

State of Colorado
Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:
404237912

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>		Phone: <u>(970) 730-7281</u>
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80202</u>		Mobile: <u>()</u>
Contact Person: <u>Dan Peterson</u>	Email: <u>danpeterson@chevron.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 20766 Initial Form 27 Document #: 402864761

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>123-17429</u>	County Name: <u>WELD</u>
Facility Name: <u>BAKER STATE B 36-11</u>	Latitude: <u>40.354130</u>	Longitude: <u>-104.500500</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NESW</u>	Sec: <u>36</u>	Twps: <u>5N</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 Crop Land

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

Residential 0.2mi SW
Farm Structures 0.17/0.19/0.2mi SW

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 Baker State B36-11 (REM #20766) wellhead cut and cap and flowline abandonment. The wellhead was cut and capped on 08/30/2022 per ECMC rules. On 11/28/2023 and 11/30/2023, approximately 300' of flowline was removed; however, a portion of the flowline was abandoned-in-place due to field constraints and the ECMC was notified on Form 44 Document #403346651.

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):

On 2/17/2025 and 2/20/2025 seventeen (17) grab soil samples were collected at the Baker State B36-11 wellhead (1), the flowline terminus at the wellhead (1), the flowline terminus at the separator (1), and along the flowline (14). These confirmation soil samples were taken from depths ranging from four (4) to six (6) feet and were submitted for full ECMC Table 915-1 analysis. 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, grab groundwater samples 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):

The proposed Supplemental Site Investigation (SSI) will include delineation at three (3) locations, confirmation soil sampling at four (4) locations, and background sampling at (3+) locations. Six (6) locations were found to be in exceedance of background concentrations and results: FL02@4' (chromium VI), FL05@4' (chromium VI), FL06@4' (pH, SAR), FL10@4' (pH), FL11@4' (selenium), and FL14@4' (selenium, EC, SAR). FL06-SB will be delineated for pH and SAR, FL10-SB will be delineated for pH, and FL14-SB will be delineated for EC and SAR. The delineation soil samples will be collected and analyzed for the full Table 915-1 constituents. Additional background soil samples (3+) will be collected to assess whether metals exceedances at FL02@4', FL05@4', FL11@4', and FL14@4' can be attributed to background concentrations. The background soil samples will be analyzed for metals and inorganics in soil per ECMC Table 915-1. A proposed soil sample location is attached to the current form.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 17
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

ND Highest concentration of TPH (mg/kg) _____
-- Highest concentration of SAR 6.94
BTEX > 915-1 No
Vertical Extent > 915-1 (in feet) 4

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 (6) background soil samples were collected from five (5) boring locations in the wellhead/flowline area and analyzed for ECMC Table 915-1 metals, pH, EC, SAR, and boron. The background soil samples were collected from depths of approximately four (4), five (5), and six (6) feet below ground surface (ft bgs). Maximum background concentrations, including the 1.25 multiplier for metals, were reported as 8.44 for pH, 4.92 mmhos/cm for EC, 5.050 for SAR, 8.14 mg/kg for arsenic, 175.0 mg/kg for barium, and 0.25 mg/kg for chromium (VI). All analyzed samples met ECMC Table 915-1 standards or maximum background levels, except pH in FL06@4' (8.47) and FL10@4' (8.5); EC in FL14@4' (5.480); SAR in FL06@4' (6.290) and FL14@4' (6.940); chromium (VI) in FL02@4' (0.27 mg/kg) and FL05@4' (0.42 mg/kg); and selenium in FL11@4' (0.308 mg/kg) and FL14@4' (0.272 mg/kg).

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 proposed Supplemental Site Investigation (SSI) will include delineation at three (3) locations, confirmation soil sampling at four (4) locations, and background sampling at (3+) locations. Six (6) locations were found to be in exceedance of background concentrations and results: FL02@4' (chromium VI), FL05@4' (chromium VI), FL06@4' (pH, SAR), FL10@4' (pH), FL11@4' (selenium), and FL14@4' (selenium, EC, SAR). FL06-SB will be delineated for pH and SAR, FL10-SB will be delineated for pH, and FL14-SB will be delineated for EC and SAR. The delineation soil samples will be collected and analyzed for the full Table 915-1 constituents. Additional confirmation soil samples will be collected at four (4) locations to address the COA included in previously approved Supplemental Form 27 Documents #404118788 and #403780436, "Operator shall conduct soil sampling at a minimum of every 250 feet between the proposed sample points." Additional background soil samples (3+) will be collected to assess whether metals exceedances at FL02@4', FL05@4', FL11@4', and FL14@4' can be attributed to background concentrations. The background soil samples will be analyzed for metals and inorganics in soil per ECMC Table 915-1. A proposed soil sample location is attached to the current form.

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 2/17/2025 and 2/20/2025 seventeen (17) grab soil samples were collected at the Baker State B36-11 wellhead (1), the flowline terminus at the wellhead (1), the flowline terminus at the separator (1), and along the flowline (14). These confirmation soil samples were taken from depths ranging from four (4) to six (6) feet and were submitted for full ECMC Table 915-1 analysis. Additionally, six (6) background samples were collected at the wellhead/flowline area and were analyzed for metals and inorganics in soil per ECMC Table 915-1. The background soil samples were collected from depths of approximately four (4), five (5), and six (6) feet.

