 SSI and April 2024 decommissioning activities, additional site investigation activities will be completed to further vertically and/or horizontally delineate the organic compound exceedances observed at sample location SB02@2-3' and SB05@2-3' during the October SSI. A proposed SSI map is attached to this Form 27. During the SSI, soil samples will be collected and analyzed for full ECMC Table 915-1 constituents. Concurrently with the SSI, additional background samples will be collected to determine if pH and chromium 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.

Refer to the Remediation Summary Section below.

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.

A Site Assessment was conducted on 10/24/2025 to delineate impacted media, during which five soil borings were advanced (SB01 - SB05) to depths ranging from 2 to 9 ft. bgs. SB01 was advanced at the same location as soil sample SEP01-DL@3' and SEP01-FL@3' to vertically delineate impacts at that location. SB02-SB05 were advanced surrounding SB01 to vertically and laterally delineate impacts. Eight soil samples were collected and analyzed for full ECMC Table 915-1 constituents. BH01-BH05 were advanced surrounding BH01 to vertically and laterally delineate impacts identified at GW01. Fifteen Soil samples were collected and analyzed for full ECMC Table 915-1 constituents.

Analytical results indicated that organic compounds were in exceedance of applicable regulatory standards in soil sample locations SB01@2-3', SB01@5-6', SB02@2-3', and SB05@2-3'

Based on analytical results, additional supplemental site investigation (SSI) will be completed to confirm and further vertically and horizontally delineate the 1,2,4-trimethylbenzene, TPH, and 1methyl naphthalene exceedances observed at sample location SB02@2-3' and SB05@2-3', in accordance with the attached proposed site investigation map, and proposed sampling plan outlined in the Site Investigation Report section of this Form 27.

On 10/24/2025 five monitoring wells (BH01 - BH05) were installed within and surrounding the final excavation extent to delineate dissolved-phase hydrocarbon impacts following decommissioning activities. Lithologic descriptions and volatile organic compound (VOC) concentrations measured using a photoionization detector (PID) were recorded for each monitoring well. Samples were collected from each borehole at depths ranging from 2 feet to 13 feet bgs.

Soil Remediation Summary

<input type="checkbox"/> In Situ	<input type="checkbox"/> 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 monitoring will continue on a quarterly basis at the 5 site monitoring wells (BH01-BH05) until closure criteria are met. Groundwater samples will be submitted for laboratory analysis of BTEX, naphthalene, 1,2,4-TMB, and 1,3,5-TMB by EPA Method 8260B, chloride and sulfate anions by EPA Method 300.0 and total dissolved solids (TDS) by Method SM 2540C by EPA Method 300.0 in accordance with Table 915-1.

On 11/05/2025, Noble initiated fourth quarter groundwater monitoring at the 5 site monitoring wells (BH01-BH05) at the former Hanscome K11-1 Tank Battery. Groundwater samples were submitted for laboratory analysis of BTEX, naphthalene, 1,2,4-TMB, and 1,3,5-TMB by EPA Method 8260B, chloride and sulfate anions by EPA Method 300.0, and total dissolved solids (TDS) by Method SM 2540C in accordance with Table 915-1. All organic and inorganic constituents were in compliance with the applicable ECMC Table 915-1 standards.

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 Confirmation Sample Summary & Supplemental Site Investigation Proposal _____

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. 04/10/2024

Proposed date of completion of Reclamation. 03/05/2027

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. 02/22/2024

Actual Spill or Release date, or date of discovery. 04/29/2024

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 04/10/2024

Proposed site investigation commencement. 03/05/2026

Proposed completion of site investigation. 03/05/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 03/05/2026

Proposed date of completion of Remediation. 09/05/2026

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 the October 2025 supplemental site investigation at the Hanscome K11-1 Tank Battery and necessity for additional supplemental site investigation activities. The proposed site investigation is tentatively scheduled for 03/05/2026.

OPERATOR COMMENT

This Form 27 is being submitted to include the supplemental site investigation results, fourth quarter groundwater monitoring activities and analytical results collected on 10/24/2025 and 10/29/2025, as well as propose additional site investigation activities for the Hanscome K11-1 tank battery location.

A Site Assessment was conducted on 10/24/2025 to delineate impacted media, during which five soil borings were advanced (SB01 - SB05) to depths ranging from 2 to 9 ft. bgs. SB01 was advanced at the same location as soil sample SEP01-DL@3' and SEP01-FL@3' to vertically delineate impacts at that location. SB02-SB05 were advanced surrounding SB01 to vertically and laterally delineate impacts. Eight soil samples were collected and analyzed for full ECMC Table 915-1 constituents. BH01-BH05 were advanced surrounding BH01 to vertically and laterally delineate impacts identified at GW01. Fifteen Soil samples were collected and analyzed for full ECMC Table 915-1 constituents. Analytical results indicated that all samples collected from BH01 - BH05 are 915-1 compliant with the exception of chromium.

On 10/24/2025 five monitoring wells (BH01 - BH05) were installed within and surrounding the final excavation extent to delineate dissolved-phase hydrocarbon impacts following decommissioning activities.

On April 10, 2024 three background soil sample were collected from one location (BG01) near the flowline and analyzed for metals in soil per ECMC Table 915-1. Background soil samples were collected from depths ranging between 0.5 to 3 feet below ground surface (ft bgs) and the lithology between the site and background locations were observed to be fine grain, sandy clay. The maximum background concentrations with a 1.25x multiplier applied for arsenic, barium, cadmium, and selenium were calculated to be 4.83 mg/kg, 173, mg/kg, 0.429 mg/kg, and 3.20 mg/kg, respectively. All barium, cadmium, and selenium concentrations observed during decommissioning were below background levels.

On 10/29/2025 fifteen background soil sample were collected from five discrete locations (BKG02 - BKG06) near the tank battery and analyzed for metals in soil per ECMC Table 915-1. Background soil samples were collected from depths ranging between 0 to 3 feet below ground surface (ft bgs). The maximum background concentrations for pH, EC, and SAR were calculated to be 8.19, 23.9 mmhos/cm, and 30.2. All EC and SAR were below maximum background levels. The maximum background concentrations with a 1.25x multiplier applied for arsenic, barium, cadmium, lead, and selenium were calculated to be 8.25 mg/kg, 404, mg/kg, 0.429 mg/kg, 30.1 mg/kg, and 22.5 mg/kg, respectively. All arsenic, barium, cadmium, lead, and selenium concentrations observed were below background levels.

Based on the analytical results collected during October 2025 SSI and April 2024 decommissioning activities, additional site investigation activities will be completed to further vertically and/or horizontally delineate the organic compound exceedances observed at sample location SB02@2-3' and SB05@2-3' during the October SSI. A proposed SSI map is attached to this Form 27. During the SSI, soil samples will be collected and analyzed for full ECMC Table 915-1 constituents. Concurrently with the SSI, additional background samples will be collected to determine if pH and chromium 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.

Pursuant to Rule 913.e, quarterly reporting will be conducted until closure criteria are achieved for the remediation project. The results of the supplemental site investigation 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: Ben Wagner

Title: Environmental Consultant

Submit Date: _____

Email: tas-chevron-4@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: 34167

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

404476975	MONITORING REPORT
404476981	SITE INVESTIGATION REPORT
404476986	ANALYTICAL RESULTS
404476987	ANALYTICAL RESULTS
404476989	ANALYTICAL RESULTS

Total Attach: 5 Files

General Comments

User Group

Comment

Comment Date

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

Total: 0 comment(s)