

State of Colorado
Energy & Carbon Management Commission

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Report taken by:
Nick Cholas

Site Investigation and Remediation Workplan (Supplemental Form)

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. However, this shall not preclude the Operator from taking immediate action to protect public health or safety, the environment, wildlife, or livestock.

This Form 27 describes site conditions as currently understood by the Operator; approval of this Form 27 by 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>		
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80202</u>
Contact Person: <u>Jason Davidson</u>	Email: <u>jason.davidson@chevron.com</u>	Phone: <u>(970) 939-1929</u>
		Mobile: <u>(970) 939-1929</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 29038 Initial Form 27 Document #: 403378662

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>123-12791</u>	County Name: <u>WELD</u>
Facility Name: <u>SHELTON R G 26-8</u>	Latitude: <u>40.285020</u>	Longitude: <u>-104.623510</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SENE</u>	Sec: <u>26</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 Crop Land
 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

Freshwater Emergent Wetlands exist immediately E and 0.15mi NW. Riverine located 0.1mi ESE and 0.17mi S. Livestock Ponds are 0.16mi SE, 0.12mi S, 0.11/0.17mi SW, and 0.8/0.9/0.16/0.17mi W. Farm Structures are located 0.22 and 0.23mi NW.

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	To be determined	Lab analysis or field screening, if encountered
Yes	SOILS	To be determined	Soil sampling and lab analysis

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 Energy & Carbon Management Commission (ECMC) Rule 911, site investigations were conducted pertaining to the SHELTON R G 26-8 wellhead cut and cap and flowline removal. On June 30, 2023, initial wellhead characterization sampling was completed on following cut and cap operations. Soil samples were collected for field screening from the surface surrounding the excavation area, all four excavation sidewalls, and from the base of the excavation. All but sidewall sample WH-SS-02 were submitted for analysis of ECMC Table 915-1 organic constituents of concern and Soil Suitability for Reclamation (SSR) constituents; sidewall sample WH-SS-02 was submitted for full Table 915-1. One groundwater grab sample was collected from the excavation and submitted for analysis of Table 915-1 organic constituents. One background soil sample was also collected and submitted for analysis of pH, sodium adsorption ratio (SAR), and Table 915-1 metals, except for hexavalent chromium.

On August 14, 2023, approximately 1,246 feet of flowline was abandoned, and initial flowline characterization sampling was completed. Ten samples collected and field screened from the flowline corridor. The most impacted soil based on field screening was submitted for analysis of full Table 915-1 constituents. See attached Site Investigation Reports for more details.

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):

Additional soil samples will be collected as needed to delineate the extent of impacts identified by initial investigation activities. Soil samples will be submitted for analysis of all Table 915-1 soil constituents of concern. Background samples may be collected to characterize native levels of inorganic constituents at the Location.

Proposed Groundwater Sampling

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

Additional groundwater samples will be collected as needed to delineate the extent of impacts identified by initial investigation activities. Samples will be submitted for analysis of all Table 915-1 soil constituents of concern.

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 wellhead and flowline areas occurred during cut and cap and removal activities. Field personnel field screened all disturbed areas using visual and olfactory senses to determine if laboratory confirmation sampling was required.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 5
Number of soil samples exceeding 915-1 3
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) 374.1
-- Highest concentration of SAR 9.98
BTEX > 915-1 No
Vertical Extent > 915-1 (in feet) 5

Groundwater

Number of groundwater samples collected 1
Was extent of groundwater contaminated delineated? No
Depth to groundwater (below ground surface, in feet) 6
Number of groundwater monitoring wells installed 0
Number of groundwater samples exceeding 915-1 1

-- Highest concentration of Benzene (µg/l) 21.9
-- Highest concentration of Toluene (µg/l) 102
-- Highest concentration of Ethylbenzene (µg/l) 23.1
-- Highest concentration of Xylene (µg/l) 316
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 June 30, 2023, one background soil sample was collected and analyzed pH, SAR and Table 915-1 metals, except hexavalent chromium.

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?

Supplemental site investigation (SSI) activities will be conducted to delineate the extent of soil and groundwater impacts identified by initial investigation activities. Delineation soil samples will be collected and analyzed for all Table 915-1 constituents. Additional background samples will be collected and analyzed for all Table 915-1 inorganics. The SSI schedule 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.

Noble is in the process of determining the extent of impacts associated with the project. Once impacts are delineated, Noble will prepare a remediation plan to remove the source material within the investigation area.

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.

On June 30, 2023, initial wellhead characterization sampling was completed on the day of cut and cap operations. Soil samples were collected for field screening from the surface surrounding the excavation area, all four excavation sidewalls, and from the base of the excavation. All sidewall samples were submitted for analysis: one for the full list of ECMC Table 915-1 constituents and three for for Table 915-1 organics and SSR constituents. Analytical results indicated exceedances of SSRs and Protection of Groundwater Soil Screening Levels (PGSSLs) for metals. One groundwater grab sample was collected from the excavation and submitted for analysis of Table 915-1 organic constituents. Analytical results indicated a benzene exceedance. One background soil sample was also collected and submitted for analysis of pH, SSRs, and and Table 915-1 metals, except for hexavalent chromium. Analytical results indicated values of pH and SAR elevated above SSR standards and an arsenic value exceeding the PGSSL.

