

FORM

2

Rev  
05/22

## State of Colorado

## Energy &amp; Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number:

403708599

(SUBMITTED)

Date Received:

03/19/2024

## APPLICATION FOR PERMIT TO

☒ Drill ☐ Deepen ☐ Re-enter ☐ Recomplete and OperateAmend ☐TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: \_\_\_\_\_Refile ☒ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: Rusch

Well Number: 1W4NBM

Name of Operator: NICKEL ROAD OPERATING LLC

COGCC Operator Number: 10669

Address: 3773 CHERRY CRK NORTH DR #670

City: DENVER

State: CO

Zip: 80209

Contact Name: ERIN LIND

Phone: (303)2267375

Fax: ( )

Email: erin.lind@nickelroadoperating.com

## FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

## COGCC Financial Assurance

☒ The Operator has provided or will provide Financial Assurance to the COGCC for this Well.

Surety ID Number (if applicable): 20230163

## Federal Financial Assurance

☐ In checking this box, the Operator certifies that it has provided or will provide at least this amount of Financial Assurance to the federal government for this Well. (Per Rule702.a.)

Amount of Federal Financial Assurance \$ \_\_\_\_\_

## WELL LOCATION INFORMATION

## Surface Location

QtrQtr: NESE Sec: 3 Twp: 7N Rng: 65W Meridian: 6

FNL/FSL

FEL/FWL

Footage at Surface: 1765 Feet FSL 594 Feet FEL

Latitude: 40.600383

Longitude: -104.641461

GPS Data: GPS Quality Value: 1.4 Type of GPS Quality Value: PDOP

Date of Measurement: 11/07/2017

Ground Elevation: 4886

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: 3 Twp: 7N Rng: 65W

Footage at TPZ: 460 FNL 460 FEL

Measured Depth of TPZ: 8546

True Vertical Depth of TPZ: 7108

FNL/FSL

FEL/FWL

**Base of Productive Zone (BPZ)**Sec: 4 Twp: 7N Rng: 65WFootage at BPZ: 460 FNL 460 FWLMeasured Depth of BPZ: 18166True Vertical Depth of BPZ: 7155 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 4 Twp: 7N Rng: 65WFootage at BHL: 460 FNL 150 FWL

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: 09/17/2020

Comments: 1041WOGLA20-0055

**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 Bond (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 ON FILE

Total Acres in Described Lease: 134

Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # \_\_\_\_\_

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 845 Feet  
Building Unit: 876 Feet  
Public Road: 588 Feet  
Above Ground Utility: 565 Feet  
Railroad: 5280 Feet  
Property Line: 594 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.

## 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	407-2931	1280	T7N R65W SEC.3&4: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: 173 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: 18476 FeetTVD at Proposed Total Measured Depth 7156 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: 620 Feet ☐ No well belonging to another operator within 1,500 feetWill a closed-loop drilling system be used? YesIs H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater thanor equal to 100 ppm? No If yes, attach an H<sub>2</sub>S 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	26	16	A52A	36.94	0	40	170	40	0
SURF	13+1/2	9+5/8	J55	36	0	1825	805	1825	0
1ST	8+1/2	5+1/2	EPP110	20	0	18476	2928	18476	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	FOX HILLS SANDSTONE	0	0	360	360	1001-10000	DWR	
Confining Layer	PIERRE SHALE	360	360	1230	1230			
Groundwater	UPIR/PAWNEE AQUIFER	1230	1230	1700	1700	1001-10000	Other	COGCC UPWQ STUDY
Confining Layer	PIERRE SHALE	1700	1700	3938	3938			
Hydrocarbon	PARKMAN	3938	3938	4095	4095			
Confining Layer	PIERRE SHALE	4095	4095	4450	4450			
Hydrocarbon	SUSSEX	4450	4450	4720	4720			
Confining Layer	PIERRE SHALE	4720	4720	5211	5211			
Hydrocarbon	SHANNON	5211	5211	5365	5365			
Confining Layer	PIERRE SHALE	5365	5365	7767	6956			
Subsurface Hazard	SHARON SPRINGS SHALE	7767	6956	7817	6985			LEAST COMPETENT SHALES
Hydrocarbon	NIOBRARA	7817	6958	18476	7156			NIOBRARA TARGET

**OPERATOR COMMENTS AND SUBMITTAL**

Comments



The following changes from the previously approved Form 2 are being made:

- Well name and number
- TPZ, BPZ & BHL footages
- Nearest well in DSU and offset well distances
- Casing / Cementing program
- PFZ Table data
- Revised Well Location Plat, Deviated Drilling Plan, Directional Data Template and Offset Well Evaluation are attached

Distance from completed portion to nearest completed portion of wellbore permitted/completed in the same formation and subject to the proposed spacing order measured to the proposed Rusch 2W4CM (123-51558). Distance measured in 3D anti-collision.

Distance to nearest wellbore belonging to another operator measured to the TOPAZ EAST 12 (BAYSWATER / 05-123-51537 / PR). There are no other operator wells with a treated interval less 175' from the treated interval of the proposed well. Distance measured in 2D map view.

This well has a bottom hole location beyond the unit boundary setback. The bottom of the completed interval will be within the unit boundary setback at 460' FNL and 460' FWL of Section 4. The wellbore beyond the unit boundary setback will be physically isolated and will not be completed.

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

Oil and Gas Development Plan Name \_\_\_\_\_ OGDID #: \_\_\_\_\_

Location ID: 479158

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

Signed: \_\_\_\_\_ Print Name: ERIN LIND

Title: REG & ENV MANAGER Date: 3/19/2024 Email: erin.lind@nickelroadoperating.c

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 51559 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**

0 COA	
-------	--

## 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 with gamma-ray log from the kick-off point 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 state "Alternative Logging Program - No open-hole logs were run", and shall clearly identify the type of log and the well (by API#) 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

<u>Att Doc Num</u>	<u>Name</u>
403708621	OffsetWellEvaluations Data
403709659	DIRECTIONAL DATA
403709661	DEVIATED DRILLING PLAN
403717272	WELL LOCATION PLAT

Total Attach: 4 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)