

State of Colorado  
Energy & Carbon Management Commission

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Report taken by:  
Taylor Robinson

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: KERR MCGEE OIL & GAS ONSHORE LP	Operator No: 47120	Phone Numbers Phone: (720) 929-4307 Mobile: ( )
Address: P O BOX 173779		
City: DENVER	State: CO	Zip: 80217-3779
Contact Person: Max Moran	Email: DJRemediation_Forms@oxy.com	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 42347 Initial Form 27 Document #: 404290816

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 #: 123-22269	County Name: WELD
Facility Name: LOVELAND 8-3	Latitude: 40.343170	Longitude: -104.869640	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: SENE	Sec: 3	Twp: 4N	Range: 67W Meridian: 6 Sensitive Area? Yes
Facility Type: WELL	Facility ID: _____	API #: 123-23123	County Name: WELD
Facility Name: LOT HOLDINGS 1-3	Latitude: 40.343144	Longitude: -104.869426	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: SENE	Sec: 3	Twp: 4N	Range: 67W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE Facility ID: 492577 API #: \_\_\_\_\_ County Name: WELD  
 Facility Name: Lot Holdings 1-3 Wellhead Latitude: 40.343144 Longitude: -104.869426  
 \*\* correct Lat/Long if needed: Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_  
 QtrQtr: SENE Sec: 3 Twp: 4N Range: 67W Meridian: 6 Sensitive Area? Yes

**SITE CONDITIONS**

General soil type - USCS Classifications SC Most Sensitive Adjacent Land Use Surface Water & Occupied Buildings  
 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**

Big Thompson River 210 feet (ft) north. Ponds 1200 ft southwest. Areas with wetland characteristics 580 ft north, 980 ft northeast, 1000 ft northwest, 1150 ft west, & 1260 ft southwest. Water well 250 ft northeast. Occupied Buildings 540 ft northeast, 750 ft southeast, & 810 ft south. Commercial Building 820 ft south. Livestock 860 ft southwest. State Hwy 430 ft east. County Road 720 ft south. Agriculture 640 ft east. Railroad 310 ft northeast. The site is located within a 100 year floodplain. The site is located within an Aquatic Native Species Conservation Waters, Mule Deer Severe Winter Range, & Mule Deer Winter Concentration Area High Priority Habitat (HPH) areas.

**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
UNDETERMINED	GROUNDWATER	TBD	Groundwater Samples/Laboratory Analytical Results
Yes	SOILS	TBD	Soil Samples/Laboratory 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.

Wellhead cut and cap operations were completed at the Lot Holdings 1-3 and Loveland 8-3 wellheads on November 19, 2025. Groundwater was not encountered during wellhead cut and cap operations. Visual inspection and field screening of soil around the wellhead and associated pumping equipment were conducted following cut and cap operations. Soil samples [B01(1-3)@4' and B01(8-3)@4'] were submitted for analysis of full list ECMC Table 915-1 constituents to determine if a release occurred. Portions of the flowlines associated with the wellheads were removed on November 19, 2025. Samples were collected from the locations where the flowline risers were disconnected from the wellheads [WH-Riser(1-3)@3' and WH-Riser(8-3)@3']. Samples were submitted for analysis of full list Table 915-1 constituents to determine if a release occurred. Laboratory analytical results indicate that polycyclic aromatic hydrocarbons (PAHs) or barium exceeding the Table 915-1 allowable levels and background levels are present at the former 1-3 and 8-3 wellheads, respectively. As such, a Form 19 Initial/Supplemental Spill/Release Report (Document No. 404464699) was submitted on December 10, 2025, and the ECMC issued Spill/Release Point ID 492577. The wellheads are depicted on Figure 1. The PID readings and soil sample results are summarized in Tables 1 and 2, respectively.

Additional flowline removal activities are pending. Excavation activities are pending and details will be provided in a subsequent Form 27 supplemental report.

**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 ):

On November 19, 2025, soil samples were collected from the wellhead excavations [B01(1-3)@4' and B01(8-3)@4'] and from where the flowline risers were disconnected from the wellheads [WH-Riser(1-3)@3' and WH-Riser(8-3)@3'] at depths of 3 and 4 ft below ground surface (bgs). The samples were submitted for analysis of full list Table 915-1 constituents, using ECMC-approved methods. Laboratory analytical results indicate that PAHs or barium exceeding the Table 915-1 allowable levels and background levels are present at the former 1-3 and 8-3 wellheads, respectively. Excavation activities are pending. Additional flowline removal activities are pending. The laboratory report is attached.

**Proposed Groundwater Sampling**

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

Groundwater was not encountered during wellhead cut and cap or partial flowline removal activities.

**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 ):

On November 19, 2025, visual inspection and field screening of soil were conducted at four sidewall locations within each cut and cap excavation area and eight locations at the ground surface adjacent to the cut and cap excavation areas. Based on the inspection and screening results, hydrocarbon-impacted soil was not observed at the screening locations, and no soil samples were submitted for laboratory analysis from these areas, in accordance with the ECMC Operator Guidance. A photographic log is attached.

