

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:

402576018

Date Received:

01/29/2021

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: 1X-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: NWNW Sec: 17 Twp: 7N Rng: 65W Meridian: 6
Footage at Surface: 1230 Feet FNL 865 Feet FWL
Latitude: 40.578843 Longitude: -104.693317
GPS Data: GPS Quality Value: 1.9 Type of GPS Quality Value: PDOP Date of Measurement: 12/07/2017
Ground Elevation: 4894
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: 772 FNL 460 FWL
Measured Depth of TPZ: 7831 True Vertical Depth of TPZ: 7346 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 16 Twp: 7N Rng: 65W Footage at TPZ: 738 FNL 460 FEL
Measured Depth of TPZ: 17178 True Vertical Depth of TPZ: 7296 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 16 Twp: 7N Rng: 65W Footage at BHL: 768 FNL 460 FEL
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: WELDMunicipality: 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: 08/20/2019

Comments: WOGLA 19-0052

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.)

PLEASE SEE ATTACHED LEASE MAP

Total Acres in Described Lease: 245 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 696 Feet
Building Unit: 884 Feet
Public Road: 5280 Feet
Above Ground Utility: 578 Feet
Railroad: 5280 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.

Property Line: 148 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

☒ 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: 17178 Feet

TVD at Proposed Total Measured Depth 7296 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 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	17178	2300	17178	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	485	484	645	642	1001-10000	Other	CSU - Domestic Water Analysis Report - Larry Moore Well - 176559
Groundwater	UPPER PIERRE	815	810	1789	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	1789	1772	4681	4632			
Hydrocarbon	SUSSEX	4681	4632	5244	5189			
Hydrocarbon	SHANNON	5244	5189	5273	5218			
Confining Layer	PIERRE SHALE	5273	5218	7140	7039			
Hydrocarbon	NIOBRARA	7140	7039	7636	7317			
Confining Layer	FORT HAYS	7636	7317	7758	7341			
Hydrocarbon	CODELL	7758	7341	17178	7296			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 been built and contains 2 wells in DG status with intent to drill to TD and complete in Q1 2021. The following changes from the previously approved Form 2 are being made via this refile:

- Updated lease information on 'Surface & Minerals' tab
- Updated lease map attached
- 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 1X-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 _____ OGDID ID#: _____

Location ID: 460556

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: 1/29/2021 Email: JENNIFER.LIND@NICKELRO

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: 4/15/2021

Expiration Date: 04/14/2024

API NUMBER

05 123 49439 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.

Condition of Approval**COA Type****Description**

	IN PROCESS – received requested information from Operator on 02/25/2021; COGCC review will resume and be conducted within 60 days (4/7/2021).
Drilling/Completion Operations	Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).
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 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.

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: 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)

Applicable Policies and Notices to Operators

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.
<http://cogcc.state.co.us/documents/reg/Policies/PolicyGwaBradenheadMonitoringFinal.pdf>

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402576018	FORM 2 SUBMITTED
402582793	OffsetWellEvaluations Data
402582833	LEASE MAP
402660591	OFFSET WELL EVALUATION

Total Attach: 4 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	This APD on the Nickel Road Operating Dehann North Location (ID 460556) has been reviewed as part of the Location. Sundry doc no 402611062 provided additional information and Best Management Practices for the Location. An OGLA Technical Review Summary reviewing the Location in relation to these APDs is attached to the Sundry as Doc No 2316689. This APD complies with all COGCC Rules and is adequately protective of public health, safety, welfare, the environment, and wildlife resources. OGLA task passed.	04/12/2021
OGLA	<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:</p> <ol style="list-style-type: none"> 1. Dust: BMP should include dust control along the access road as well as on location. Consider dust from wind, vehicle disturbance, and drilling or completions operations. 2. Lighting: BMP should consider lighting through all phases of construction, drilling, completions, and regular production operations. 3. Noise: BMP should consider the direction of individuals impacted, hours of operations, types of equipment and noise generated during construction, drilling, completions, and production. 4. Odor: BMP should include the type of OBM to be used, cuttings and fluid management, odors from tanks, loading from tanks to trucks, engines, or any other source of odors. 5. Request information on Air Monitoring 6. Request local government information and information regarding an Emergency Response Plan for the location per Rule 602.j. 7. Confirm communication Nickel Road has had with residential Building Unit residents within 2,000 feet of the Location. Please provide information on how Nickel Road plans to meet Rule 412.b. <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. First information requests on 2/25 and 3/19.</p>	03/24/2021
Permit	Final Review Completed.	03/01/2021
OGLA	COGCC staff has reviewed the Location post SB19-181 and the rule making. Staff has requested a Form 4 Sundry for the Location for dust, light, noise, odor BMPs. Request information for air monitoring, local government interactions and emergency response plan and communication with building unit residents within 2,000 feet.	02/25/2021
Permit	Permitting Review Complete.	02/08/2021
Engineer	Offset Wells Evaluated	02/03/2021

Total: 6 comment(s)