

FORM  
2  
Rev  
10/24

# State of Colorado Energy & Carbon Management Commission

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Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

404625745

Date Received:

04/19/2026

## APPLICATION FOR PERMIT TO

Drill     Deepen     Re-enter     Recomplete and Operate    Amend

TYPE OF WELL OIL  GAS     COALBED     GEOTHERMAL     GEOLOGIC STORAGE  
 OTHER: Unplanned Sidetrack

Refile

Sidetrack

TYPE OF GEOLOGIC STORAGE WELL    SCIENCE     MONITORING

ZONE TYPE    SINGLE ZONE     MULTIPLE ZONES     COMMINGLE ZONES

Well Name: LAVENDER    Well Number: 33-16HZ

Please describe the reason for the scientific well and its potential future use:

Name of Operator: KERR MCGEE OIL & GAS ONSHORE LP    ECMC Operator Number: 47120

Address: P O BOX 173779

City: DENVER    State: CO    Zip: 80217-3779

Contact Name: Christina Hirtler    Phone: (720)929-6301    Fax: ( )

Email: christina\_hirtler@oxy.com

### FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

#### ECMC Financial Assurance

The Operator has provided or will provide Financial Assurance to the ECMC for this Well.

Surety ID Number (if applicable): 20010124

#### Federal Financial Assurance

In checking this box, the Operator certifies that it has provided or will provide at least this amount of Financial Assurance to the federal government for this Well. (Per Rule702.a.)

Amount of Federal Financial Assurance \$ \_\_\_\_\_

### WELL LOCATION INFORMATION

#### Surface Location

QtrQtr: NENE    Sec: 33    Twp: 4N    Rng: 68W    Meridian: 6

Footage at Surface: 382 Feet    FNL/FSL FNL 881 Feet    FEL/FWL FEL

Latitude: 40.275950    Longitude: -105.001833

GPS Data:    GPS Quality Value: 1.6    Type of GPS Quality Value: PDOP    Date of Measurement: 12/23/2024

Ground Elevation: 5077

Field Name: WATTENBERG    Field Number: 90750

Well Plan: is  Directional     Horizontal (highly deviated)     Vertical

If Well plan is Directional or Horizontal attach Deviated Drilling Plan and Directional Data.

**Subsurface Locations**

Top of Productive Zone (TPZ)

Sec: 34 Twp: 4N Rng: 68W Footage at TPZ: 2168 FNL 400 FWL  
Measured Depth of TPZ: 7793 True Vertical Depth of TPZ: 7114 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 35 Twp: 4N Rng: 68W Footage at BPZ: 2223 FNL 75 FEL  
Measured Depth of BPZ: 17911 True Vertical Depth of BPZ: 7145 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 35 Twp: 4N Rng: 68W Footage at BHL: 2222 FNL 45 FEL  
FNL/FSL FEL/FWL

**LOCAL GOVERNMENT PERMITTING INFORMATION**

County: WELD Municipality: Mead

Is the Surface Location of this Well in an area designated as one of State interest and subject to the requirements of § 24-65.1-108 C.R.S.? Yes

Per §34-60-106(1)(f)(I)(A) C.R.S and §37-90.5-107(2)(b)(I) C.R.S, the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas or Deep Geothermal Locations.

The Energy and Carbon Management Act and the Geothermal Resources Act provide that when “applying for a permit to drill,” operators must include proof that they sought a local government siting permit and the disposition of that permit application, or that the local government does not have siting regulations.

Does the Relevant Local Government regulate the siting of Oil and Gas and Deep Geothermal Locations, with respect to this Location?  Yes  No

If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location.

The disposition of the application filed with the Relevant Local Government is: Approved Date of Final Disposition: 11/10/2025

Comments: Mead Special Use Permit (SUP) Approved - Ordinance No. 1095

## GEOTHERMAL

### Well Overview

The following questions determine informational requirements based on Well type:

Which type of Geothermal Well is this? Select one of the following:

Will this well be constructed using cementing methodologies other than those listed in Rule 408.f?

If Yes, what method will be used:

Please describe the cementing method to be used in detail:

### Geothermal Resource Units

Fill out the information below to submit an application for a Geothermal Resource Unit (GRU) as part of the current permit application. This may also be completed later using a Form 4 Sundry.

Will this Well be in an existing GRU?

Are you submitting your application for a new GRU as part of the current application?

### SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS OR DEEP GEOTHERMAL LOCATION

Surface Owner of the land at this Well's Oil and Gas Or Deep Geothermal Location:  Fee  State  Federal  Indian

Mineral Owner beneath this Well's Oil and Gas Or Deep Geothermal Location:  Fee  State  Federal  Indian

Surface Owner Protection Bond (if applicable): \_\_\_\_\_ Surety ID Number (if applicable): \_\_\_\_\_

### MINERALS DEVELOPED BY WELL

The ownership of all the minerals that will be developed by this Well is (check all that apply):

- Fee
- State
- Federal
- Indian
- N/A

### LEASE INFORMATION

Using standard QtrQtr, Section, Township, Range format describe one entire mineral lease as follows:

- \* If this Well is within a unit, describe a lease that will be developed by the Well.
  - \* If this Well is not subject to a unit, describe the lease that will be produced by the Well.
- (Attach a Lease Map or Lease Description or Lease if necessary.)

