

State of Colorado
Energy & Carbon Management Commission

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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 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>QB ENERGY OPERATING LLC</u>	Operator No: <u>10844</u>	Phone Numbers Phone: <u>(970) 285.2739</u> Mobile: <u>(970) 987.4650</u>
Address: <u>1001 17TH STREET SUITE 1600</u>		
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80202</u>
Contact Person: <u>Brett Middleton</u>	Email: <u>bmiddleton@qb-energy.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 42721 Initial Form 27 Document #: 404341853

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: Status Update to Remediation Project Number (RPN) 42721

SITE INFORMATION

No Multiple Facilities

Facility Type: <u>PIT</u>	Facility ID: <u>290544</u>	API #: _____	County Name: <u>GARFIELD</u>
Facility Name: <u>LATHAM O-29</u>	Latitude: <u>39.579531</u>	Longitude: <u>-108.191265</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SWSE</u>	Sec: <u>29</u>	Twp: <u>5S</u>	Range: <u>96W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

SITE CONDITIONS

General soil type - USCS Classifications SM Most Sensitive Adjacent Land Use agricultural
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

North Little Creek and Little Creek are located approximately 450 feet east and 410 feet north of the pit location.

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- E&P Waste Other E&P Waste Non-E&P Waste
- Produced Water Workover Fluids
- Oil Tank Bottoms
- Condensate Pigging Waste
- Drilling Fluids Rig Wash
- Drill Cuttings Spent Filters
- Pit Bottoms
- Other (as described by EPA)

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
Yes	SOILS	TBD	Soil Sampling/Laboratory Analytical

INITIAL ACTION SUMMARY

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

On November 25, 2025, in accordance with ECMC Rules 911.c.(2) and 915.e.(2)B., eight (8) confirmation soil samples were collected from the pit after the pit liner had been removed. Two (2) confirmation soil samples were collected along each long sidewall representative of the North 1 (N1), North 2 (N2), South 1 (S1), and South 2 (S2) locations. One (1) confirmation soil sample was collected along each short sidewall representative of the East 1 (E1) and West 1 (W1) locations. Lastly, two (2) confirmation soil samples were collected from the base of the pit representative of Base East (BASE-E) and Base West (BASE-W) locations. Pit closure sample depths ranged from 5 feet bgs to 14 feet below ground surface (bgs). The confirmation soil samples were observed for any petroleum hydrocarbon odors and staining. The soil's headspace was then field screened using a photoionization detector (PID) to monitor for the presence or absence of volatile organic compounds (VOCs). Composite stockpile soil samples were collected from the stockpiled material removed from the base and sidewalls of the pit. Due to the estimated stockpile volume being greater than 500 cubic yards, it was divided into two (2) cells, and one (1) 5-point composite soil sample was collected from each cell. Aliquots were collected using a hand auger at depths of approximately 4 feet into the stockpile. Once all 5 aliquots were collected from each cell, they were combined and thoroughly mixed in a Ziploc bag to create a composite sample. The stockpile soil samples were documented and field screened as described above. The sample locations are depicted on Figure 1 of the attached report of work completed (ROWC).

Please refer to the attached ROWC for additional 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 sampling will occur to confirm removal of hydrocarbon impacts. Please see the "Remediation Summary" section of this form for these details.

See the attached ROWC for proposed details on how QB plans to delineate the reported inorganic exceedances reported associated with the pit closure. These activities will be completed once all hydrocarbon impacts have been addressed.

Proposed Groundwater Sampling

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

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):

Please see the "Proposed Soil Sampling" and "Remediation Summary" sections for these details.

These proposed activities are explained in the attached ROWC in more detail.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 10

Number of soil samples exceeding 915-1 10

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

Approximate areal extent (square feet) 6000

NA / ND

-- Highest concentration of TPH (mg/kg) 3578.442

-- Highest concentration of SAR 36.68

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 14

Groundwater

Number of groundwater samples collected 0

Was extent of groundwater contaminated delineated? No

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?

Previous background samples were collected in support of other ongoing projects at or near the O29 696 location in accordance with ECMC Rule 915.e. (2)D.

See the attached ROWC for more details.

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?

Please see the "Proposed Soil Sampling" and "Remediation Summary" sections for these details.

These proposed activities are explained in the attached ROWC in more detail.

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.

Above liner impacts were removed via hydro-vac, liner was disposed of at a commercial disposal facility.

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.

Small excavations will be advanced within the existing pit footprint to remove reported hydrocarbons at previously sampled locations W1, S1, and S2. Field screening using a PID will be conducted simultaneously with the excavations to confirm removal of impacted soil. Once the excavations are complete, confirmation soil samples will be collected and submitted for laboratory analysis to determine if the removal of impacted soil was successful. Excavated material from each location will be stockpiled onsite and a 5-point composite sample will be collected from the stockpiled material. If the stockpile is greater than 500 cubic yards multiple composite samples will be collected.

See "Operator Comments" section for reduced suite for soil under ECMC Rule 915.e.(2)C.

See the attached ROWC for additional details.

