

State of Colorado
Energy & Carbon Management Commission

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Document Number:
404397635
Receive Date:
12/03/2025

Report taken by:
Kari Brown

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>1876 RESOURCES LLC</u>	Operator No: <u>10821</u>	Phone Numbers
Address: <u>1700 LINCOLN ST, STE4800</u>	Phone: <u>(720) 3203660</u>	
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80203</u>		Mobile: <u>()</u>
Contact Person: <u>Meredith O'Brien</u>	Email: <u>m.obrien@1876resources.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 34478 Initial Form 27 Document #: 403711249

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: <u>TANK BATTERY</u>	Facility ID: <u>481785</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Knight Pad Tank Battery</u>	Latitude: <u>40.197030</u>	Longitude: <u>-105.041390</u>	
	** correct Lat/Long if needed: Latitude: <u>40.197140</u>	Longitude: <u>-105.042170</u>	
QtrQtr: <u>SWNE</u> Sec: <u>30</u> Twp: <u>3N</u> Range: <u>68W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>			
Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>484607</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Well #21</u>	Latitude: <u>40.197030</u>	Longitude: <u>-105.041390</u>	
	** correct Lat/Long if needed: Latitude: _____	Longitude: _____	
QtrQtr: <u>SWNE</u> Sec: <u>30</u> Twp: <u>3N</u> Range: <u>68W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>			

SITE CONDITIONS

General soil type - USCS Classifications SP

Most Sensitive Adjacent Land Use Occupied building

Is domestic water well within 1/4 mile? No

Is surface water within 1/4 mile? No

Is groundwater less than 20 feet below ground surface? Yes

Other Potential Receptors within 1/4 mile

Five water well permits were identified within a 1/2-mile radius of the release; however, three of these five well permits were listed as expired and the other two were listed as application denied. The closest constructed water well (Permit #12985) is a stock well located approximately 2,735 feet northeast of the release. The nearest surface water body and wetland were identified to be Union Reservoir located approximately 2,115 feet south of the release. High priority habitat identified by Colorado Parks and Wildlife is located approximately 1,700 feet south of the release. The nearest occupied building is located approximately 600 feet west of the release. Site Location map attached as Figure 1.

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 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	Unknown	GW analytical result
Yes	SOILS	~13000 sqft	Soil analytical results

INITIAL ACTION SUMMARY

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

@0850 (5/9/23) the lease operator on location noticed condensate daylighting at surface. Within 10 mins, impacted flowline identified & shut in. The spilled condensate was contained on location. On 5/10/23, ~1bbl of condensate was removed via a hydrovac. ~1 cubic yard of impacted soil was also excavated at that time and transported to Pawnee Waste, LLC, for offsite disposal.

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):

Soil confirmation sampling has been done for the majority of the excavated area. The area left to sample is the ramp used to access the excavation. These locations will be sampled once confirmation of remediation of the larger portion of the excavation has been completed based on confirmation soil sampling.

Proposed Groundwater Sampling

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

There are currently 4 GW monitoring wells in place at the Knight Pad, one at each corner (NE:MW-01, SE: MW-02, SW:MW-03, NW: MW-04). MW-01 and MW-04 are upgradient from the release area. After backfilling 1876 will install additional GW Monitoring wells, 1 up gradient, 1 cross gradient, 1 in the source area, and 1 down gradient (Well Placements Attachment). All wells will continue to be monitored quarterly against Table 915 until 4 consecutive quarters show compliance with 915 standards. Results from the existing MWs are attached (Knight Pad Water Analysis).

Proposed Surface Water Sampling

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

Surface water sample SW01 was collected from the surface pond located approximately 700 feet upgradient of the release to evaluate the dissolved and total barium. Laboratory analytical results indicated barium was elevated in the surface pond with dissolved barium at 35.6 ug/L and total barium at 32.1 ug/L. Following the collection of GW samples from MW-01, MW-02, MW-03, & MW-04, a second surface water sample (SW01) was collected from the surface pond and was submitted for laboratory analysis of TDS, chloride, & sulfate to investigate the elevated concentrations. TDS, chloride, & sulfate results for SW01 indicate compliance with ECMC Table 915-1 standards.

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 69

NA Highest concentration of TPH (mg/kg) _____

Number of soil samples exceeding 915-1 69

NA Highest concentration of SAR _____

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

BTEX > 915-1 Yes

Approximate areal extent (square feet) 13000

Vertical Extent > 915-1 (in feet) 8

Groundwater

Number of groundwater samples collected 16

ND Highest concentration of Benzene (µg/l) _____

Was extent of groundwater contaminated delineated? Yes

ND Highest concentration of Toluene (µg/l) _____

Depth to groundwater (below ground surface, in feet) 10

ND Highest concentration of Ethylbenzene (µg/l) _____

Number of groundwater monitoring wells installed 4

ND Highest concentration of Xylene (µg/l) _____

Number of groundwater samples exceeding 915-1 2

NA Highest concentration of Methane (mg/l) _____

Surface Water

1 Number of surface water samples collected

0 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?

