

State of Colorado  
Energy & Carbon Management Commission

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Document Number:  
404005190

Date Received:

SUNDRY NOTICE

This form is required for reports, updates, and requests as specified in the ECMC rules. It is also used to request changes to some aspects of approved permits for Wells and Oil and Gas Locations.

ECMC Operator Number: <u>47120</u>	Contact Name <u>Greg Hamilton</u>
Name of Operator: <u>KERR MCGEE OIL &amp; GAS ONSHORE LP</u>	Phone: <u>(970) 515-1698</u>
Address: <u>P O BOX 173779</u>	Fax: <u>( )</u>
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80217-3779</u>	Email: <u>Gregory_hamilton@oxy.com</u>

FORM 4 SUBMITTED FOR:

Facility Type: WELL

API Number : 05-123-51984-00 ID Number: 483631

Name: RAINBOW Number: 9-1HZ

Location QtrQtr: SWNE Section: 9 Township: 5N Range: 67W Meridian: 6

County: WELD Field Name: WATTENBERG

Oil & Gas Location(s) and Oil & Gas Development Plan (OGDP) Information

Location(s)

Location ID	Location Name and Number
483324	RAINBOW 24-9HZ

OGDP(s)

OGDP ID	OGDP Name
482683	NORTH CORE OGDP

WELL LOCATION CHANGE OR AS-BUILT GPS REPORT

☐ Change of Location for Well \* ☐ As-Built GPS Location Report ☐ As-Built GPS Location Report with Survey

\* Well Location Change requires a new Plat.

SURFACE LOCATION GPS DATA Data must be provided for Change of Surface Location and As Built Reports.

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

GPS Quality Value: \_\_\_\_\_ Type of GPS Quality Value: \_\_\_\_\_ Measurement Date: \_\_\_\_\_

Well Ground Elevation: \_\_\_\_\_ feet (Required for change of Surface Location.)

WELL LOCATION CHANGE

Well plan is: \_\_\_\_\_ (Vertical, Directional, Horizontal)

		FNL/FSL		FEL/FWL	
Change of <b>Surface</b> Footage <b>From</b> :		2273	FNL	2096	FEL
Change of <b>Surface</b> Footage <b>To</b> :					
Current <b>Surface</b> Location <b>From</b>	QtrQtr <u>SWNE</u> Sec <u>9</u> Twp <u>5N</u> Range <u>67W</u> Meridian <u>6</u>				
New <b>Surface</b> Location <b>To</b>	QtrQtr <u></u> Sec <u></u> Twp <u></u> Range <u></u> Meridian <u></u>				

Change of **Top of Productive Zone** Footage **From:**

255 FNL

2104 FWL

Change of **Top of Productive Zone** Footage **To:**

\*\*

Current **Top of Productive Zone** Location

Sec 9

Twp 5N

Range 67W

New **Top of Productive Zone** Location

Sec

Twp

Range

Change of **Base of Productive Zone** Footage **From:**

FNL

FWL

Change of **Base of Productive Zone** Footage **To:**

\*\*

Current **Base of Productive Zone** Location

Sec

Twp

Range

New **Base of Productive Zone** Location

Sec

Twp

Range

Change of **Bottomhole** Footage **From:**

245 FNL

70 FWL

Change of **Bottomhole** Footage **To:**

\*\*

Current **Bottomhole** Location

Sec 7

Twp 5N

Range 67W

\*\* attach deviated drilling plan

New **Bottomhole** Location

Sec

Twp

Range

## SAFETY SETBACK INFORMATION

Required for change of Surface Location.

Distance from Well to nearest:

Building: Feet

Building Unit: Feet

Public Road: Feet

Above Ground Utility: Feet

Railroad: Feet

Property Line: Feet

### INSTRUCTIONS:

- Specify all distances per Rule 308.b.(1).
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit – as defined in 100 Series Rules.

## SUBSURFACE MINERAL SETBACKS

Required for change of Top and/or Base of Productive Zone. Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? \_\_\_\_\_

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: \_\_\_\_\_ Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: \_\_\_\_\_ Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: \_\_\_\_\_ Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: \_\_\_\_\_ Feet

## Exception Location

☐ If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers. \_\_\_\_\_

## LOCATION CHANGE COMMENTS

## CHANGE OR ADD OBJECTIVE FORMATION AND/OR SPACING UNIT

<u>Objective Formation</u>	<u>Formation Code</u>	<u>Spacing Order Number</u>	<u>Unit Acreage</u>	<u>Unit Configuration</u>	<u>Add</u>	<u>Modify</u>	<u>No Change</u>	<u>Delete</u>
NIOBRARA	NBRR	407-3401	2560	T5N-67W; 07: ALL, 08			X	