Soil Remediation Summary

In Situ

- _____ Bioremediation (or enhanced bioremediation)
- _____ Chemical oxidation
- _____ Air sparge / Soil vapor extraction
- _____ Natural Attenuation
- _____ Other _____

Ex Situ

- _____ Excavate and offsite disposal
- _____ If Yes: Estimated Volume (Cubic Yards) _____
- _____ Name of Licensed Disposal Facility or ECMC Facility ID # _____
- _____ Excavate and onsite remediation
- _____ Land Treatment
- _____ Bioremediation (or enhanced bioremediation)
- _____ Chemical oxidation
- _____ Other _____

Groundwater Remediation Summary

- No _____ 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.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

Quarterly Semi-Annually Annually Other Q4 Status Update to RPN 42721

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 Pit Facility Closure- Q4 Status Update to RPN 42721

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.

Per Rule 705.b, and in line with guidance laid out in the SBAP, QB Energy has general liability insurance in the amount of \$5M, and QB Energy has umbrella insurance, which sits over the general liability insurance in the amount of \$65M. The umbrella and general liability insurance covers property damage, bodily injury to third parties, and sudden or accidental pollution under a combined \$70M

Operator anticipates the remaining cost for this project to be: \$ 150000

WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? Yes

Describe beneficial use, if any, of E&P Waste derived from this remediation project:

Pit bottoms were removed via hydro-vac. The liner and above liner sediment were disposed of at Greenleaf Environmental Services. The liner after washing was disposed of as construction debris at Rio Blanco Landfill.

Volume of E&P Waste (solid) in cubic yards 0

E&P waste (solid) description

ECMC Disposal Facility ID #, if applicable:

Non-ECMC Disposal Facility:

Volume of E&P Waste (liquid) in barrels 55

E&P waste (liquid) description above liner pit bottoms

ECMC Disposal Facility ID #, if applicable:

Non-ECMC Disposal Facility: Greenleaf Environmental Services

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 comply with ECMC 1000 series rules after investigation and remediation is complete.

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. _____

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

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 08/25/2025

Proposed site investigation commencement. 10/27/2025

Proposed completion of site investigation. 03/30/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 01/26/2026

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

In accordance with ECMC Table 915, Footnote 1, QB requests relief of arsenic as a contaminant of concern (COC) as collected confirmation soil samples at the Site range from 7.62 milligrams per kilogram (mg/kg) [20251125-O29 596-(FC-PIT-S2)@9] to 20.76 mg/kg [20251125-O29 596-(STOCK02)], respectively. These arsenic values are within the site-specific background soil sample previously collected at the Site of 21.7 mg/kg [20250728-LMBG-(O29 596 SWD-S01)@18-20].

In accordance with ECMC Table 915-1 Rule 915e.(2).C, QB requests an alternative reporting soil screening level for sodium adsorption ratio (SAR) of 16.23, representative of the previously collected background sample 20251103-Valve Can 1589-(MW00)@5-7.

The above-mentioned background sample locations can be referenced on the attached documents to this form titled "SITE MAP". The certified laboratory analytical reports of the above-mentioned soil samples are included as attachments to this document titled "LABORATORY ANALYTICAL REPORT".

Assuming the requests above are approved, QB requests the Director's approval for the reduced analyte suite of electric conductivity (EC), SAR, hot water-soluble boron (HWS-B), benzo(a)pyrene (BaP), and total petroleum hydrocarbons (TPH) [specifically, diesel range organics (DRO) and oil range organics (ORO)] prior to supplemental investigation events in accordance with ECMC Rule 915.e.(2)C.

QB is still evaluating "next step" options for the stockpile material associated with samples STOCK01 and STOCK02. This determination will be made once all excavation activities associated with this project are complete.

Lastly, QB will collect a produced fluid "source" sample per COA as outlined in DN 404341853. The source sample will be collected from the tank battery that feeds the injection pump at the Site which is representative of what would have been stored in the pond.

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

Signed: Brett Middleton

Title: EHS Lead

Submit Date: 12/31/2025

Email: bmiddleton@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: 03/18/2026

Remediation Project Number: 42721

COA Type

Description

	ECMC approves the request for a reduced analyte suite of electric conductivity (EC), SAR, hot water-soluble boron (HWS-B), benzo(a)pyrene (BaP), and total petroleum hydrocarbons (TPH) [specifically, diesel range organics (DRO) and oil range organics (ORO)]. However, the Operator shall continue sampling for TPH-GRO.
	ECMC denies the request for an alternative reporting soil screening level for a sodium adsorption ratio (SAR) of 16.23. The SAR value of 16.23 appears to be an outlier, as the other 14 background sample SAR levels range from 0.319 to 3.4.

2 COAs

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

404484813	INVESTIGATION/REMEDATION WORKPLAN (SUPPLEMENTAL)
404484925	LABORATORY ANALYTICAL REPORT
404484926	LABORATORY ANALYTICAL REPORT
404488152	LABORATORY ANALYTICAL REPORT
404488154	LABORATORY ANALYTICAL REPORT
404488986	SITE INVESTIGATION REPORT
404489123	SITE MAP
404489131	SITE MAP
404586260	FORM 27-SUPPLEMENTAL-SUBMITTED

Total Attach: 9 Files

General Comments

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

Total: 0 comment(s)