

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:
402081081
Date Received:
10/25/2019

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: REEMAN Well Number: 1X-HNB-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: 1965 Feet FNL/FSL 1430 Feet FEL/FWL
Latitude: 40.518741 Longitude: -104.691700
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: 670 FNL 460 FWL
Measured Depth of TPZ: 7672 True Vertical Depth of TPZ: 7061 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 4 Twp: 6N Rng: 65W Footage at TPZ: 759 FNL 2192 FWL
Measured Depth of TPZ: 14698 True Vertical Depth of TPZ: 7021 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 4 Twp: 6N Rng: 65W Footage at BHL: 759 FNL 2192 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: 1402 Feet
 Public Road: 1422 Feet
 Above Ground Utility: 841 Feet
 Railroad: 3459 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: 246 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: 201 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: 14698 Feet TVD at Proposed Total Measured Depth 7021 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: 71 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	1700	475	1700	0
1ST	8+1/2	5+1/2	HCP110	20	0	14698	1920	14698	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	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	4698	4504			
Hydrocarbon	Sussex	4698	4504	5282	5040			
Hydrocarbon	Shannon	5282	5040	5317	5069			
Confining Layer	Pierre Shale	5317	5069	7672	6932			
Hydrocarbon	Niobrara	7672	7061	14698	7021			Btm MD=TD, Btm TVD=TVD @ BHL

OPERATOR COMMENTS AND SUBMITTAL

Comments

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 1X-HNC-04-06-65. Distance measured in 3D anti-collision.

Distance to nearest wellbore belonging to another operator measured to the JOHNSON 11-4 (Lyco / DA / 05-123-14084). Other operator wells with treated interval less 175' from the treated interval of the proposed well: JOHNSON 11A-4 (PDC / SI / 05-123-14135) at 86' Distances measured in 2D map view.

Please note, the portion of the proposed wellbore within 150' of the offset operator well will not be completed.

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 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: 2/24/2021

Expiration Date: 02/23/2024

API NUMBER

05 123 51526 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	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.
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)

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

Notice Concerning Operating Requirements for Wildlife Protection.
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

Att Doc Num	Name
402081081	APD APPROVED
402220761	FORM 2 REJECTED
402555800	DEVIATED DRILLING PLAN
402555801	WELL LOCATION PLAT
402590567	OffsetWellEvaluations Data
402590572	DIRECTIONAL DATA
402609770	OFFSET WELL EVALUATION
402609773	FORM 2 RESUBMITTED
402609812	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)