

State of Colorado
Energy & Carbon Management Commission

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Document Number:
404330382

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: NOBLE ENERGY INC	Operator No: 100322	Phone Numbers
Address: 1099 18TH STREET SUITE 1500		Phone: (832) 349-0757
City: DENVER State: CO Zip: 80202		Mobile: ()
Contact Person: Lauren Hoff	Email: lauren.hoff@chevron.com	

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

Yes Multiple Facilities

Facility Type: WELL	Facility ID: _____	API #: 123-12791	County Name: WELD
Facility Name: SHELTON R G 26-8	Latitude: 40.285020	Longitude: -104.623510	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: SENE	Sec: 26	Twp: 4N	Range: 65W Meridian: 6 Sensitive Area? Yes
Facility Type: SPILL OR RELEASE	Facility ID: 484791	API #: _____	County Name: WELD
Facility Name: Shelton RG 26-8	Latitude: 40.285020	Longitude: -104.623510	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: SENE	Sec: 26	Twp: 4N	Range: 65W Meridian: 6 Sensitive Area? Yes

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 0.01mi E and 0.15mi NW. Gilmore Ditch is 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	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.

Pursuant to Colorado 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 by Eagle Environmental Consulting, LLC (Eagle) following cut and cap operations. On August 14, 2023, approximately 1,246 feet of flowline was abandoned, and initial flowline characterization sampling was completed by Tasman Geosciences (Tasman). See ECMC Form 27 Document 404087053 and the associated attachments for initial site investigation details.

On June 23, 2025, Confluence Compliance Companies, LLC (Confluence) provided sampling support to recharacterize potential soil impacts at the wellhead identified by initial site investigation. Using hand tools, five soil samples were collected from 6 feet below ground surface (bgs) at the previous locations of wellhead samples collected by Eagle on June 30, 2023. Using an environmental drill rig, five delineation soil borings (MW01 – MW05) were advanced in each cardinal direction of the groundwater grab sample (GW-01) collected by Eagle and one soil sample was collected from each boring at the depth of greatest impact as determined by field-screening. Each soil boring was completed as a groundwater monitoring well. Four background soil samples were also collected in native, nearby, non-disturbed areas to further characterize native concentrations of inorganics at the Location. From June 23 through June 26, 2025, Confluence returned to the Location to install, develop, and complete second quarter 2025 sampling of monitoring wells MW-01 through MW-05 and BKG02. See the attached Report of Work Completed (ROWC) and Groundwater Monitoring Report (GWMR) for 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 characterize and delineate the extent of potential soil impacts around the wellhead investigation area. 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):

Groundwater samples will be collected from monitoring wells MW01-MW05 on a quarterly basis and analyzed for all Table 915-1 groundwater constituents. See the attached GWMR for details of the second quarter 2025 sampling event. Groundwater monitoring will continue until a minimum of four consecutive quarters of compliance is achieved. Background monitoring wells may be installed to characterize native groundwater conditions at the Location

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 decommissioning and supplemental site investigation (SSI) 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 9

Number of soil samples exceeding 915-1 9

Was the areal and vertical extent of soil contamination delineated? No

Approximate areal extent (square feet) 900

NA / ND

-- Highest concentration of TPH (mg/kg) 0.232

-- Highest concentration of SAR 12.2

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 7

Groundwater

Number of groundwater samples collected 5

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 5

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 June 30, 2023, one background soil sample was collected and analyzed pH, sodium adsorption ratio (SAR) and Table 915-1 metals, except hexavalent chromium. See Document 404087053 for details.

Four background samples were collected on June 23, 2025, and analyzed for Table 915-1 inorganic constituents of concern. The maximum background concentration calculated using a 1.25x multiplier for arsenic was 6.73 milligrams per kilogram (mg/kg), barium was 156 mg/kg, and hexavalent chromium was 0.11mg/kg. The maximum pH and SAR values were reported at 11.6 and 12.2, respectively.

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?

As part of Chevron's Data Integrity review for projects associated with Eagle, all point of compliance samples have been recollected in accordance with the approved Form 27 investigation plan and analyzed for full Table 915-1. Additional supplemental site investigation (SSI) activities will be conducted to delineate the extent of potential soil impacts identified by wellhead and groundwater investigation activities. 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.

No impacted material caused by oil and gas operations has been removed 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.

See Document 404087053 and the associated attachments for site investigation details prior to 2025.