On December 11, 2025, a soil gas survey was conducted at ten soil vapor points installed adjacent to the former wellhead locations following cut and cap operations. GEM 5000 field readings were all non-detect for methane at all soil vapor points. The soil vapor point locations are illustrated on Figure 1. The soil vapor field form is included as an attachment.

**SITE INVESTIGATION REPORT**

**SAMPLE SUMMARY**

Soil	NA / ND
Number of soil samples collected <u>4</u>	-- Highest concentration of TPH (mg/kg) <u>0.115</u>
Number of soil samples exceeding 915-1 <u>4</u>	-- Highest concentration of SAR <u>1.98</u>
Was the areal and vertical extent of soil contamination delineated? <u>No</u>	BTEX > 915-1 <u>No</u>
Approximate areal extent (square feet) <u>602</u>	Vertical Extent > 915-1 (in feet) <u>4</u>
<b>Groundwater</b>	
Number of groundwater samples collected <u>0</u>	Highest concentration of Benzene (µg/l) _____
Was extent of groundwater contaminated delineated? <u>No</u>	Highest concentration of Toluene (µg/l) _____
Depth to groundwater (below ground surface, in feet) _____	Highest concentration of Ethylbenzene (µg/l) _____
Number of groundwater monitoring wells installed _____	Highest concentration of Xylene (µg/l) _____
Number of groundwater samples exceeding 915-1 _____	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?

Twelve background soil samples (Native-BG01@3' through Native-BG06@3' and Native-BG01@6' through Native-BG06@6') were collected from the native material outside of the wellhead excavation areas. The background soil samples were submitted for laboratory analysis of pH, electrical conductivity (EC), sodium adsorption ratio (SAR), boron, and ECMC Table 915-1 metals, using ECMC-approved methods. Analytical results indicate that pH, arsenic, barium, cadmium, lead, and selenium are naturally high in the native soil. The background soil sample analytical results are summarized in Table 2. The background soil sample locations are illustrated on Figure 2.

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?

Additional flowline removal activities are pending. Excavation activities are pending and details will be provided in a subsequent Form 27 supplemental report.

## 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.

Impacted soil from the wellhead excavations will be removed and transported to a licensed disposal facility. Final disposal information will be provided upon completion of assessment activities. Disposal records are kept on file and available upon request. The excavation areas will be backfilled and contoured to match pre-existing conditions.

### 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.

Laboratory data indicate that PAHs or barium exceeding the Table 915-1 allowable levels and background levels are present at the former 1-3 and 8-3 wellheads, respectively. Groundwater was not encountered during wellhead cut and cap or partial flowline removal activities. Additional flowline removal activities are pending. Excavation activities are pending and details will be provided in a subsequent Form 27 supplemental report.

### 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.

\_\_\_\_\_

# 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 \_\_\_\_\_

## 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.

KMOG has sufficient insurance and bonding to fully address the anticipated costs of Remediation, including the remaining estimated costs for this project. KMOG currently has over 40 million in bonds with the Energy and Carbon Management Commission. The cost for remediation is a preliminary estimate only, costs may change upwards or downward based on site-specific information. KMOG makes no representation or guarantees as to the accuracy of the preliminary estimate.

Operator anticipates the remaining cost for this project to be: \$ 17000 \_\_\_\_\_

## 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 \_\_\_\_\_

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 reseeded program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing.

The site will be reclaimed in accordance with ECMC 1000 Series Reclamation Rules.

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. 12/09/2025

Actual Spill or Release date, or date of discovery. 12/08/2025

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 11/19/2025

Proposed site investigation commencement. 11/19/2025

Proposed completion of site investigation. 06/24/2026

### REMEDIAL ACTION DATES

Proposed start date of Remediation. 11/19/2025

Proposed date of completion of Remediation. 06/24/2026

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:

\_\_\_\_\_

**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: Max Moran \_\_\_\_\_

Title: Environmental Advisor \_\_\_\_\_

Submit Date: 12/29/2025 \_\_\_\_\_

Email: DJRemediation\_Forms@oxy.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: 42347 \_\_\_\_\_

**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.

<b>Att Doc Num</b>	<b>Name</b>
404471961	FORM 27-SUPPLEMENTAL-SUBMITTED
404471992	LABORATORY ANALYTICAL REPORT
404472003	PHOTO DOCUMENTATION
404477410	SOIL SAMPLE LOCATION MAP
404477415	OTHER
404477430	ANALYTICAL DATA SUMMARY TABLE(S)
404477446	SOIL SAMPLE LOCATION MAP

Total Attach: 7 Files

**General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Environmental	ECMC has denied this form without technical review, "Background" soil samples were collected from areas disturbed by oil and gas.	01/16/2026

Total: 1 comment(s)