A total of fifteen (15) soil samples were collected and analyzed for parameters listed in ECMC Table 915. Samples were collected with a GeoProbe equipped with electrical conductivity (EC) and hydraulic profiling tool (HPT) sensors which evaluate the subsurface lithology across the project area. Background analytical results indicate naturally elevated concentrations of certain metals, including arsenic, barium, and lead.

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?

Upon completion of backfill operations, 1876 will install GW monitoring wells as proposed in the Well Placement attachment to this report and will monitor all wells at the site until lab analysis indicates 4 consecutive quarters of compliance with ECMC Table 915 Standards.

REMEDIAL ACTION PLAN

Does this Supplemental Form 27A include changes to a previously approved Remedial Action Plan? Yes

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Source removal has been completed through excavation. Confirmation sampling has occurred and data is being reviewed to see what if any further actions need to be taken for this portion of the Knight Pad. A total of Approximately 9,500 tons of material has been removed and taken to an approved landfill including remediation project #34474 (also on the Knight Pad).

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.

Contaminated Material has been excavated and hauled to an approved disposal. Laboratory results are currently being reviewed to determine next steps.

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation) Yes Excavate and offsite disposal

_____ Chemical oxidation If Yes: Estimated Volume (Cubic Yards) 7000

Air sparge / Soil vapor extraction
 Natural Attenuation
 Other _____

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

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.

1876 Resources will install additional monitoring wells as proposed in the Well Placement attachment to this form.

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 Project status update, currently reviewing laboratory data.

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.

1876 Resources has sufficient insurance and bonding to fully address the anticipated costs of remediation, including the remaining estimated costs for this project. 1876 Resources has general liability insurance and financial assurance in-compliance with ECMC rules. The cost for remediation is a preliminary estimate only, costs may change upwards or downward based on site-specific information. 1876 Resources makes no representation or guarantees as to the accuracy of the preliminary 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? Yes

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

NA

Volume of E&P Waste (solid) in cubic yards 6500

E&P waste (solid) description Contaminated soil

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: Pawnee Waste, LLC, Erie Landfill

Volume of E&P Waste (liquid) in barrels 0

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? No

Does the previous reply indicate consideration of background concentrations? _____

Does Groundwater meet Table 915-1 standards? No

Is additional groundwater monitoring to be conducted? Yes

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.

Release occurred entirely within well production pad extent. Once excavation has been backfilled with clean fill and returned to pad grade, equipment will be replaced onsite. Seeding not required at this stage.

Is the described reclamation complete? No

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? No

If YES, does the seed mix comply with local soil conservation district recommendations? _____

Did the local soil conservation district provide the seed mix? No

SITE RECLAMATION DATES

Proposed date of commencement of Reclamation. 06/06/2025

Proposed date of completion of Reclamation. 12/15/2025

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. 05/10/2023

Actual Spill or Release date, or date of discovery. 05/09/2023

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 05/09/2023

Proposed site investigation commencement. 04/03/2024

Proposed completion of site investigation. 06/30/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 05/30/2025

Proposed date of completion of Remediation. 12/15/2025

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:

Site investigation completion date revised to allow for four quarters of groundwater monitoring following the installation of additional monitoring wells once backfill activities are complete. Remediation completion time adjusted to allow for analysis of laboratory data to determine next steps.

OPERATOR COMMENT

This is a second project on the Knight pad. Remediation activities across the two have occurred in a phased approach with the release adjacent to the separators in the first wave and this release, adjacent to the wellheads, following. We have completed 69 confirmation samples and are currently reviewing the data to see what the next steps are in the project. We have proposed monitoring well locations for this portion of the well pad in the attachment as well as provided a summary of results to date of monitoring well testing. The surface water sample provided within is from the southern excavation, but gives good indication that our approach has been effective. A following Form 27 will be submitted as soon as laboratory results are analyzed and next steps are identified.

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

Signed: Meredith O'Brien

Title: Reg. & Environmental Eng.

Submit Date: 12/03/2025

Email: m.obrien@1876resources.com

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

ECMC Approved: Kari Brown

Date: 02/27/2026

Remediation Project Number: 34478

COA Type**Description**

	ECMC has accepted this Form into the record. Operator shall comply with the workplan, timeline, and any conditions of approval for Form 27 Doc No 404519595 submitted 2/10/2026 (approved 2/20/2026).
1 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**

404397635	FORM 27-SUPPLEMENTAL-SUBMITTED
404459603	ANALYTICAL DATA SUMMARY TABLE(S)
404459609	MAP

Total Attach: 3 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)