

State of Colorado
Energy & Carbon Management Commission

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404559705

Receive Date:

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 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
Address: P O BOX 173779		
City: DENVER	State: CO	Zip: 80217-3779
Contact Person: Max Moran	Email: DJRemediation_Forms@oxy.com	Phone: (720) 929-4307
		Mobile: ()

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 37383 Initial Form 27 Document #: 403922138

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: TANK BATTERY Facility ID: 487900 API #: _____ County Name: WELD

Facility Name: Bell12-5 Creason11-5 Facility TB Latitude: 40.246711 Longitude: -104.806109

** correct Lat/Long if needed: Latitude: _____ Longitude: _____

QtrQtr: SWSW Sec: 5 Twp: 3N Range: 66W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE Facility ID: 493022 API #: _____ County Name: WELD

Facility Name: HSR-Creason 11-5 Flowline Latitude: 40.246767 Longitude: -104.806171

** correct Lat/Long if needed: Latitude: _____ Longitude: _____

QtrQtr: SWSW Sec: 5 Twp: 3N Range: 66W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SM

Most Sensitive Adjacent Land Use Occupied Building & Surface Water

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

County Road 60 feet (ft) south. Water well 170 ft west. Ponds 470 ft east, 1200 ft west, and 1300 ft southeast. Occupied building 720 ft southwest. Livestock 760 ft southwest. Platte Valley Canal 1250 ft southeast. Commercial building 1300 ft northeast. Agriculture. Groundwater was encountered at approximately 3 ft below ground surface (bgs).

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	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.

Decommissioning activities were completed at the Bell12-5/Creason11-5 Facility on January 16, 2026. Visual inspection and field screening of soil at two aboveground storage tanks (ASTs), one produced water vessel (PWV), two separators, two potholes, and two meter house locations were conducted following removal activities. Soil samples (AST01@0.5', AST02@0.5', PWV-B01@3', PWV-N01@3', SEP01-INLET@3', SEP01-OUTLET@3', SEP02-INLET@3', SEP02-OUTLET@3', DL01@3', and DL02@3') were submitted for analysis of full list Table 915-1 constituents, to determine if a release occurred. Laboratory analytical results indicated that total petroleum hydrocarbons (TPH), benzene, 1,2,4- and 1,3,5-trimethylbenzenes (TMBs), polycyclic aromatic hydrocarbon (PAH), pH, arsenic, barium, and/or selenium exceeding the ECMC Table 915-1 allowable levels are present at the AST01@0.5', AST02@0.5', PWV-B01@3', PWV-N01@3', SEP01-INLET@3', SEP01-OUTLET@3', SEP02-OUTLET@3', DL01@3', and DL02@3' locations. As such, a Form 19 Initial/Supplemental Spill/Release Report (Document No. 404525449) was submitted on January 30, 2026, and the ECMC issued Spill/Release Point ID 493022. The facility soil sample locations are depicted on Figure 1. The PID readings and soil sample results are summarized in Tables 1 and 2, respectively.

Excavation activities are pending and will be summarized 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 January 16, 2026, soil samples were collected from two ASTs, one PWV, two separators, and two dumpline locations at depths ranging from 0.5 ft bgs to 3 ft bgs. The samples were submitted for analysis of full list Table 915-1 constituents, using ECMC approved methods. Laboratory analytical results indicated that TPH, benzene, TMBs, PAH, pH, arsenic, barium, and/or selenium exceeding the ECMC Table 915-1 allowable levels are present at the AST01, AST02, PWV-B01, PWV-N01, SEP01-INLET, SEP01-OUTLET, SEP02-OUTLET, DL01, and DL02 locations. The laboratory report is attached.

Proposed Groundwater Sampling

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

On January 16, 2025, two groundwater samples (GW-SEP02-OUTLET@3' and GW-DL02@3') were collected from the SEP02-OUTLET and DL02 locations at a depth of 3 ft bgs. The groundwater samples were submitted for laboratory analysis of full list Table 915-1 constituents in groundwater. Background groundwater samples are needed to assess compliance of Total Dissolved Solids (TDS), chloride, and sulfate. Based on the laboratory analytical results groundwater concentrations exceeded the ECMC Table 915-1 allowable levels for benzene and TMBs. Groundwater monitoring wells will be installed to delineate the dissolved-phase plume. The monitoring well installation scope of work will be submitted in a subsequent Form 27 Supplemental report following completion of excavation activities. The groundwater sample locations are depicted on Figure 1. The groundwater sample analytical results are summarized in Table 3.

