

State of Colorado Oil and Gas Conservation Commission

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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 COGCC 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>BAYSWATER EXPLORATION & PRODUCTION LLC</u>	Operator No: <u>10261</u>	Phone Numbers
Address: <u>730 17TH ST STE 500</u>		Phone: <u>(303) 893-2503</u>
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80202</u>		Mobile: <u>()</u>
Contact Person: <u>Andy Verbonitz</u>	Email: <u>averbonitz@bayswater.us</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 21779 Initial Form 27 Document #: 402939196

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: Rule 911 Closure of Oil and Gas Facility

SITE INFORMATION

No Multiple Facilities

Facility Type: <u>LOCATION</u>	Facility ID: <u>414362</u>	API #: <u></u>	County Name: <u>WELD</u>
Facility Name: <u>LIND 23-15</u>	Latitude: <u>40.563260</u>	Longitude: <u>-104.855620</u>	
	** correct Lat/Long if needed: Latitude: <u>40.566450</u>	Longitude: <u>-104.854269</u>	
QtrQtr: <u>NWNE</u>	Sec: <u>23</u>	Twp: <u>7N</u>	Range: <u>67W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SM Most Sensitive Adjacent Land Use Surface Water 100' North

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? Yes

Other Potential Receptors within 1/4 mile

Agricultural land, Dairy Operations, Building Unit within 1000 feet

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
No	GROUNDWATER	NA	Not Encountered
No	SOILS	NA	Field Screening and Laboratory Analytical
No	SURFACE WATER	NA	Not Necessary

INITIAL ACTION SUMMARY

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

The Lind 23-15 well associated with the Lind 23-15 production facility is being plugged and abandoned and the facility is being decommissioned. This submittal is associated with the closure of the production facility.

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):

Five soil samples will be collected from the produced water sump excavation, one soil sample will be collected from beneath each ECD, one soil sample will be collected from under each AST and each separator. All samples will be field screened visually and with a PID. In the absence of any elevated PID readings, soil samples collected from the base and one sidewall of the produced water sump excavation, each AST, and each separator will be submitted for laboratory analysis of TPH (C6-C36), BTEX, naphthalene, 1,2,4-TMB, 1,3,5-TMB, pH, EC, SAR, and boron. The analytical results will be compared to COGCC Table 915-1. Soil associated with any flowline and dumlaine removals will also be field screened visually and with a PID. If any visual staining or any PID readings exceeding background VOC concentrations are observed anywhere onsite or at any field screening location, soil samples from those locations will also be submitted for laboratory analysis. A soil investigation map is attached.

Proposed Groundwater Sampling

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

Groundwater is not expected to be encountered during facility decommissioning. If groundwater is encountered, one grab sample will be collected from each area groundwater has accumulated and samples will be submitted for laboratory analysis of BTEX and naphthalene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene. Analytical results will be compared to table COGCC 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):

A minimum of one soil sample will be collected from an adjacent, undisturbed location to document inorganic background concentrations. The soil sample (s) will be field screened for visual staining and with a PID. The soil sample(s) will be placed on hold at the laboratory.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 10

Number of soil samples exceeding 915-1 3

Was the areal and vertical extent of soil contamination delineated? Yes

Approximate areal extent (square feet) 0

NA / ND

-- Highest concentration of TPH (mg/kg) 58

-- Highest concentration of SAR 18.2

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 0

Groundwater

Number of groundwater samples collected 0

Was extent of groundwater contaminated delineated? Yes

Depth to groundwater (below ground surface, in feet) 1

Number of groundwater monitoring wells installed 1

Number of groundwater samples exceeding 915-1 1

Highest concentration of Benzene (µg/l) 1

Highest concentration of Toluene (µg/l) 1

Highest concentration of Ethylbenzene (µg/l) 1

Highest concentration of Xylene (µg/l) 1

Highest concentration of Methane (mg/l) 1

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?

One pothole was excavated at an undisturbed, adjacent location. Three soil samples were collected from the pothole at 3" bgs, 3' bgs, and 6' bgs. Background samples exceeded Table 915-1 allowable levels for SAR, EC, and boron in at least one sample horizon. Please see attached Table 3 for summary of background sample results.

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

Volume of solid waste (cubic yards) 1

Volume of liquid waste (barrels) 1

☐ Is further site investigation required?**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 soil impacts exceeding Table 915-1 applicable standards resulting for oil and gas operations were encountered during this investigation.

REMEDIAL ACTION 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.

Sampling and field activities were performed on 3/15/22 as described in the Site Investigation Plan. Five soil samples were collected from the produced water sump excavation, one soil sample was collected from beneath each ECD, one soil sample was collected from under each AST and each separator. Soil samples collected from the base and one sidewall of the produced water sump excavation, each AST, and each separator were submitted for laboratory analysis of TPH (C6-C36), BTEX, naphthalene, 1,2,4-TMB, 1,3,5-TMB, pH, EC, SAR, and boron. All samples were fully compliant with Table 915-1 applicable standards. Additionally, during field screening, an elevated PID reading of 38.2 was detected along the dumphine corridor near the southern separator. An additional sample (DL-B02@3') was collected from this area and was also compliant with the applicable standards. No other elevated PID readings were encountered during field screening. Based on the actions taken to date, and the laboratory analytical results, no further action is necessary at this location and Bayswater is requesting remediation # 21779 be closed. Please see attached Site Maps, Summary Tables, Laboratory Analytical Reports, Tanks Battery Decommissioning Forms, and Photo Documentation.

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 COGCC Facility ID # _____
_____ 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.

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

WASTE DISPOSAL INFORMATION

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

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

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility:

Volume of E&P Waste (liquid) in barrels

E&P waste (liquid) description

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility:

REMEDIATION COMPLETION REPORT

REMEDIATION COMPLETION SUMMARY

Is this a Final Closure Request for this Remediation Project? ☐ Yes

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? ☐ Yes

Does the previous reply indicate consideration of background concentrations? ☐ No

Does Groundwater meet Table 915-1 standards? ☐ Yes

Is additional groundwater monitoring to be conducted?

Operator shall comply with the COGCC 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.

Following abandonment and decommissioning, all former locations of oil and gas facilities will be re-contoured and reclaimed in accordance with COGCC 1000 series regulations.

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. 04/07/2022

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. 01/27/2022

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

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 03/15/2022

Proposed site investigation commencement. 02/26/2022

Proposed completion of site investigation. 03/24/2022

REMEDIAL ACTION DATES

Proposed start date of Remediation. 03/15/2022

Proposed date of completion of Remediation. 03/24/2022

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

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

Signed: ` Andy Verbonitz _____

Title: Environmental Coordinator _____

Submit Date: ` _____

Email: averbonitz@bayswater.us _____

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: _____

Date: _____

Remediation Project Number: 21779 _____

COA Type**Description**

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Attachment Check 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**

403005973	MAP
403005980	SOIL SAMPLE LOCATION MAP
403005983	PHOTO DOCUMENTATION
403005987	ANALYTICAL RESULTS
403005991	ANALYTICAL RESULTS

Total Attach: 5 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)