On August 14, 2023, approximately 1,246 feet of flowline was abandoned, and initial flowline characterization sampling was completed. Ten samples were collected and field screened from the flowline corridor. The most impacted soil based on field screening was submitted for analysis of full Table 915-1 constituents. Analytical results indicated exceedances of PGSSLs for Table 915-1 metals. See attached Site Investigation Reports for more details.

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.

Monitoring wells will be completed and groundwater samples will be submitted for the full list of Table 915-1 constituents. Groundwater monitoring will continue on a quarterly basis until compliance with all Table 915-1 constituents can be demonstrated for four consecutive quarters. A more detailed plan will be provided in the subsequent Form 27.

REMEDATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

Quarterly Semi-Annually Annually Other

Request Alternative Reporting Schedule:

Semi-Annually Annually Other

Rule 913.e:

After initial approval of a Form 27, the Operator will provide quarterly update reports in a Supplemental Form 27 to document progress of site investigation and remediation, unless an alternative reporting schedule has been requested by the Operator and approved by the Director. The Director may request a more frequent reporting schedule based on site-specific conditions.

Report Type: Groundwater Monitoring Land Treatment Progress Report O&M Report

Other Quarterly Update

Adequacy of Operator's General Liability Insurance and Financial Assurance

Describe the adequacy of the Operator's general liability insurance and Financial Assurance to fully address the anticipated costs of Remediation, including the estimated remaining cost for this project (below).

If this information has been provided on a Form 27 within the last 12 months, provide the Document Number of that form.

Noble intends to directly address the costs of remediation at the locations as part of our asset retirement obligation process and operations. Noble has general liability insurance (policy MWZZ 316714) 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: _____

REMEDATION COMPLETION REPORT

REMEDATION 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. 12/31/2027

Proposed date of completion of Reclamation. 10/31/2028

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. 03/14/2023

Actual Spill or Release date, or date of discovery. 07/13/2023

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 06/30/2023

Proposed site investigation commencement. 05/08/2023

Proposed completion of site investigation. 07/16/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 06/30/2023

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

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

Change from approved implementation schedule per Rule 913.d.(2).

Basis for change in implementation schedule:

The implementation schedule has been changed due to the decommissioning of the SHELTON R G 26-8 wellhead and flowline and necessity for supplemental site investigation activities adjacent to the wellhead and flowline. The schedule for the proposed site investigation will be provided in the subsequent Form 27.

OPERATOR COMMENT

This form has been submitted to provide a quarterly update for Remediation Project 29038. No work has been conducted since Q3 2023. See the attached Site Investigation Reports for investigation details to date.

Based on currently available data, this project is not affected by data integrity irregularities and is not associated with Operator's data integrity review process and its Rule 525.e. Voluntary Disclosure. As part of its data integrity review process, Operator requested the lab protect the laboratory analytical reports from subsequent unauthorized modification by anyone outside the lab, which resulted in the lab reissuing the original reports with additional protections (Reissued Reports). Reissued Reports were received directly from the lab Origins Laboratory, INC. on February 13, 2025, which include a watermark confirming both the laboratory representative who reissued the report and the date and time of the reissuance. Additionally, Reissued Reports were received directly from Summit Scientific on February 26, 2025, which include the application of a Digital ID/Verified Certification (lock) to support reissuance. The metadata associated with the Reissued Reports also includes the lab representative's name, the date and time the laboratory reissued the report, and an explanation for the report reissuance. The Reissued Reports are attached to this submission.

In the event additional responsive information is received or discovered that would suggest this project should be incorporated into the ongoing data integrity review process associated with Operator's Rule 525.e. Voluntary Disclosure, Operator will update and/or amend the statements in this submission and provide any new or revised data or other information.

Remediation and site investigation, previously directed by Eagle Environmental, is now under the direction of Confluence Compliance Companies (Confluence). Confluence is working with Noble to establish a site investigation schedule which will be proposed in a subsequent Form 27 by June 1, 2025. All site investigation data and associated lab reports are attached to this form. 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: Chris McKisson

Title: Rem. Program Manager

Submit Date: 03/03/2025

Email: chris.mckisson@confluence-cc.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: Nick Cholas

Date: 04/24/2025

Remediation Project Number: 29038

COA Type

Description

COA Type	Description
1 COA	Operator will continue quarterly reporting until the site investigation is complete and Table 915-1 standards are met within the remediation area.

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

404087053	FORM 27-SUPPLEMENTAL-SUBMITTED
404087929	SITE INVESTIGATION REPORT
404087930	SITE INVESTIGATION REPORT
404110657	ANALYTICAL RESULTS
404110759	ANALYTICAL RESULTS
404110760	ANALYTICAL RESULTS
404110761	ANALYTICAL RESULTS
404110762	ANALYTICAL RESULTS
404110763	ANALYTICAL RESULTS

Total Attach: 9 Files

General Comments

User Group

Comment

Comment Date

Environmental	Operator states: " Confluence is working with Noble to establish a site investigation schedule which will be proposed in a subsequent Form 27 by June 1, 2025."	04/24/2025
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Total: 1 comment(s)