

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:

402576176

Date Received:

01/29/2021

APPLICATION FOR PERMIT TO:

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

Amend ☐

Refile ☒

Sidetrack ☐

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

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Well Name: DEHAAN Well Number: 5X-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: 1082 Feet FSL 554 Feet FWL
Latitude: 40.570709 Longitude: -104.694493
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: 2260 FSL 460 FWL
Measured Depth of TPZ: 7856 True Vertical Depth of TPZ: 7363 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 16 Twp: 7N Rng: 65W Footage at BPZ: 2259 FSL 460 FEL
Measured Depth of BPZ: 17294 True Vertical Depth of BPZ: 7320 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 16 Twp: 7N Rng: 65W Footage at BHL: 2259 FSL 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: 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: 828 Feet
Building Unit: 939 Feet
Public Road: 539 Feet
Above Ground Utility: 545 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: 138 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: 163 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: 17294 Feet

TVD at Proposed Total Measured Depth 7320 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

<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	N/A	42	0	80	100	80	0
SURF	13+1/2	9+5/8	K55	36	0	1850	500	1850	0
1ST	8+1/2	5+1/2	HCP110	20	0	17294	2365	17294	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	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	4726	4649			
Hydrocarbon	SUSSEX	4726	4649	5301	5206			
Hydrocarbon	SHANNON	5301	5206	5333	5235			
Confining Layer	PIERRE SHALE	5333	5235	7219	7056			
Hydrocarbon	NIOBRARA	7219	7056	7658	7334			
Confining Layer	FORT HAYS	7658	7334	7797	7358			
Hydrocarbon	CODELL	7797	7358	17294	7320			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	<p>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:</p> <ul style="list-style-type: none"> - Updated Well Location Plat, Directional 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 <p>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.</p> <p>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.</p> <p>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-HNB-16-07-65. Distance measured in 3D anti-collision.</p> <p>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.</p>
----------	--

This application is in a Comprehensive Area Plan No CAP #:

Oil and Gas Development Plan Name _____ OGD 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: 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: 6/3/2021

Expiration Date: 06/02/2024

API NUMBER

05 123 49459 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**

Drilling/Completion Operations	If location is not built by 2A expiration 1/08/22, Operator must Refile Form 2A for approval prior to location construction.
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.

3 COAs

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)

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

Att Doc Num	Name
402576176	FORM 2 SUBMITTED
402583054	OffsetWellEvaluations Data
402583055	WELL LOCATION PLAT
402583056	DEVIATED DRILLING PLAN
402583057	DIRECTIONAL DATA
402707997	OFFSET WELL EVALUATION

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	Operator submitted Sundry Notice Form 4 (Doc# 402623875) to supply additional information and update BMPs for the Location (Location ID 460600). Following additional analysis, the Director determined that this application meets the standard for the protection of public health, safety, and welfare and the environment, including wildlife resources set by SB 19-181. The OGLA Technical Review Memo (Doc# 1347851) can be found in the document file for Location ID 460600.	06/03/2021
OGLA	IN PROCESS - received requested information from Operator on 4/7/2021; COGCC review will resume and be conducted within 60 days (by 6/6/2021).	04/16/2021
OGLA	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. In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for review: 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. 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	03/24/2021
OGLA	Location was considered by staff post SB-181 and rulemaking. Staff requested a Form 4 to address dust, lighting, noise, and odor. Staff also requested information on Emergency Response Plan, communication with Residential Building Units, and if any air monitoring is planned for the location.	03/09/2021
Permit	Final Review Completed.	03/01/2021
Permit	Permitting Review Complete.	02/17/2021
Engineer	Offset Wells Evaluated	02/03/2021

Total: 7 comment(s)