

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:

404185876

Date Received:

05/14/2025

### 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: Janet 0780 Well Number: 9S-4H9  
Name of Operator: FULCRUM ENERGY OPERATING LLC ECMC Operator Number: 10805  
Address: 240 SAINT PAUL STREET SUITE 502  
City: DENVER State: CO Zip: 80206  
Contact Name: Heidi Kaczor Phone: (303)981 5409 Fax: ( )  
Email: Heidi.Kaczor@fulcrumeo.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): 20230091

#### 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: 5 Twp: 7N Rng: 80W Meridian: 6

Footage at Surface: 378 Feet FNL 879 Feet FEL

Latitude: 40.614117 Longitude: -106.390488

GPS Data: GPS Quality Value: 1.1 Type of GPS Quality Value: PDOP Date of Measurement: 03/20/2025

Ground Elevation: 8098

Field Name: NORTH PARK HORIZONTAL NIOBRARA Field Number: 60120

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: 4 Twp: 7N Rng: 80W Footage at TPZ: 100 FNL 1128 FWL  
Measured Depth of TPZ: 9293 True Vertical Depth of TPZ: 8606 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 9 Twp: 7N Rng: 80W Footage at BPZ: 100 FSL 1308 FWL  
Measured Depth of BPZ: 20045 True Vertical Depth of BPZ: 7684 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 9 Twp: 7N Rng: 80W Footage at BHL: 100 FSL 1308 FWL  
FNL/FSL FEL/FWL

**LOCAL GOVERNMENT PERMITTING INFORMATION**

County: JACKSON 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.? No

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: Waived Date of Final Disposition: 05/23/2019

Comments: Jackson County does not regulate oil & gas per letter 5/23/19.

## 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.)

T7N R80W Sec. 4, 9, 16: W2

Total Acres in Described Lease: 960 Described Mineral Lease is:  Fee  State  Federal  Indian

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

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 5280 Feet  
Building Unit: 5280 Feet  
Public Road: 3473 Feet  
Above Ground Utility: 3272 Feet  
Railroad: 5280 Feet  
Property Line: 1751 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	531-52	1281	Township 7 North, Range 80 West Section 4,9,10,21: W2

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: 100 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: 328 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: 20045 Feet                      TVD at Proposed Total Measured Depth 7684 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: \_\_\_\_\_ 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? \_\_\_\_\_

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	X52	82.85	0	120	598	120	0
SURF	13+1/2	9+5/8	L80	40	0	5039	1429	5039	0
1ST	8+1/2	5+1/2	P110	20	0	20045	2946	20045	2919

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	Alluvial	0	0	50	50	0-500	USGS	Site Name: SB00708019BCD1 TD@500' TDS@1240
Groundwater	Coalmont	50	50	3530	3427	501-1000	Groundwater Atlas	ON-010 Average Coalmont TDS of 400. No nearby USGS wells.
Confining Layer	Lance	3530	3427	4631	4484			
Confining Layer	Fox Hills	4631	4484	5126	4958			
Confining Layer	Pierre	5126	4958	6122	5949			
Hydrocarbon	Sussex	6122	5949	6763	6569			
Hydrocarbon	Shannon	6763	6569	7995	7768			
Confining Layer	Mancos	8058	7768	8352	8050			
Hydrocarbon	Niobrara	8352	8050	20045	7684			Bottom TVD is bottom of the well and not bottom of the formation; The formation is not planned to be exited.

### 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.

<u>COA Type</u>	<u>Description</u>
Drilling/Completion Operations	1) Submit a Form 42(MIRU) electronically to ECMC two business days prior to MIRU and a Form 42(SP) two business days prior to spud for each of the wells on this pad. 2) If production casing is set provide cement coverage from TD (production casing shoe) to 200' above the surface casing shoe or the base of the Coalmont, whichever is shallower. Run and submit CBL to verify cemented intervals. 3) Include all identifiable formation tops from the top of the Coalmont to TD on the Form 5.
Drilling/Completion Operations	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 threshold is observed or if there is evidence of communication, 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. 3) A post-production test within 60 days after first sales
2 COAs	

## Operator Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Alternative Logging Program: One of the first wells drilled on the pad during the first rig occupation will be logged with open-hole resistivity log with gamma-ray log from the kick-off point into the surface casing for one of the stratigraphically deepest wells on the pad. 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 and have those logs attached. The Form 5 for a well without open-hole logs will state "Alternative Logging Program - No open-hole logs were run" and will clearly identify the type of log and the well (by API#) in which open-hole logs were run.
2	Drilling/Completion Operations	Blowout Prevention Equipment ("BOPE"): A double ram annular preventer will be used during drilling.

Total: 2 comment(s)

## ATTACHMENT LIST

<u>Att Doc Num</u>	<u>Name</u>
404185876	FORM 2 SUBMITTED
404185915	OffsetWellEvaluations Data
404186588	DIRECTIONAL DATA
404186591	DEVIATED DRILLING PLAN
404203895	CORRESPONDENCE
404204192	WELL LOCATION PLAT
404279576	OFFSET WELL EVALUATION

Total Attach: 7 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Complete.	07/15/2025
Engineer	Groundwater: Alluvial, Coalmont Deepest water well: 270'(1 mi, 13 records) •Surface Casing Check complete •Offset well review complete 408.t - No wells 408.u - No wells •Engineering review complete	07/08/2025
OGLA	The Commission approved OGDG #486502 on June 26, 2024 for the Oil and Gas Location related to this Form 2. OGLA task passed.	06/30/2025
Permit	-Corrected Footage at TPZ to FNL - Corrected lease description to T7N R80W Sec. 4, 9, 16: W2 -Corrected total acres of lease to 960 - Added unit acreage configuration (1281 Township 7 North, Range 80 West Section 4,9,10,21: W2) Permit review complete	06/18/2025

Total: 4 comment(s)