

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

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: UNPLANNED SIDETRACK 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/FSL 2282 Feet FEL/FWL

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 H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No If yes, attach an H₂S 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 A	36.94	0	80	64	80	0
SURF	12+1/4	8+5/8	L80	28	0	1885	590	4885	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

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.

COA Type

Description

Drilling/Completion Operations	All original COA's applied ot the original APD doc: 403972215 remain in effect.
1 COA	

Operator Best Management Practices

No BMP/COA Type

Description

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

Att Doc Num

Name

1517591	WELLBORE DIAGRAM
404146088	FORM 2 SUBMITTED
404146112	CORRESPONDENCE
404146113	DRILLING PLAN
404146115	DIRECTIONAL DATA

Total Attach: 5 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Complete.	04/01/2025
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.	04/01/2025
Engineer	Corrected drilling tab - salt based drilling fluids will not be used. No changes to offset review.	04/01/2025
Permit	Emailed operator for updated / corrected WBD Added BMP/COAs to form. Adjusted API number to reflect sidetrack (-00 to -01) Per operator MD is 21661 Per operator concurrence deleted initial WBD with incorrect MD and uploaded corrected version. Permitting review complete	03/31/2025

Total: 4 comment(s)