## OTHER

☐ **RULE 502 VARIANCE**

Order Number: \_\_\_\_\_

Description: \_\_\_\_\_

☐ **REMOVE FROM SURFACE BOND** Signed surface use agreement is a required attachment☐ **CHANGE NAME OR NUMBER OF WELL, FACILITY, OIL & GAS LOCATION, OR OGD**From: Name RAINBOW Number 9-1HZ Effective Date: \_\_\_\_\_

To: Name \_\_\_\_\_ Number \_\_\_\_\_

☐ **ABANDON PERMIT: Permit can only be abandoned if the permitted operation has NOT been conducted. Field inspection will be conducted to verify site status.**☐ WELL: Abandon Application for Permit-to-Drill (Form2) – Well API Number \_\_\_\_\_ has not been drilled.☐ PIT: Abandon Earthen Pit Permit (Form 15) – ECMC Pit Facility ID Number \_\_\_\_\_ has not been constructed (Permitted and constructed pit requires closure per Rule 911)☐ CENTRALIZED E&P WASTE MANAGEMENT FACILITY: Abandon Centralized E&P Waste Management Facility Permit (Form 28) – Facility ID Number \_\_\_\_\_ has not been constructed (Constructed facility requires closure per Rule 907)

OIL &amp; GAS LOCATION ID Number: \_\_\_\_\_

☐ Abandon Oil & Gas Location Assessment (Form 2A) – Location has not been constructed and site will not be used in the future.☐ Keep Oil & Gas Location Assessment (Form 2A) active until expiration date. This site will be used in the future.**Surface disturbance from Oil and Gas Operations must be reclaimed per Rule 1003 and Rule 1004.**☐ **REQUEST FOR WELL RECORDS CONFIDENTIALITY (Rule 206.c.(1))**☐ **DIGITAL WELL LOG UPLOAD**☒ **DOCUMENTS SUBMITTED** Purpose of Submission: Pressure Blanket Procedure/Plot Plan☐ **COMPLIANCE with CONDITION OF APPROVAL (COA) on** Form NO: \_\_\_\_\_ Document Number: \_\_\_\_\_

## RECLAMATION

## INTERIM RECLAMATION

☐ Interim Reclamation will commence approximately \_\_\_\_\_

Per Rule 1003.e.(3) operator shall submit Sundry Notice reporting interim reclamation is complete and site is ready for inspection when vegetation reaches 80% coverage.

☐ Interim reclamation complete, site ready for inspection.  
Per Rule 1003.e(3) describe interim reclamation procedure in Comments below or provide as an attachment and attach required location photographs.**Field inspection will be conducted to document Rule 1003.e. compliance**

## FINAL RECLAMATION

☐ Final Reclamation will commence approximately \_\_\_\_\_

Per Rule 1004.c.(4) operator shall submit Sundry Notice reporting final reclamation is complete and site is ready for inspection when vegetation reaches 80% coverage.

☐

Final reclamation complete, site ready for inspection. Per Rule 1004.c(4) describe final reclamation procedure in Comments below or provide as an attachment.

**Field inspection will be conducted to document Rule 1004.c. compliance**

Comments:

**ENGINEERING AND ENVIRONMENTAL WORK**

☐ **REPORT OF TEMPORARY ABANDONMENT**

Describe the method used to ensure that the Well is closed to the atmosphere and the Operator's plans for future operation of the Well in the COMMENTS box below as required by Rule 434.b.(1).

☐ **REQUEST FOR TEMPORARY ABANDONMENT EXCEEDING 6 MONTHS**

State the reason for the extension request and explain the Operator's plans for future operation of the Well in the COMMENTS box below as required by Rule 434.b.(3).

Date well temporarily abandoned \_\_\_\_\_

Has Production Equipment been removed from site? \_\_\_\_\_

Mechanical Integrity Test (MIT) required. Date of last MIT \_\_\_\_\_

**TECHNICAL ENGINEERING AND ENVIRONMENTAL WORK**

Details of work must be described in full in the COMMENTS below or provided as an attachment.

