

FORM
2

Rev
05/22

State of Colorado

Oil and Gas Conservation Commission

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



Document Number:

403225994

Date Received:

11/11/2022

APPLICATION FOR PERMIT TO

Drill Deepen Re-enter Recomplete and Operate

Amend

TYPE OF WELL OIL GAS COALBED OTHER: _____

Refile

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: BLEHM Well Number: 2X-HC-10-07-67
Name of Operator: NICKEL ROAD OPERATING LLC COGCC Operator Number: 10669
Address: 44 COOK ST STE 705
City: DENVER State: CO Zip: 80206
Contact Name: ERIN LIND Phone: (303)2267375 Fax: ()
Email: erin.lind@nickelroadoperating.com

FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

COGCC Financial Assurance

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

Surety ID Number (if applicable): 20200034

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: 9 Twp: 7N Rng: 67W Meridian: 6

Footage at Surface: 377 Feet FNL 703 Feet FEL

Latitude: 40.594921 Longitude: -104.891161

GPS Data: GPS Quality Value: 1.5 Type of GPS Quality Value: PDOP Date of Measurement: 06/23/2020

Ground Elevation: 5101

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: 9 Twp: 7N Rng: 67W Footage at TPZ: 940 FNL 460 FWL

Measured Depth of TPZ: 9498 True Vertical Depth of TPZ: 7019 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 10 Twp: 7N Rng: 67W Footage at BPZ: 940 FNL 460 FEL

Measured Depth of BPZ: 18982 True Vertical Depth of BPZ: 7204 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 10 Twp: 7N Rng: 67W Footage at BHL: 940 FNL 460 FEL

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.? No

Per § 34-60-106(1)(f)(I)(A) C.R.S., the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas Location.

SB 19-181 provides 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. § 34-60-106(1)(f)(I)(A) C.R.S.

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

[X] 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: 10/15/2020

Comments: 1041WOGLA20-0076

SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS LOCATION

Surface Owner of the land at this Well's Oil and Gas Location: [X] Fee [] State [] Federal [] Indian

Mineral Owner beneath this Well's Oil and Gas Location: [X] 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):

- [X] 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.)

PLEASE SEE LEASE MAP ON FILE

Total Acres in Described Lease: 2 Described Mineral Lease is: [X] Fee [] State [] Federal [] Indian

Federal or State Lease #

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1015 Feet
 Building Unit: 1015 Feet
 Public Road: 365 Feet
 Above Ground Utility: 335 Feet
 Railroad: 5280 Feet
 Property Line: 358 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.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| CODELL | CODL | 407-3028 | 640 | T7N R67W: Sec.9 & 10: N/2 |

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: 460 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: 258 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 PROGRAMProposed Total Measured Depth: 18982 Feet TVD at Proposed Total Measured Depth 7204 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: 1418 Feet No well belonging to another operator within 1,500 feetWill a closed-loop drilling system be used? YesIs 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? NoWill salt sections be encountered during drilling? NoWill salt based (>15,000 ppm Cl) drilling fluids be used? NoWill oil based drilling fluids be used? YesBOP Equipment Type: Annular Preventor Double Ram Rotating Head None

Beneficial reuse or land application plan submitted? _____

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

| <u>Casing Type</u> | <u>Size of Hole</u> | <u>Size of Casing</u> | <u>Grade</u> | <u>Wt/Ft</u> | <u>Csg/Liner Top</u> | <u>Setting Depth</u> | <u>Sacks Cmt</u> | <u>Cmt Btm</u> | <u>Cmt Top</u> |
|--------------------|---------------------|-----------------------|--------------|--------------|----------------------|----------------------|------------------|----------------|----------------|
| CONDUCTOR | 24 | 16 | NA | 42 | 0 | 80 | 100 | 80 | 0 |
| SURF | 13+1/2 | 9+5/8 | K-55 | 36 | 0 | 1500 | 415 | 1500 | 0 |
| 1ST | 8+1/2 | 5+1/2 | HCP110 | 20 | 0 | 18982 | 2460 | 18982 | 1000 |

 Conductor Casing is NOT planned**POTENTIAL FLOW AND CONFINING FORMATIONS**

| <u>Zone Type</u> | <u>Formation /Hazard</u> | <u>Top M.D.</u> | <u>Top T.V.D.</u> | <u>Bottom M.D.</u> | <u>Bottom T.V.D.</u> | <u>TDS (mg/L)</u> | <u>Data Source</u> | <u>Comment</u> |
|------------------|--------------------------|-----------------|-------------------|--------------------|----------------------|-------------------|--------------------|---|
| Groundwater | Laramie-Fox Hills | 0 | 0 | 139 | 139 | 1001-10000 | Other | CSU - Domestic Water Analysis Report - Larry Moore Well - 176559 |
| Groundwater | Upper Pierre | 300 | 300 | 1314 | 1314 | 1001-10000 | Other | Water Quality and the Presence and Origin of Methane in the Upper Pierre Aquifer in Northeastern Weld County, Morgan County and Logan County, Colorado COGCC Project Number 2141 October 2017 |
| Confining Layer | Pierre Shale | 1314 | 1314 | 4626 | 4100 | | | |
| Hydrocarbon | Sussex | 4626 | 4100 | 5263 | 4449 | | | |
| Hydrocarbon | Shannon | 5263 | 4449 | 5316 | 4478 | | | |
| Confining Layer | Pierre Shale | 5316 | 4478 | 8886 | 6715 | | | |
| Hydrocarbon | Niobrara | 8886 | 6715 | 9313 | 6986 | | | |
| Confining Layer | Fort Hays | 9313 | 6986 | 9402 | 7009 | | | |
| Hydrocarbon | Codell | 9402 | 7009 | 18982 | 7204 | | | Btm MD=TD, Btm TVD=TV D @ BHL |

OPERATOR COMMENTS AND SUBMITTAL

Comments

Distance from completed portion to nearest completed portion of wellbore permitted/completed in the same formation and subject to the proposed spacing order measured to the proposed Blehm 1X-HNB-10-07-67. Distance measured in 3D anti-collision.

