

State of Colorado
Energy & Carbon Management Commission

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404087773
Receive Date:
05/06/2025

Report taken by:
John Heil

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: CAERUS PICEANCE LLC	Operator No: 10456	Phone Numbers
Address: 1001 17TH STREET #1600		Phone: (970) 902-3598
City: DENVER State: CO Zip: 80202		Mobile: (970) 902-3598
Contact Person: Andy Verbonitz	Email: averbonitz@qb-energy.com	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 34380 Initial Form 27 Document #: 403709318

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: 1Q 2025 Status Update to Remediation Project Number (RPN) 34380

SITE INFORMATION

Yes Multiple Facilities

Facility Type: GAS COMPRESSOR STATION	Facility ID: 419752	API #: _____	County Name: GARFIELD
Facility Name: BULL FORK COMPRESSOR STATION	Latitude: 39.695594	Longitude: -108.283333	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: SWSE	Sec: 16	Twp: 4S	Range: 97W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE	Facility ID: 485683	API #: _____	County Name: RIO BLANCO
Facility Name: Bullfork Tank Bullplug Freeze	Latitude: 39.696385	Longitude: -108.282971	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: SWSE	Sec: 16	Twp: 4S	Range: 97W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SM

Most Sensitive Adjacent Land Use East Willow Creek, located approximately 200' west of location

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

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 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	TBD	Analytical
Yes	SOILS	TBD	Laboratory Analytical
No	SURFACE WATER	NA	Not currently present/frozen

INITIAL ACTION SUMMARY

Description of initial action or emergency response measures take to abate, investigate, and/or remediate impacts associated with E&P Waste.

Please reference the ECMC Form 19 for Spill/Release Point ID Number 48563 document 403620883 for emergency response measures taken. Reference Remediation Number 34380 for initial liner integrity inspection and initial characterization details provided via initial Form 27 403709318.

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 drilling assessment will be conducted to delineate soil impacts at the location. Additionally, please see attached report of work complete (ROWC) detailing recent drilling activities completed in December 2024. Based on the drilling assessment, historical impacts may be present and future soil samples will be submitted for laboratory analysis of full ECMC Table 915-1.

Proposed Groundwater Sampling

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

Based on the December 2024 drilling assessment, groundwater impacts have been identified. Future soil borings will be completed as monitoring wells and sampled on a quarterly basis. Pending laboratory data, additional groundwater monitoring wells will be installed, surveyed, and sampled until points of compliance have been established. Groundwater samples will be submitted for laboratory analysis of full Table 915-1 groundwater contaminants of concern. Please see attached ROWC and Site Investigation Report tab for groundwater sampling results to date.

Proposed Surface Water Sampling

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

As a precautionary measure, surface water samples from the adjacent creek will be collected if surface water is present.

Additional Investigative Actions

Additional alternative investigative actions described in attached Site Investigation Plan (summary):

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

NA / ND

Number of soil samples collected 2

-- Highest concentration of TPH (mg/kg)

Number of soil samples exceeding 915-1 2

NA Highest concentration of SAR

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

BTEX > 915-1 Yes

Approximate areal extent (square feet) 500

Vertical Extent > 915-1 (in feet) 37

Groundwater

Number of groundwater samples collected 1

-- Highest concentration of Benzene (µg/l) 556

Was extent of groundwater contaminated delineated? No

-- Highest concentration of Toluene (µg/l) 840

Depth to groundwater (below ground surface, in feet) 37

-- Highest concentration of Ethylbenzene (µg/l) 29.5

Number of groundwater monitoring wells installed 0

-- Highest concentration of Xylene (µg/l) 366

Number of groundwater samples exceeding 915-1 1

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?

Please see ECMC DN 403864739 for information regarding the previously collected site-specific background samples.

Was investigation derived waste (IDW) generated as part of this investigation?

Volume of solid waste (cubic yards) 0

Volume of liquid waste (barrels) 6

Is further site investigation required?

Additional soil and groundwater drilling assessment will resume when conditions allow.

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.

Approximately 6 bbls of release liquid was vacuumed up from the containment prior to it freezing.

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.

Once impacts have been delineated a remediation plan will be determined.

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
_____ Other _____

_____ Excavate and onsite remediation
_____ 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.

Based on the December 2024 drilling assessment, groundwater impacts have been identified. Future soil borings will be completed as monitoring wells and sampled on a quarterly basis. Pending laboratory data, additional groundwater monitoring wells will be installed, surveyed, and sampled until points of compliance have been established. Groundwater samples will be submitted for laboratory analysis of full Table 915-1 groundwater contaminants of concern. Please see attached ROWC and Site Investigation Report tab for groundwater sampling results to date.

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.

If intrusive assessment or remediation is required, any disturbed areas will be reclaimed in accordance with 1000 series rules if offsite, or returned to active pad working surface if onsite.

Is the described reclamation complete? _____

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. _____

Proposed date of completion of Reclamation. _____

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. 12/10/2023

Actual Spill or Release date, or date of discovery. 12/10/2023

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 12/10/2023

Proposed site investigation commencement. 05/29/2024

Proposed completion of site investigation. 12/01/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. _____

Proposed date of completion of Remediation. _____

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:

OPERATOR COMMENT

This form was originally submitted on 03/04/2025. Following the data integrity NTO issued on 04/08/2025, this form was returned to draft on 04/28/2025, and is now being resubmitted on 05/06/2025 with secured laboratory reports included.

This form is being submitted as a first quarter-2025 update report to comply with ECMC quarterly reporting requirements.

Future soil samples will be analyzed for the full list of ECMC Table 915-1 contaminants of concerns. Results will be compared to Protection of Groundwater Soil Screening Level Concentrations.

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

Signed: Andy Verbonitz

Title: Remediation Specialist

Submit Date: 05/06/2025

Email: averbonitz@qb-energy.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: John Heil

Date: 05/08/2025

Remediation Project Number: 34380

COA Type**Description**

COA Type	Description
0 COA	

ATTACHMENT LIST

Upon approval, the approved Form 27 and all listed attachments will be indexed to the Remediation Project file. Only the approved Form 27 will also be indexed to the related Facilities.

Att Doc Num**Name**

404087773	INVESTIGATION/REMEDATION WORKPLAN (SUPPLEMENTAL)
404111075	SITE INVESTIGATION REPORT
404192647	ANALYTICAL RESULTS
404192649	ANALYTICAL RESULTS
404196590	FORM 27-SUPPLEMENTAL-SUBMITTED

Total Attach: 5 Files

General Comments**User Group****Comment****Comment Date**

Environmental	ECMC approves the attached SITE INVESTIGATION REPORT.	04/28/2025
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Total: 1 comment(s)