☒ **NOTICE OF INTENT/REQUEST FOR APPROVAL**      Approximate Start Date      12/30/2024

☐ **SUBSEQUENT REPORT**      Date of Activity \_\_\_\_\_

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Bradenhead Plan  | <input type="checkbox"/> Venting or Flaring (Rule 903) | <input type="checkbox"/> E&P Waste Mangement           |
| <input type="checkbox"/> Change Drilling Plan   | <input type="checkbox"/> Repair Well                   | <input type="checkbox"/> Beneficial Reuse of E&P Waste |
| <input type="checkbox"/> Gross Interval Change  |  |  |
| <input type="checkbox"/> Underground Injection Control  |  |  |
| <input type="checkbox"/> Request approval of Reuse and Recycling Plan per Rule 905.a.(3). (Reuse and Recycling Plan must be attached.)                    |  |  |
| <input type="checkbox"/> Request approval of Alternative Sampling Plan per Rule 909.j.(6). for this Pit. (Alternative Sampling Program must be attached.) |  |  |
| <input checked="" type="checkbox"/> Other    Request Pressure Blanket Approval  |  |  |

☐ Request that an existing produced water sample from the same formation be used per Rule 909.j.(6) to meet the requirements of Rule 909.j.(1)-(5) for this Well.

Pit ID \_\_\_\_\_ Pit Name \_\_\_\_\_

(No Sample Provided)

☐ Subsequent well operations with heavy equipment (Rule 312)

(No Well Provided)

## COMMENTS:

Kerr-McGee is requesting approval to conduct a hydraulic fracturing (frac) pressure blanket on this well, which is one of (24) horizontal wells on the Rainbow 24-9HZ well pad (location 483324). This is one of four wells on the pad that will receive this treatment. Injection pressures will be less than fracture pressures. Fresh water will be injected into the Rainbow 9-1HZ (API: 05-123-51984) at a maximum downhole gradient below 0.94 psi/ft. The planned volume of fresh water to inject is approximately 5,000 bbls.

The temporary equipment will consist of (3) chemical totes, (2) 2500 horsepower quinipler pumps, (1) blender trailer, and (15) 500-bbl water storage tanks. A main treatment of surfactant-based chemicals will be injected to make good contact with the reservoir with the objective of improving oil and gas flow in the reservoir, especially after offset frac work at the nearby Schmerge 9-4HZ well pad (location 485056) is complete.

The surface pressure is dependent upon flow rate and friction loss in the tubulars. The surface pressure will be maintained such that frac gradient of 0.94 psi/ft is not eclipsed. Expected surface pressure will be limited to 2500 psi to protect gas lift valves installed in the well. The Hazen-Williams correlation was used to estimate friction loss in the tubulars for varying rates to dictate maximum allowed surface pressure while keeping formation pressure below fracture pressure.

Temporary equipment is expected to have minimal impact to the surrounding area. Incremental noise impacts are minimal and do not require mitigation, especially due to the distance of any building units. Heavy vehicles will only be necessary during rig up and rig down of equipment and transportation of fresh water.

After injection is complete, the combined pad of four wells will be placed on production using the existing plunger lift as well as existing permanent gas lift equipment.

Estimated start date is December 30, 2024.

Please see attached procedure.

Related location sundry:

Rainbow 24-9HZ – Sundry 404005189

Related frac pressure blanket sundries:

Rainbow 9-1HZ – Sundry 404005190

Rainbow 9-3HZ – Sundry 404005191

Rainbow 9-4HZ – Sundry 404005192

Rainbow 9-5HZ – Sundry 404005193

## GAS CAPTURE

### VENTING AND FLARING:

Operation type: \_\_\_\_\_ Operational phase requiring venting/flaring: \_\_\_\_\_

Reason for venting/flaring: \_\_\_\_\_

Describe Other reason for venting/flaring:

Describe why venting or flaring is necessary. If reporting per Rule 903.b.(2), 903.c.(3).C, or 903.d.(2), include the explanation, rationale, and cause of the event:

Describe how the operation will protect and minimize adverse impacts to public health, safety, welfare, the environment, and wildlife resources. If reporting per Rule 903.d.(2), include BMPs used to minimize venting on the BMP Tab:

Total volume of gas vented or flared: \_\_\_\_\_ mcf ☐ estimated ☐ measured

Total duration of emission event: \_\_\_\_\_ hours ☐ consecutive ☐ cumulative

Submit a single representative gas analysis via Form 43 to create a Sample Site Facility ID# for this Location. Reference the Form 43 document number on the Related Forms tab.

Sample Site Facility ID#: \_\_\_\_\_

### GAS CAPTURE PLAN

Describe the plan to connect to a gathering line or beneficially use the gas; include anticipated timeline:

A Gas Capture Plan that meets the requirements of Rule 903.e is attached. ☐

## CASING PROGRAM

(No Casing Provided)

## POTENTIAL FLOW AND CONFINING FORMATIONS

## H2S REPORTING

☐ Intentional release of H2S gas due to Upset Condition or malfunction.