Distance to nearest wellbore belonging to another operator measured to the Arkansas 8-67-33-4N (Enerplus, PR, 05-123-449036). There are no other operator wells with treated interval less 175' from the treated interval of the proposed well. Distances measured in 2D map view.

This location has been built and contains 10 wells in PR status. The following changes from the previously approved Form 2 are being made via this refil:

- Offset Well Evaluation: new template attached
- Updated distance to nearest Building and Building Unit

No other changes to this Form 2 are proposed at this time. Attachments have not been provided except as identified above as no changes are proposed.

This application is in a Comprehensive Area Plan _____ CAP #: _____
Oil and Gas Development Plan Name _____ OGDP ID#: _____
Location ID: 478497

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

Signed: _____ Print Name: ERIN LIND

Title: SR REGULATORY ANALYST Date: 11/11/2022 Email: erin.lind@nickelroadoperating.c

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 COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved:  _____ Director of COGCC Date: 3/1/2023

Expiration Date: 02/28/2026

API NUMBER

05 123 51458 00

Conditions Of Approval

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> |
|--------------------------------|---|
| Interim Reclamation | Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017). |
| Construction | If conductors are preset, operator shall comply with Rule 406.e. |
| Drilling/Completion Operations | Per COGCC 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, must contact COGCC 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 COGCC 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 | 1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (Spud Notice), for the first well/activity on the pad and provide 48 hour 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. |
| 4 COAs | |

Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|-----------|--------------------------------|--|
| 1 | Drilling/Completion Operations | Anti-collision: Operator will perform an anti-collision evaluation of all active (producing, shut in, or temporarily abandoned) offset wellbores that have the potential of being within 150 feet of a proposed well prior to drilling operations for the proposed well. Notice shall be given to all offset operators prior to drilling. |
| 2 | Drilling/Completion Operations | Alternative Logging Program: An existing well on the pad was logged with Open Hole Resistivity Log and Gamma Ray Log from the kick-off point to 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 and have those logs attached. The Form 5 for a well without open-hole logs shall clearly state "Alternative Logging Program - No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open-hole logs were run. |
| 3 | Drilling/Completion Operations | Operator acknowledges and will comply with COGCC policy for Bradenhead Monitoring during Hydraulic Fracturing treatments in the Greater Wattenberg Area dated May 29, 2012. |

Total: 3 comment(s)

Attachment List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|----------------------------|
| 403225994 | FORM 2 SUBMITTED |
| 403226025 | OffsetWellEvaluations Data |
| 403333779 | OFFSET WELL EVALUATION |

Total Attach: 3 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|---------------------|
| Permit | Final Review Completed. | 02/27/2023 |
| OGLA | This Location and its associated materials was fully reviewed in the review of this APD. See Sundry doc #403275510 in Location #478497 file for additional information. This APD complies with all COGCC Rules and is adequately protective of public health, safety, welfare, the environment, and wildlife resources. OGLA task passed. | 02/23/2023 |
| OGLA | <p>ON HOLD: This application has been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is placing this form ON HOLD until additional information is received from the applicant.</p> <p>In compliance with § 24-65.1-108(1), C.R.S., the COGCC is providing this written request for all additional information necessary for the COGCC to respond to this application. The applicant may provide all requested additional information to COGCC via email. Upon receipt of all requested information, the COGCC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review. If the applicant no longer requires this application be approved, the applicant may request to withdraw the application.</p> <p>In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for review: 1.) Sundry for the Location with updated Noise, Light, and Dust BMPs to demonstrate compliance with the Rules that are protective of nearby residential building units. Please provide a plan for Sound Monitoring for the Location. Please provide clarification as to whether oil based or water based drilling muds will be utilized, if oil based what group will be utilized.</p> | 01/05/2023 |
| Permit | <p>Made the following changes with concurrence from the operator:</p> <ul style="list-style-type: none"> - Selected NO for sidetrack under Well Name & Contact Info tab. - Revised Unit Configuration box to include Twp & Rng. <p>Permit Review Complete</p> | 12/21/2022 |
| Permit | <p>Emailed Operator for the following:</p> <ul style="list-style-type: none"> - Confirm Sidetrack is NO - Confirm revising Unit Configuration box to include Twp & Rng. - Form 2A distances are greater than reported distances to Building & Building Unit. <p>Advised operator to submit sundry to have Form 2A updated. Notified OGLA.</p> | 12/20/2022 |
| OGLA | The Location and its associated Form 2A materials was fully reviewed during the review of this APD. This APD complies with all COGCC Rules and is adequately protective of public health, safety, welfare, the environment, and wildlife resources. OGLA task passed. | 12/13/2022 |
| Engineer | Offset Wells re-Evaluated with this APD. | 11/14/2022 |

Total: 7 comment(s)