Township 4 North, Range 68 West, 6th P.M.  
 Section 33: E/2  
 Weld County, Colorado

Total Acres in Described Lease: 320 Described Mineral Lease is:  Fee  State  Federal  Indian  
 Federal or State Lease # \_\_\_\_\_

### SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 3151 Feet  
 Building Unit: 4092 Feet  
 Public Road: 867 Feet  
 Above Ground Utility: 3533 Feet  
 Railroad: 5280 Feet  
 Property Line: 382 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.

### OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NIOBRARA	NBRR	407-3793	2482	T4N-68W: SEC 21: S2SESE; SEC 28: E2, SW/4, SENW, S2SWNW, SEC 33: ALL, SEC 34: ALL, SEC 35: ALL

Federal or State Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

### SUBSURFACE MINERAL SETBACKS

Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? Yes

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: 75 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: 502 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. \_\_\_\_\_

## SPACING & FORMATIONS COMMENTS

### DRILLING PROGRAM

Proposed Total Measured Depth: 17951 Feet      TVD at Proposed Total Measured Depth 7185 Feet

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells:  
 Enter distance if less than or equal to 1,500 feet: 125 Feet     No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No If yes, attach an H<sub>2</sub>S Drilling Plan unless a plan was already submitted with the Form 2A per Rule 304.c.(10).

Will there be hydraulic fracture treatment at a depth less than 2,000 feet in this well? No

Will salt sections be encountered during drilling? No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? Yes

BOP Equipment Type:  Annular Preventor     Double Ram     Rotating Head     None

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: \_\_\_\_\_ or Document Number: \_\_\_\_\_

### CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	26	16	ASTM A53B	36.94	0	80	64	80	0
SURF	12+1/4	8+5/8	L80	28	0	1440	524	1440	0
1ST	7+7/8	5+1/2	HCP110	17	0	17945	1828	17945	

Conductor Casing is NOT planned

### POTENTIAL FLOW AND CONFINING FORMATIONS

Zone Type	Formation /Hazard	Top M.D.	Top T.V.D.	Bottom M.D.	Bottom T.V.D.	TDS (mg/L)	Data Source	Comment
Confining Layer	Pierre Shale	17	17	294	294			The Fox Hills proper is absent at this location but some transition zone may exist per the USGS
Groundwater	Upper Pierre Aquifer	295	295	1197	1192	501-1000	Electric Log Calculation	Controlled by samples
Confining Layer	Pierre Shale	1198	1193	4253	4117			
Hydrocarbon	Sussex	4254	4118	4467	4321			Non productive
Confining Layer	Pierre Shale	4468	4322	4823	4661			
Hydrocarbon	Shannon	4824	4662	4958	4790			Non productive
Confining Layer	Pierre Shale	4959	4791	7610	7091			
Hydrocarbon	Niobrara	7614	7092	17951	7185			Base MD/TVD for target formation is BHL per ECMC

### OPERATOR COMMENTS AND SUBMITTAL

Comments

We are requesting permission to perform an unplanned sidetrack on the Lavender 33-16HZ due to Sharon Springs exposure while drilling the Niobrara A. I've included information for our proposed sidetrack and attached a wellbore diagram. Thank you for your help and let me know if there is any other information you need from my end for approval.

Well name and API #:  
Lavender 33-16HZ  
05-123-53257

Explanation for need to sidetrack

While drilling ahead in lateral, we faulted into the Sharon Springs at ~13,600. Knowing the risk this presents to the casing and cement job the best plan forward is to pull back and sidetrack at 10,560' and drill a new wellbore around the troublesome area. Gamma was relogged from 13,400' to 13,900 to confirm Sharon Springs exposure.

Total measured depth reached in the wellbore being sidetracked  
14,234' MD / 7173' TVD

Casing set – size(s) and measured depth(s)  
8.625" surface casing set at 1440' MD / 1424' TVD

Description of fish in the hole (if any) – including top and bottom measured depths  
NONE.

Description of proposed plugs: setting measured depths, heights, and cement volumes  
NONE. Open hole sidetrack plan.

Type of cement to be used for all plugs, including slurry weight (ppg) and yield (cf/sk)  
N/A.

Measured depth of proposed sidetrack kick-off point  
10,560' MD

Proposed objective formation(s) for sidetrack hole – new or same as the wellbore being abandoned  
Same as original, permitted wellbore – Niobrara A

BHL target for sidetrack hole – new or same as the wellbore being abandoned  
BHL will be same point as originally planned wellbore.

