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: 402576257 **(SUBMITTED)**

Date Received:`

APPLICATION FOR PERMIT TO:

[X] **Drill** [ ] Deepen [ ] Re-enter [ ] Recomplete and Operate

Amend [ ] Refile [X] Sidetrack [ ]

TYPE OF WELL OIL [X] GAS [ ] COALBED [ ] OTHER:

ZONE TYPE SINGLE ZONE [X] MULTIPLE ZONES [ ] COMMINGLE ZONES [ ]

Well Name: DEHAAN Well Number: 7X-HC-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: 1085 Feet FSL (FNL/FSL) 606 Feet FWL (FEL/FWL)

Latitude: 40.570715 Longitude: -104.694307

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 [X] Horizontal (highly deviated) [ ] Vertial

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: 1060 FSL (FNL/FSL) 460 FWL (FEL/FWL)

Measured Depth of TPZ: 7788 True Vertical Depth of TPZ: 7348

Base of Productive Zone (BPZ)

Sec: 16 Twp: 7N Rng: 65W Footage at TPZ: 1068 FSL (FNL/FSL) 460 FEL (FEL/FWL)

Measured Depth of TPZ: 17063 True Vertical Depth of TPZ: 7295

Bottom Hole Location (BHL)

Sec: 16 Twp: 7N Rng: 65W Footage at BHL: 1068 FSL (FNL/FSL) 460 FEL (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? [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: 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: [X] Fee [ ] State [ ] Federal [ ] Indian

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

- [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.)

SEE LEASE MAP ATTACHED TO ORIGINAL SUBMITTAL

Total Acres in Described Lease: 52 Described Mineral Lease is: [X] Fee [ ] State [ ] Federal [ ] Indian

Federal or State Lease #

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building:	829	Feet
Building Unit:	963	Feet
Public Road:	590	Feet
Above Ground Utility:	587	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: 134 Feet

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	407-2616	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

[X] 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 PROGRAM

Proposed Total Measured Depth: 17063 Feet TVD at Proposed Total Measured Depth 7295 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 feet

Will a closed-loop drilling system be used? Yes

Is H_2S 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: [X] Annular Preventor [X] Double Ram [X] 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	17063	2350	17063	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	643	642	1001-10000	Other	CSU - Domestic Water Analysis Report - Larry Moore Well - 176559
Groundwater	UPPER PIERRE	812	810	1779	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	1779	1772	4653	4634			
Hydrocarbon	SUSSEX	4653	4634	5212	5191			
Hydrocarbon	SHANNON	5212	5191	5241	5220			
Confining Layer	PIERRE SHALE	5241	5220	7094	7041			
Hydrocarbon	NIOBRARA	7094	7041	7584	7319			
Confining Layer	FORT HAYS	7584	7319	7700	7343			
Hydrocarbon	CODELL	7700	7343	17063	7295			Btm MD=TD, Btm TVD=TVD @ BHL, since well is drilled with inclination > 90 deg, BHL TVD is shallower than Top Niobrara TVD

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:
- 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) and an Order 407-2616 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 7X-HNB-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 49461 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
402583223	OffsetWellEvaluations Data

Total Attach: 1 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.