

FORM
2

Rev
12/20

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:

402576221

(SUBMITTED)

Date Received:

APPLICATION FOR PERMIT TO:

☒ Drill ☐ Deepen ☐ Re-enter ☐ Recomplete and Operate

Amend ☐

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: _____

Refill ☒

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: DEHAAN

Well Number: 5X-HNC-16-07-65

Name of Operator: NICKEL ROAD OPERATING LLC

COGCC Operator Number: 10669

Address: 1600 STOUT STREET SUITE 1850

City: DENVER

State: CO

Zip: 80202

Contact Name: JENNIFER LIND

Phone: (303)406-1117

Fax: ()

Email: JENNIFER.LIND@NICKELROADOPERATING.COM

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20200034

WELL LOCATION INFORMATION

Surface Location

QtrQtr: SWSW Sec: 17 Twp: 7N Rng: 65W Meridian: 6

Footage at Surface: 1105 Feet FSL 547 Feet FWL

Latitude: 40.570775 Longitude: -104.694518

GPS Data: GPS Quality Value: 1.5 Type of GPS Quality Value: PDOP

Date of Measurement: 12/07/2017

Ground Elevation: 4907

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: 17 Twp: 7N Rng: 65W

Footage at TPZ: 2006 FSL 460 FWL

Measured Depth of TPZ: 7678

True Vertical Depth of TPZ: 7242

FNL/FSL

FEL/FWL

Base of Productive Zone (BPZ)

Sec: 16 Twp: 7N Rng: 65W

Footage at TPZ: 2005 FSL 460 FEL

Measured Depth of TPZ: 17115

True Vertical Depth of TPZ: 7200

FNL/FSL

FEL/FWL

Bottom Hole Location (BHL)

Sec: 16 Twp: 7N Rng: 65W

Footage at BHL: 2005 FSL 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.? Yes

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? ☒ 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: 02/04/2019

Comments: WOGLA 18-0190

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

Surface Owner of the land at this Well's Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☐ Indian

Mineral Owner beneath this Well's Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☐ Indian

Surface Owner Protection Financial Assurance (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.)

SEE LEASE MAP ATTACHED TO ORIGINAL SUBMITTAL

Total Acres in Described Lease: 52 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 804 Feet
Building Unit: 958 Feet
Public Road: 531 Feet
Above Ground Utility: 556 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.

Railroad: 5280 Feet
Property Line: 114 Feet

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 | 407-2616 | 1280 | Sec.16 & 17: 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: 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: 310 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: 17115 Feet TVD at Proposed Total Measured Depth 7200 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: 150 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 | 24 | 16 | N/A | 42 | 0 | 80 | 100 | 80 | 0 |
| SURF | 13+1/2 | 9+5/8 | K55 | 36 | 0 | 1850 | 550 | 1850 | 0 |
| 1ST | 8+1/2 | 5+1/2 | HCP110 | 20 | 0 | 17115 | 2365 | 17115 | 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 | LARAMIE-FOX HILLS | 484 | 484 | 642 | 642 | 1001-10000 | Other | CSU - Domestic Water Analysis Report - Larry Moore Well - 176559 |
| Groundwater | UPPER PIERRE | 810 | 810 | 1772 | 1772 | 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 | 1772 | 1772 | 4685 | 4630 | | | |
| Hydrocarbon | SUSSEX | 4685 | 4630 | 5255 | 5187 | | | |
| Hydrocarbon | SHANNON | 5255 | 5187 | 5283 | 5216 | | | |
| Confining Layer | PIERRE SHALE | 5283 | 5216 | 7176 | 7037 | | | |
| Hydrocarbon | NIOBRARA | 7176 | 7037 | 17115 | 7200 | | | Btm MD=TD, Btm TVD=TVD @ BHL |

OPERATOR COMMENTS AND SUBMITTAL

Comments This location has not yet been built, associated Form 2A expires on 1/8/2022. The following changes from the previously approved Form 2 are being made via this refile:

- Updated Well Location Plat, Direction Plan and Directional Data per approved change of Location sundry approved 3.12.2019
- Offset Well Evaluation: updated list of wells attached
- Offset well distances: updated to reflect recent activity
- BMPs: Updated to reflect current requirements
- Casing / Cement Program: Setting depth for surface casing and cement top for First String (Production String) Updated

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 Form 2 was originally approved as a Rule 603.a.(2) (Property Line) exception location. Exception location waiver and request letter provided with original submittal.

Distance from completed portion of proposed wellbore to nearest completed portion of wellbore permitted/completed in the same formation and subject to the proposed spacing order measured to the proposed DeHaan 5X-HC-16-07-65. Distance measured in 3D anti-collision.

Distance to nearest wellbore belonging to another operator measured to the East Ault #16-18-19HNA (Bayswater, PR, 05-123-47072). 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 application is in a Comprehensive Area Plan No CAP #: _____
 Oil and Gas Development Plan Name _____ OGDP ID#: _____
 Location ID: 460600

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

Signed: _____ Print Name: JENNIFER LIND

Title: VP REG & ENV

Date:

Email: JENNIFER.LIND@NICKELRO

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:

Expiration Date:

API NUMBER

05 123 49462 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.

COA Type

Description

Best Management Practices

No BMP/COA Type

Description

| | | |
|---|--------------------------------|--|
| 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: One of the first wells drilled on the pad will be 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

Att Doc Num

Name

| | |
|-----------|----------------------------|
| 402583094 | OffsetWellEvaluations Data |
| 402583098 | WELL LOCATION PLAT |
| 402583099 | DEVIATED DRILLING PLAN |
| 402583101 | 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)



Public Comments

No public comments were received on this application during the comment period.