This application is in a Comprehensive Area Plan No CAP #: \_\_\_\_\_  
Oil and Gas Development Plan Name LAVENDER OGDP ID#: 491332  
Location ID: 417018

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

Signed: \_\_\_\_\_ Print Name: Christina Hirtler

Title: Regulatory Date: 4/19/2026 Email: christina\_hirtler@oxy.com

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

Based on the information provided herein, this Application for Permit-to-Drill complies with ECMC Rules, applicable orders, and SB 19-181 and is hereby approved.

ECMC Approved:  Director of ECMC Date: 4/21/2026

Expiration Date: 11/18/2028

**API NUMBER**

05 123 53257 01

## CONDITIONS OF APPROVAL, IF ANY LIST

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

<u>COA Type</u>	<u>Description</u>
Drilling/Completion Operations	1) Comply with Rule 408.j. and provide cement coverage from TD to a minimum of 500' above Niobrara. Verify coverage with a cement bond log. 2) Oil based drilling fluid can only be used after all groundwater has been isolated.
Drilling/Completion Operations	Per ECMC Order 1-232, Bradenhead tests shall be performed according to the following schedule and Form 17 submitted within 10 days of each test: 1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi is observed or if there is continuous flow, Operator must contact ECMC engineering for approval prior to stimulation. 2) If a delayed completion, a second test is required between 6-9 months after rig release and must be conducted prior to stimulation. If any pressure greater than 200 psi is observed or if there is continuous flow, Operator must contact ECMC engineering for approval prior to stimulation. 3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance.
Drilling/Completion Operations	Operator acknowledges the proximity of the listed non-operated wells. Operator assures that this offset list will be remediated per the Offset Well Evaluation and Hydraulic Fracturing Operator Guidance Document using Option 3. Operator will submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well. 05-123-06144, OLSON 1-X 05-123-11172, OLSON 1
Drilling/Completion Operations	The Operator will insure the wellbore beyond the unit boundary setback is physically isolated and is not completed. In the Operator Comments on the Form 5A the operator will (1) report the footages from the section lines of the bottom of the completed interval (2) describe how the wellbore beyond the unit boundary setback is physically isolated and (3) certify that none of the wellbore beyond the setback was completed.
Interim Reclamation	In the event delayed operations are to occur, Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).
5 COAs	

## Operator Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Anti-Collision: Kerr-McGee will perform an anti-collision evaluation of all active (producing, shut in, or temporarily abandoned) offset wellbores that have the potential of being within one hundred fifty (150) feet of a proposed well prior to drilling operations for the proposed well. Notice shall be given to all offset operators within one hundred fifty (150) feet prior to drilling.
2	Drilling/Completion Operations	Open Hole Logging Exception: One of the first wells drilled on the pad will be logged with cased-hole neutron log with gamma-ray log from the kick-off point into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The horizontal portion of every well will be logged with a measured-while drilling gamma-ray log. The Form 5, Completion Report, for each well on the pad will list all logs run in that well and have those logs attached. The Form 5 for each well shall state "Open Hole Logging Exception - No open-hole logs were run" and shall clearly identify the type of log and the well (by API#) in which open-hole logs were run.

Total: 2 comment(s)

## ATTACHMENT LIST

<b>Att Doc Num</b>	<b>Name</b>
404625745	FORM 2 SUBMITTED
404625746	DIRECTIONAL DATA
404625747	WELLBORE DIAGRAM
404625748	DRILLING PLAN
404625749	CORRESPONDENCE

Total Attach: 5 Files

### **General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	Final Review Complete.	04/21/2026
Engineer	This Form 2 documents the actual surface casing setting depth. The casing table was updated to reflect data the operator supplied. The original Form 2 (doc 404331433) was not followed as the surface casing was set shallower than approved. Surface casing was to be set at 1514' and it was set at 1440'. The setting depth is not in compliance with the approved Form 2 Application for Permit to Drill. This will be referred to enforcement.	04/21/2026
Engineer	Emailed operator about surface casing depth discrepancy on wellbore diagram vs casing table. Updated surface and conductor string on the casing table based on the information provided by the operator.	04/20/2026
OGLA	This Location and its associated Form 2A materials, and the Form 2 Application for Permit to Drill were fully evaluated in accordance with current Rules and approved prior to the commencement of drilling operations for this well. Because this is an application for an unplanned sidetrack with drilling in progress, an Oil and Gas Location Assessment review is not applicable to this ongoing operation. OGLA Task passed.	04/20/2026
Permit	Pooling Docket No. 250900191 was approved on 1/21/2026 Added BMP/COAs Adjusted API to reflect sidetrack (-00 to -01) Permitting review complete	04/20/2026

Total: 5 comment(s)