On June 23, 2025, Confluence provided sampling support to recharacterize potential soil impacts at the wellhead identified by initial site investigation. Using hand tools, five soil samples were collected from 6 feet bgs at the previous locations of wellhead samples collected by Eagle on June 30, 2023. Using an environmental drill rig, five delineation soil borings (MW01 – MW05) were advanced in each cardinal direction of the groundwater grab sample (GW-01) collected by Eagle and one soil sample was collected from each boring at the depth of greatest impact as determined by field-screening. Each soil boring was completed as a groundwater monitoring well. Four background soil samples were also collected in native, nearby, non-disturbed areas to further characterize native concentrations of inorganics at the Location. Analytical results of recharacterization soil samples indicate pH and SAR values above the Soil Suitability for Reclamation (SSR) standard and concentrations of arsenic, hexavalent chromium, and lead exceeding Table 915-1 Protection of Groundwater Soil Screening Levels (PGSSLs). Analytical results of the soil boring samples indicate SAR values above the SSR standard and concentrations of arsenic, barium, hexavalent chromium, and lead above PGSSLs. From June 23 through June 26, 2025, Confluence returned to the Location to install, develop, and complete second quarter 2025 sampling of monitoring wells MW-01 through MW-05 and BKG02. Analytical results confirmed compliance with Table 915-1 standards for all organic constituents across the monitoring network. Elevated levels of total dissolved solids (TDS), chloride, and sulfate concentrations were observed above background levels within all monitoring wells. See the attached ROWC and GWMR for 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.

Groundwater samples will be collected from monitoring wells MW01-MW05 on a quarterly basis and analyzed for all Table 915-1 groundwater constituents. See the attached GWMR for details of the second quarter 2025 sampling event. Based on the second quarter findings, Chevron intends to install additional background monitoring wells and collect additional background groundwater samples to further establish representative native concentrations of inorganics. Groundwater monitoring will continue until a minimum of four consecutive quarters of compliance is achieved.

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 Quarterly Update, SSI Results, and SSIP

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. 12/31/2026

Proposed date of completion of Reclamation. 10/31/2027

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. 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. 06/23/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 05/08/2023

Proposed date of completion of Remediation. 12/31/2026

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 decommissioning of the SHELTON R G #26-8 wellhead and flowline and necessity for SSI activities adjacent to the wellhead. 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 third quarter 2025 update for the SHELTON R G #26-8 (Remediation Project 29038), and to report the results of recent soil and groundwater sampling events. See the attached reports for details.

Based on soil sampling completed by Confluence, all organic constituents of concern are within PGSSLs. Levels of pH, SAR, arsenic, barium, and hexavalent chromium, above allowable limits remain in the investigation area. However, site-specific background data collected from the Location indicate that these levels are within native conditions. The Location is characterized as Olney Fine Sandy Loam soil classification and background soil samples collected from the same soil profile as well as soil characterized as Aquolls and Aquepts, flooded, demonstrates elevated levels of these constituents in native soil. Both soil profiles were formed in alluvium and are commonly associated with low-lying, floodplain environments, indicating similar geologic and hydrologic influences. Based on similar soil classifications, parent material, and proximity to the site investigation area, it is reasonable to conclude that elevated levels of pH, SAR, arsenic, barium, and hexavalent chromium are consistent with native conditions. Therefore, Chevron requests an alternative allowable limit for pH of 8.29 and 10.5 for SAR in accordance with Table 915-1 Footnote 1 and alternative allowable limits for arsenic, barium, and hexavalent chromium of 6.73, 156, and 0.11 mg/kg, respectively, in accordance with Table 915-1 Footnote 11.

Assuming the proposed alternative allowable limits are approved, elevated levels of pH, SAR, barium, hexavalent chromium, and lead remain in the investigation area. However, existing background samples collected from native, non-disturbed soils north of the Location do not characterize the actively managed manure compost field immediately adjacent to the Location. Manure compost can alter salinity, acidity, and influence the observed levels of metals within soils. Chevron plans to conduct a targeted background study within the compost management area to fully characterize native soils. Samples within the manure compost field will be collected directly from the source and at depths that match existing soil boring intervals. This data will be used to establish a representative land-use background for the Location and to determine whether observed concentrations are consistent with site-specific agricultural management rather than attributable to oil and gas operations.

Pursuant to Rule 913.e., quarterly reporting will be conducted until closure criteria are achieved for the remediation project. Confluence plans to conduct the proposed SSI by the end of the fourth quarter of 2025, in accordance with the proposed implementation schedule and the Site Investigation Plan attached to this form submittal. The results will be submitted in a subsequent Form 27

Based on the second quarter findings, Chevron intends to install additional background monitoring wells and collect additional background groundwater samples to further establish representative native concentrations of TDS. Quarterly groundwater monitoring will continue until compliance with all Table 915-1 groundwater standards can demonstrated for four consecutive quarters.

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

Signed: Miranda Beard

Title: Project Scientist

Submit Date: _____

Email: miranda.beard@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: _____

Date: _____

Remediation Project Number: 29038

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
404330775	SITE INVESTIGATION REPORT
404330776	SITE INVESTIGATION REPORT
404330777	ANALYTICAL RESULTS
404330783	ANALYTICAL RESULTS

Total Attach: 4 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)