

FORM  
2

Rev  
10/24

# State of Colorado

## Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

404146088

**(SUBMITTED)**

Date Received:

03/30/2025

### APPLICATION FOR PERMIT TO

Drill  Deepen  Re-enter  Recomplete and Operate Amend

TYPE OF WELL OIL  GAS  COALBE  GEOTHERMAL  OTHER: \_\_\_\_\_

Refile

ZONE TYPE SINGLE ZONE  MULTIPLE ZONES  COMMINGLE ZONES

Sidetrack

Well Name: TULIP WEST Well Number: 30-1HZ

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.ocm

### 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): 20230087

#### 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: NWNE Sec: 30 Twp: 4N Rng: 67W Meridian: 6

Footage at Surface: 275 Feet FNL 2282 Feet FEL

Latitude: 40.290957 Longitude: -104.931235

GPS Data: GPS Quality Value: 1.3 Type of GPS Quality Value: PDOP Date of Measurement: 03/21/2024

Ground Elevation: 4967

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: 19 Twp: 4N Rng: 67W Footage at TPZ: 647 FNL 1760 FWL  
Measured Depth of TPZ: 9312 True Vertical Depth of TPZ: 7056 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 23 Twp: 4N Rng: 68W Footage at BPZ: 710 FNL 70 FWL  
Measured Depth of BPZ: 21661 True Vertical Depth of BPZ: 6721 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 23 Twp: 4N Rng: 68W Footage at BHL: 710 FNL 70 FWL  
FNL/FSL FEL/FWL

**LOCAL GOVERNMENT PERMITTING INFORMATION**

County: WELD Municipality: N/A

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: 10/11/2024

Comments: Tulip Well Pad WOGLA #: 1041WOGLA24-0018  
Tulip Facility WOGLA #: 1041WOGLA24-0019

## 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 24: S/2NW/4, N/2SW/4  
Weld County, Colorado

Total Acres in Described Lease: 152 Described Mineral Lease is:  Fee  State  Federal  Indian

Federal or State Lease # \_\_\_\_\_

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1941 Feet  
Building Unit: 2154 Feet  
Public Road: 264 Feet  
Above Ground Utility: 298 Feet  
Railroad: 1997 Feet  
Property Line: 275 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	407-3673	2880	T4N-R67W: SEC 19: W/2; SEC 29: ALL; Section 30: ALL; T4N-R68W: SEC 29: ALL; SEC 30: 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: 70 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: 284 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: 21661 Feet      TVD at Proposed Total Measured Depth 6721 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: 600 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? Yes

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 A	36.94	0	80	64	80	0
SURF	12+1/4	8+5/8	L80	28	0	1527	590	1527	0
1ST	7+7/8	5+1/2	HCP110	17	0	21661	2464	21661	1000

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
Groundwater	Fox Hills and Shallower	17	17	212	212	501-1000	USGS	
Confining Layer	Pierre Shale	213	213	435	435			
Groundwater	Upper Pierre Aquifer	436	436	1297	1282	501-1000	Electric Log Calculation	Controlled by samples
Confining Layer	Pierre Shale	1298	1283	4846	4107			
Hydrocarbon	Sussex	4847	4108	5126	4312			Non-productive
Confining Layer	Pierre Shale	5128	4313	5594	4654			
Hydrocarbon	Shannon	5595	4655	5701	4732			Non-productive
Confining Layer	Pierre Shale	5702	4733	9033	7024			
Hydrocarbon	Niobrara	9037	7025	21661	6721			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 Tulip West 30-1HZ due significant Sharon Springs exposure encountered while attempting to target the Niobrara A. I've included information for our proposed sidetrack and attached a wellbore diagram. Thank you for taking our call in the middle of the night and providing verbal approval. Please let me know if there is any other information you need.

Well name and API #:

- TULIP WEST 30-1HZ
- 05-123-52895

Explanation for need to sidetrack

• While drilling ahead in lateral, the BHA crossed a fault from the Niobrara A formation into the Sharon Springs. Hole conditions became increasingly adverse presenting elevated rotating torque, inconsistent differential pressure and unusually high cuttings load on the shakers. Due to the lack of wellbore stability in the Sharon Springs, we will pull back and sidetrack a new wellbore and remain in the Niobrara A formation.

Total measured depth reached in the wellbore being plugged back

- 14,744' MD

Casing set – size(s) and measured depth(s)

- 8.625" surface casing set at 1,885' MD

Description of fish in the hole (if any) – including top and bottom measured depths

- No fish left in hole.

Description of proposed plugs: setting measured depths, heights, and cement volumes

- Open hole sidetrack – no plugs are planned to be set

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

- Open hole sidetrack – no plugs are planned to be set

Measured depth of proposed sidetrack kick-off point

- 12,402' 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

- Same as original, permitted wellbore

This application is in a Comprehensive Area Plan       No       CAP #: \_\_\_\_\_

Oil and Gas Development Plan Name       TULIP       OGDP ID#:       487706      

Location ID:       488534      

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:       3/30/2025       Email:       christina\_hirtler@oxy.ocm      

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: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

**API NUMBER**

05 123 52895 00

**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>
0 COA	

**Operator Best Management Practices**

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>

**ATTACHMENT LIST**

<u>Att Doc Num</u>	<u>Name</u>
404146111	WELLBORE DIAGRAM
404146112	CORRESPONDENCE
404146113	DRILLING PLAN
404146115	DIRECTIONAL DATA

Total Attach: 4 Files

**General Comments**

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)