The proposed Supplemental Site Investigation (SSI) will include delineation at three (3) locations and background sampling at (3+) locations. Six (6) locations were found to be in exceedance of background concentrations and results: FL02@4' (Chromium (VI)), FL05@4' (Chromium (VI)), FL06@4' (pH, SAR), FL10@4' (pH), FL11@4' (Selenium), and FL14@4' (Selenium, EC, SAR). FL06-SB will be delineated for pH and SAR, FL10-SB will be delineated for pH, and FL14-SB will be delineated for EC and SAR. The delineation soil samples will be collected and analyzed for the full suite of constituents listed in Table 915-1. Additional confirmation soil samples will be collected at four (4) locations to address the COA included in previously approved Supplemental Form 27 Documents #404118788 and #403780436. Additional background soil samples (3+) will be collected to assess whether metals exceedances at FL02@4', FL05@4', FL11@4', and FL14@4' can be attributed to background concentrations. These background samples will be analyzed for metals and inorganics in soil per ECMC Table 915-1. A proposed soil sample location is attached to the current form. The proposed SSI will be completed following the approval of this form and is tentatively scheduled to take place by the end of 4Q 2025.

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 initial decommissioning or SSI 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 Site Investigation Report and SSI 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? 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. 08/30/2022

Proposed date of completion of Reclamation. 12/31/2027

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. 09/08/2021

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

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 08/30/2022

Proposed site investigation commencement. 08/30/2022

Proposed completion of site investigation. 12/31/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 12/31/2025

Proposed date of completion of Remediation. 06/30/2026

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 SSI at the former Baker State B36-11 wellhead and flowline (REM #20766), and the need for additional delineation and background sampling activities along the flowline. Additional remedial investigation is proposed to delineate three (3) locations in areas with inorganic exceedances, collect additional confirmation soil samples in four (4) locations along the flowline to address the COA included in previously approved Supplemental Form 27 Documents #404118788 and #403780436, and collect additional background samples at (3+) locations. FL06-SB will be delineated for pH and SAR, FL10-SB will be delineated for pH, and FL14-SB will be delineated for EC and SAR. The proposed SSI will be completed following the approval of this form and is tentatively scheduled to take place by the end of 4Q 2025.

OPERATOR COMMENT

This form has been submitted as 2Q 2025 update for the Baker State B36-11 (REM #20766) wellhead and flowline. Facility closure activities and confirmation soil sampling were conducted at the wellhead/flowline on 08/30/2022, 11/28/2022, 11/30/2022, 12/07/2022 and were summarized in Supplemental Form 27 Documents #403697630 and #403708728.

On 2/17/2025 and 2/20/2025 seventeen (17) grab soil samples were collected at the Baker State B36-11 wellhead (1), the flowline terminus at the wellhead (1), the flowline terminus at the separator (1), and along the flowline (14). These confirmation soil samples were taken from depths ranging from four (4) to six (6) feet and were submitted for full ECMC Table 915-1 analysis. Additionally, six (6) background samples were collected at the wellhead/flowline area and were analyzed for metals and inorganics in soil per ECMC Table 915-1. The background soil samples were collected from depths of approximately four (4), five (5), and six (6) feet below ground surface (ft bgs).

Noble proposes to conduct soil sampling to include delineation at three (3) locations, confirmation soil sampling at four (4) locations, and background sampling at (3+) locations. Six (6) locations were found to be in exceedance of background concentrations and results: FL02@4' (Chromium (VI)), FL05@4' (Chromium (VI)), FL06@4' (pH, SAR), FL10@4' (pH), FL11@4' (Selenium), and FL14@4' (Selenium, EC, SAR). FL06-SB will be delineated for pH and SAR, FL10-SB will be delineated for pH, and FL14-SB will be delineated for EC and SAR. The delineation soil samples will be collected and analyzed for the full Table 915-1 constituents. Additional confirmation soil samples will be collected at four (4) locations to address the COA included in previously approved Supplemental Form 27 Documents #404118788 and #403780436, "Operator shall conduct soil sampling at a minimum of every 250 feet between the proposed sample points." Additional background soil samples (3+) will be collected to assess whether metals exceedances at FL02@4', FL05@4', FL11@4', and FL14@4' can be attributed to background concentrations. The background soil samples will be analyzed for metals and inorganics in soil per ECMC Table 915-1. A proposed soil sample location is attached to the current form.

Please refer to the attached site investigation assessments and analytics for a detailed description of decommissioning activities conducted on 02/17/2025 and 02/20/2025. 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. The results of the proposed SSI will be reported 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: Richie Blessing

Title: Environmental Consultant

Submit Date: _____

Email: RichieBlessing@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: 20766

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

404247388	LABORATORY ANALYTICAL REPORT
404265043	SITE INVESTIGATION PLAN
404265198	SITE INVESTIGATION REPORT
404282503	LABORATORY ANALYTICAL REPORT

Total Attach: 4 Files

General Comments

User Group

Comment

Comment Date

		Stamp Upon Approval
--	--	---------------------

Total: 0 comment(s)