

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:

402576343

(SUBMITTED)

Date Received:

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: DEHAAN Well Number: 8X-HNB-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: 1109 Feet FNL/FSL FSL 598 Feet FEL/FWL FWL

Latitude: 40.570781 Longitude: -104.694333

GPS Data: GPS Quality Value: 1.4 Type of GPS Quality Value: PDOP Date of Measurement: 12/07/2017

Ground Elevation: 4908

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: 493 FSL 460 FWL

Measured Depth of TPZ: 7674 True Vertical Depth of TPZ: 7210 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 16 Twp: 7N Rng: 65W Footage at TPZ: 499 FSL 0 FEL

Measured Depth of TPZ: 12144 True Vertical Depth of TPZ: 7183 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 16 Twp: 7N Rng: 65W Footage at BHL: 499 FSL 0 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: 02/04/2018

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 ATTACHED LEASE MAP

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: 982 Feet
Public Road: 583 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.

Above Ground Utility: 596 Feet

- Building Unit – as defined in 100 Series Rules.

Railroad: 5280 Feet

Property Line: 110 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: 138 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. 407-2616

SPACING & FORMATIONS COMMENTS

DRILLING PROGRAMProposed Total Measured Depth: 12144 FeetTVD at Proposed Total Measured Depth 7183 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: 165 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 NoneBeneficial 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 | 12144 | 1520 | 12144 | 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 | 811 | 810 | 1780 | 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 | 1780 | 1772 | 4680 | 4647 | | | |
| Hydrocarbon | SUSSEX | 4680 | 4647 | 5241 | 5204 | | | |
| Hydrocarbon | SHANNON | 5241 | 5204 | 5271 | 5233 | | | |
| Confining Layer | PIERRE SHALE | 5271 | 5233 | 7190 | 7054 | | | |
| Hydrocarbon | NIOBRARA | 7190 | 7054 | 12144 | 7184 | | | Btm MD=TD, Btm TVD=TVD @ BHL |

OPERATOR COMMENTS AND SUBMITTAL

Comments

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 |
|--------------------|----------------------------|
| 402583261 | OffsetWellEvaluations Data |
| 402583262 | LEASE MAP |
| 402583263 | WELL LOCATION PLAT |
| 402583264 | DEVIATED DRILLING PLAN |
| 402586805 | EXCEPTION LOC WAIVERS |
| 402586807 | EXCEPTION LOC REQUEST |
| 402586817 | DIRECTIONAL DATA |

Total Attach: 7 Files

General Comments

| User Group | Comment | Comment Date |
|-------------------|----------------|---------------------|
| | | Stamp Upon Approval |

Total: 0 comment(s)

Public Comments

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

