

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:

402081102

Date Received:

10/25/2019

## APPLICATION FOR PERMIT TO:

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

Well Name: REEMAN

Well Number: 3X-HNC-04-06-65

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: SWNW Sec: 5 Twp: 6N Rng: 65W Meridian: 6

Footage at Surface: 2066 Feet FNL/FSL FNL 1454 Feet FEL/FWL FWL

Latitude: 40.518460 Longitude: -104.691617

GPS Data: GPS Quality Value: 1.8 Type of GPS Quality Value: PDOP Date of Measurement: 10/06/2020

Ground Elevation: 4816

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: 5 Twp: 6N Rng: 65W Footage at TPZ: 1996 FNL 460 FWL  
 Measured Depth of TPZ: 7575 True Vertical Depth of TPZ: 7124 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

 Sec: 4 Twp: 6N Rng: 65W Footage at TPZ: 2086 FNL 2194 FWL  
 Measured Depth of TPZ: 14597 True Vertical Depth of TPZ: 7089 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

 Sec: 4 Twp: 6N Rng: 65W Footage at BHL: 2086 FNL 2194 FWL  
 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: 12/10/2020

Comments: 1041WOGLA20-0082

## 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.)

T6N-R65W-SEC.5: NESW, W/2 SE

Total Acres in Described Lease: 120 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

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

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 907 Feet  
Building Unit: 1464 Feet  
Public Road: 1445 Feet  
Above Ground Utility: 946 Feet  
Railroad: 3452 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: 247 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	407-2923	960	S.4: W/2, S.5: 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: 197 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: 14597 Feet

TVD at Proposed Total Measured Depth 7089 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: 10 Feet ☐ No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or 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? 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	1700	475	1700	0
1ST	8+1/2	5+1/2	HCP110	20	0	14597	1900	14597	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	56	56	404	404	1001-10000	Other	CSU - Domestic Water Analysis Report - Larry Moore Well - 176559
Groundwater	Upper Pierre	641	641	1608	1608	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	1608	1608	4621	4498			
Hydrocarbon	Sussex	4621	4498	5182	5034			
Hydrocarbon	Shannon	5182	5034	5216	5063			
Confining Layer	Pierre Shale	5216	5063	7575	6926			
Hydrocarbon	Niobrara	7575	7124	14597	7089			Btm MD=TD, Btm TVD=TVD @ BHL

**OPERATOR COMMENTS AND SUBMITTAL**

Comments	<p>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 Reeman 3X-HNB-04-06-65. Distance measured in 3D anti-collision.</p> <p>Distance to nearest wellbore belonging to another operator measured to the REEMAN 12-5 (PDC / PA / 05-123-24233). Other operator wells with treated interval less 175' from the treated interval of the proposed well:  GIES E 5-6 (Noble / PA / 05-123-12936) at 95'  YETTER 2 (Patina / PA / 05-123-12072) at 62'  ROTHER-WINTER 1 (High Point / PA / 05-123-12705) at 85'  Distances measured in 2D map view.</p> <p>Please note, the portion of the proposed wellbore within 150' of the offset operator well will not be completed.</p>
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This application is in a Comprehensive Area Plan           No           CAP #:                                   
Oil and Gas Development Plan Name    OGDID #:                                   
Location ID: 478973

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: 10/25/2019 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 place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

COGCC Approved: \_\_\_\_\_

Director of COGCC

Date: 2/24/2021

Expiration Date: 02/23/2024

**API NUMBER**

05 123 51504 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**

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	Operator acknowledges the proximity of the following non-operated listed wells: Operator agrees to: provide mitigation option 1 or 2 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OFFSET MITIGATION COMPLETED") for the remediated wells, referencing the API number of the proposed horizontal well(s) stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.  Johnson 11A-4 (API NO 123-14135)Gies E 5-3 (API NO 123-17829) Ottoson 32-16 (API NO 123-17119)
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.

## Best Management Practices

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	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.
2	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.
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

Notice Concerning Operating Requirements for Wildlife Protection.  
[http://cogcc.state.co.us/documents/reg/Policies/Wildlife\\_Notice.pdf](http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf)

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

<b>Att Doc Num</b>	<b>Name</b>
402081102	APD APPROVED
402220799	FORM 2 REJECTED
402564433	WELL LOCATION PLAT
402564435	DIRECTIONAL DATA
402590741	OffsetWellEvaluations Data
402590746	DEVIATED DRILLING PLAN
402609744	OFFSET WELL EVALUATION
402609782	FORM 2 RESUBMITTED
402609832	PUBLIC COMMENT-0

Total Attach: 9 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	02/23/2021
OGLA	This Location and its associated Form 2A materials was fully reviewed during the OGLA review of this APD in accordance with current Rules. See Form 4 #402591392 (revised Multi-Well Plan) and Form 4 #402600457 (revised Location Drawing and updated distances from wells and production facilities to cultural features) in the Reeman Pad Location ID #478973 file for additional information. This APD complies with all COGCC Rules and is adequately protective of public health, safety, welfare, the environment, and wildlife resources. Passed the OGLA task.	02/23/2021
Permit	The Measured Depth and True Vertical Depth of the TPZ were corrected with operator concurrence.	02/11/2021
Permit	This Form 2 was resubmitted into IN PROCESS on 2/3/2021.	02/11/2021
Permit	Returned to draft: Cannot pass completeness until 2A is approved. Will need WOGLA # and Location ID from approved 2A when resubmitted.	04/22/2020
Permit	Returned to draft: 1)The Surface Owner is committed to an Oil and Gas Lease box shouldn't be checked. 2)The Surface Owner has signed the Oil and Gas Lease box shouldn't be checked.	10/28/2019
Permit (Rejected)	This APD has been rejected per the COGCC Rejection Process (updated May 21, 2019). The Right to Construct is incorrect. The minerals given are not under the surface and the Surface Use Agreement description is unclear and requires a map on this APD and on 31 other APDs on the pad. This entire form was not reviewed by permitting staff.	10/24/2019
Permit	Entered the Local Government Information provided by the operator.	07/22/2019
Engineer	Offset Wells Evaluated	07/16/2019
Permit	Passed Completeness.	07/09/2019

Total: 10 comment(s)