☐ Intent to temporarily abandon well with potential H2S concentration >100 ppm.

Data Fields in this section are intended to document Sample and Location Data associated with the collection of a Gas Sample that is submitted for Laboratory Analysis.

**Gas Analysis Report must be attached.**

H2S Concentration: \_\_\_\_\_ in ppm (parts per million)

Date of Measurement or Sample Collection \_\_\_\_\_

Description of Sample Point:

Absolute Open Flow Potential \_\_\_\_\_ in CFPD (cubic feet per day)

Description of Release Potential and Duration (If flow is not open to the atmosphere, identify the duration in which the container or pipeline would likely be opened for servicing operations.):

Distance to nearest occupied residence, school, church, park, school bus stop, place of business, or other areas where the public could reasonably be expected to frequent: \_\_\_\_\_

Distance to nearest Federal, State, County, or municipal road or highway owned and principally maintained for public use: \_\_\_\_\_

COMMENTS:

## OIL & GAS LOCATION UPDATES

OGDP ID \_\_\_\_\_ OGDP Name \_\_\_\_\_

## **SITE EQUIPMENT LIST UPDATES**

Indicate the number and type of major equipment components planned for use on this Oil and Gas Location:

Wells _____	Oil Tanks _____	Condensate Tanks _____	Water Tanks _____	Buried Produced Water Vaults _____
Drilling Pits _____	Production Pits _____	Special Purpose Pits _____	Multi-Well Pits _____	Modular Large Volume Tank _____
Pump Jacks _____	Separators _____	Injection Pumps _____	Heater-Treaters _____	Gas Compressors _____
Gas or Diesel Motors _____	Electric Motors _____	Electric Generators _____	Fuel Tanks _____	LACT Unit _____
Dehydrator Units _____	Vapor Recovery Unit _____	VOC Combustor _____	Flare _____	Enclosed Combustion Devices _____
Meter/Sales Building _____	Pigging Station _____	Vapor Recovery Towers _____		

## **OTHER PERMANENT EQUIPMENT UPDATES**

## **OTHER TEMPORARY EQUIPMENT UPDATES**

Date Run: 11/25/2024 Doc [#404005190]

CULTURAL AND SAFETY SETBACK UPDATES

OTHER LOCATION CHANGES AND UPDATES

Provide a description of other changes or updates to technical information for this Location:

POTENTIAL OGDG UPDATES

PROPOSED CHANGES TO AN APPROVED OGDG

☐ This Sundry Form 4 is being submitted pursuant to Rule 301.c to propose changes to an approved Oil and Gas Development Plan.

Check all boxes that pertain to the type(s) of changes being proposed for this OGDG:

- ☐ Add Oil and Gas Location(s)
- ☐ Add Drilling and Spacing Unit(s)
- ☐ Amend Oil and Gas Location(s)
- ☐ Amend Drilling and Spacing Unit(s)
- ☐ Remove Oil and Gas Location(s)
- ☐ Remove Drilling and Spacing Unit(s)
- ☐ Oil and Gas Location attachment or plan updates
- ☐ Amend the lands subject to the OGDG
- ☐ Other

Provide a detailed description of the changes being proposed for this OGDG. Attach supporting documentation such as maps if necessary.

Best Management Practices

No BMP/COA Type

Description

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Operator Comments:

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Related frac pressure blanket sundries:  
Rainbow 9-1HZ – Sundry 404005190  
Rainbow 9-3HZ – Sundry 404005191  
Rainbow 9-4HZ – Sundry 404005192  
Rainbow 9-5HZ – Sundry 404005193

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

Signed: \_\_\_\_\_ Print Name: Greg Hamilton  
Title: Sr Regulatory Consultant Email: Gregory\_hamilton@oxy.com Date: \_\_\_\_\_

Based on the information provided herein, this Sundry Notice (Form 4) complies with ECMC Rules and applicable orders and is hereby approved.

ECMC Approved: \_\_\_\_\_ Date: \_\_\_\_\_

### **CONDITIONS OF APPROVAL, IF ANY LIST**

<b><u>COA Type</u></b>	<b><u>Description</u></b>
0 COA	

### **General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
		Stamp Upon Approval
Total: 0 comment(s)		



**ATTACHMENT LIST**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
404005322	AERIAL PHOTOGRAPH
404005324	WELLBORE DIAGRAM
404005326	PRESSURE BLANKET PROCESS
Total Attach: 3 Files	