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 January 16, 2026, visual inspections and field screening of soils were conducted at the base and drain for the ASTs, three sidewalls of the PWV excavation, and two meter house locations. 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.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil	NA / ND
Number of soil samples collected <u>10</u>	-- Highest concentration of TPH (mg/kg) <u>829</u>
Number of soil samples exceeding 915-1 <u>10</u>	-- Highest concentration of SAR <u>2.64</u>
Was the areal and vertical extent of soil contamination delineated? <u>No</u>	BTEX > 915-1 <u>Yes</u>
Approximate areal extent (square feet) <u>3177</u>	Vertical Extent > 915-1 (in feet) <u>3</u>
Groundwater	
Number of groundwater samples collected <u>2</u>	-- Highest concentration of Benzene (µg/l) <u>493</u>
Was extent of groundwater contaminated delineated? <u>No</u>	-- Highest concentration of Toluene (µg/l) <u>8.45</u>
Depth to groundwater (below ground surface, in feet) <u>3</u>	-- Highest concentration of Ethylbenzene (µg/l) <u>27.1</u>
Number of groundwater monitoring wells installed <u>0</u>	-- Highest concentration of Xylene (µg/l) <u>779</u>
Number of groundwater samples exceeding 915-1 <u>2</u>	NA Highest concentration of Methane (mg/l) _____
Surface Water	
<u>0</u> 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?

Seven background soil samples were also collected as part of the HSR- Cleason 11-5, Bell 12-5, Chaknova 14-5 wellhead cut and cap activities (Remediation No. 37381) located approximately 1085 ft northeast, from similar depths (3' and 6' bgs), the same land use, and NRCS soil type (Loamy Sand). Background samples were submitted for laboratory analysis of pH, electrical conductivity (EC), sodium adsorption ratio (SAR), boron, and Table 915-1 metals. Laboratory analytical results indicate that arsenic and barium are naturally high in the native soil. The background soil sample laboratory analytical results are summarized in Table 2. The background soil sample locations are depicted 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?

Excavation activities are pending and will be summarized in a subsequent Form 27 Supplemental report.

Groundwater monitoring wells will be installed to delineate the dissolved-phase plume. The monitoring well installation scope of work will be submitted in a subsequent Form 27 Supplemental report following completion of excavation activities.

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 facility 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.

REMEDICATION 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 TPH, benzene, TMBs, PAH, pH, arsenic, barium, and/or selenium exceeding the ECMC Table 915-1 allowable levels and background levels are present at the AST01, AST02, PWV-B01, PWV-N01, SEP01-INLET, SEP01-OUTLET, SEP02-OUTLET, DL01, and DL02 locations. Groundwater was encountered at approximately 3 ft bgs. Analytical results indicate that groundwater concentrations exceeded the ECMC Table 915-1 allowable levels for benzene and TMBs. Background groundwater samples are needed to assess compliance of Total Dissolved Solids (TDS), chloride, and sulfate. Groundwater monitoring wells will be installed to delineate the dissolved-phase plume. The monitoring well installation scope of work will be submitted in a subsequent Form 27 Supplemental report following completion of excavation activities. Excavation activities are pending and will be summarized 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.

Groundwater monitoring wells will be installed to delineate the dissolved-phase plume. The monitoring well installation scope of work will be submitted in a subsequent Form 27 Supplemental report following completion of excavation activities.

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: \$ 16000 _____

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 reseeding 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. 01/30/2026

Actual Spill or Release date, or date of discovery. 01/29/2026

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 01/16/2026

Proposed site investigation commencement. 01/16/2026

Proposed completion of site investigation. 08/28/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 01/16/2026

Proposed date of completion of Remediation. 08/28/2027

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: _____

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: 37383

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**

404559733	SOIL SAMPLE LOCATION MAP
404559734	LABORATORY ANALYTICAL REPORT
404559735	ANALYTICAL DATA SUMMARY TABLE(S)
404559736	PHOTO DOCUMENTATION
404646678	SOIL SAMPLE LOCATION MAP

Total Attach: 5 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)