

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

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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: Blackhawk Well Number: F01-2NU
Name of Operator: NOBLE ENERGY INC ECMC Operator Number: 100322
Address: 1099 18TH STREET SUITE 1500
City: DENVER State: CO Zip: 80202
Contact Name: Patricia Minerich Phone: (303)228-4000 Fax: ()
Email: RBUDevPermitting@chevron.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): 20230051

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: NWSW Sec: 1 Twp: 5N Rng: 65W Meridian: 6
Footage at Surface: 2062 Feet FNL/FSL 735 Feet FEL/FWL
Latitude: 40.426907 Longitude: -104.618282
GPS Data: GPS Quality Value: 1.3 Type of GPS Quality Value: PDOP Date of Measurement: 12/19/2023
Ground Elevation: 4636
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: 1 Twp: 5N Rng: 65W Footage at TPZ: 1857 FSL 330 FWL
Measured Depth of TPZ: 7230 True Vertical Depth of TPZ: 6764 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 1 Twp: 5N Rng: 65W Footage at BPZ: 610 FSL 330 FWL
Measured Depth of BPZ: 17911 True Vertical Depth of BPZ: 6764 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 1 Twp: 5N Rng: 65W Footage at BHL: 610 FSL 330 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: 11/24/2023

Comments: 1041WOLGA24-0009, Approved 11/24/2023

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 5 North, Range 65 West, 6th P.M.
Section 3: E2NE4NE4

Total Acres in Described Lease: 19 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 788 Feet
Building Unit: 2953 Feet
Public Road: 286 Feet
Above Ground Utility: 352 Feet
Railroad: 5280 Feet
Property Line: 248 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	407-3680	1718	Township 5 North, Range 65 West Section 1: S2 Section 2: NW4, S2 Section 3: All Section 4: E2

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: 200 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: 260 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: 17911 Feet TVD at Proposed Total Measured Depth 6764 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: 153 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? No

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	A-53B	36.95	0	80	175	80	0
SURF	13+1/2	9+5/8	J-55	36	0	1500	523	1500	0
1ST	8+1/2	5+1/2	P-110	20	0	17911	2077	17911	

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	0	0	394	394			
Groundwater	UPIR/Pawnee Aquifer	394	394	1379	1368	1001-10000	Other	COGCC UPWQ Study
Confining Layer	Pierre Shale	1379	1368	3654	3587			
Hydrocarbon	Parkman	3654	3587	3970	3895			
Confining Layer	Pierre Shale	3970	3895	4068	3991			
Hydrocarbon	Sussex	4068	3991	4466	4379			
Confining Layer	Pierre Shale	4466	4379	4907	4808			
Hydrocarbon	Shannon	4907	4808	5192	5087			
Confining Layer	Pierre Shale	5192	5087	6773	6589			
Subsurface Hazard	Sharon Springs Shale	6773	6589	6820	6620			least competent shales
Hydrocarbon	Niobrara	6820	6620	17911	6764			Nio Target

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	<p>Per Order 1-232, Bradenhead tests shall be performed according to the following schedule and Form 17 submitted within 10 days of each test:</p> <ol style="list-style-type: none"> 1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi, must contact ECMC engineer prior to stimulation. 2) If a delayed completion, 6 months after rig release and prior to stimulation. If any pressure greater than 200 psi, must contact ECMC engineer 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	<ol style="list-style-type: none"> 1) Submit Form 42 electronically to ECMC 2 business days prior to MIRU (Spud Notice), for the first well/activity on the pad and provide 2 business days spud notice for all subsequent wells drilled on the pad. 2) Comply with Rule 408.j and provide cement coverage from the end of production casing to a minimum of 500' above Niobrara. Verify coverage with cement bond log. 3) Oil-based drilling fluid is to be used only after all aquifers are covered.
Drilling/Completion Operations	<p>The Operator acknowledges the proximity of the listed wells. Operator assures that this offset list will be remediated per the DJ Basin Horizontal Offset Policy (option 4). Operator will submit a Form 42 ("OTHER – AS SPECIFIED BY PERMIT CONDITION") stating that appropriate mitigation will be completed, during the hydraulic stimulation of this well. This Form 42 shall be filed 48 hours prior to stimulation. Operator will assure that the well's Bradenhead is open and monitored during the entire stimulation treatment – a person will monitor for any evidence of fluid, a Bradenhead test will be performed prior to the beginning of stimulation.</p> <p>LDS 1W-414 (API NO 123-41205) LDS 1V-234 (API NO 123-41206) LDS 1W-314 (API NO 123-41208)</p>
Drilling/Completion Operations	<p>This U-Turn well is proposed to be drilled beyond the unit boundary setback. The Operator will ensure the wellbore beyond the unit boundary setback will not be completed. In the Operator Comments on the Form 5A the operator will (1) Provide the footage calls and measured depth of the last perforation before entering the unit boundary setback of the outgoing leg (2) Provide the footage calls and measured depth of the first perforation after exiting the unit boundary setback of the return leg (3) certify that none of the wellbore beyond the unit boundary setback was completed.</p>
4 COAs	

Operator Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Operator will perform anti-collision evaluation of all active (producing, shut-in, or temporarily abandoned) offset wellbores that have the potential of being within 150' of the proposed well prior to drilling operations.
2	Drilling/Completion Operations	During and Post stimulation: Operator will comply with the COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated 5/29/12.
3	Drilling/Completion Operations	If a skid is performed for the subject well, then the only required BOPE tests are for the BOPE connection bonnet seal breaks, as long as a full BOPE test was performed at the beginning of the pad, and as long as all necessary BOPE tests are completed at least every 30 days during the pad operations.
4	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with Cased hole Pulsed Neutron Log with Gamma Ray Log from 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 clearly 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: 4 comment(s)

ATTACHMENT LIST

<u>Att Doc Num</u>	<u>Name</u>
404073985	FORM 2 SUBMITTED
404198009	OPEN HOLE LOGGING EXCEPTION
404198010	WELL LOCATION PLAT
404198011	SURFACE AGRMT/SURETY
404198012	DIRECTIONAL DATA
404199682	DEVIATED DRILLING PLAN
404239395	OffsetWellEvaluations Data
404312377	OFFSET WELL EVALUATION

Total Attach: 8 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Complete.	08/01/2025
OGLA	The Commission approved OGDG #487285 on December 4, 2024 for the Oil and Gas Location related to this Form 2. OGLA task passed.	07/17/2025
Engineer	Offset Wells Evaluated.	07/16/2025
Permit	Permit review complete Updated "Comments" tab per Operator correcting verbiage Updated pooling "Comment" per Operator	07/08/2025
Permit	Added BHL footage of 610 FSL from the attached plat	06/16/2025

Total: 5 comment(s)