

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:  
402495399

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: \_\_\_\_\_  
Refiling ☒  
ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐ Sidetrack ☐

Date Received:  
09/24/2020

Well Name: Tatanka Federal Well Number: LD13-660  
Name of Operator: NOBLE ENERGY INC COGCC Operator Number: 100322  
Address: 1001 NOBLE ENERGY WAY  
City: HOUSTON State: TX Zip: 77070  
Contact Name: Craig Richardson Phone: (303)228-4232 Fax: ( )  
Email: Denverregulatory@nbleenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: SENE Sec: 15 Twp: 9N Rng: 58W Meridian: 6  
Latitude: 40.754670 Longitude: -103.841940  
Footage at Surface: 1467 Feet FNL/FSL FNL 335 Feet FEL/FWL FEL  
Field Name: DJ HORIZONTAL NIOBRARA Field Number: 16950  
Ground Elevation: 4678 County: WELD  
GPS Data: GPS Quality Value: 1.3 Type of GPS Quality Value: PDOP Date of Measurement: 10/20/2016  
Instrument Operator's Name: AARON RIVERA  
If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.  
Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL  
1860 FNL 200 FWL 1860 FNL 140 FEL  
Sec: 14 Twp: 9N Rng: 58W Sec: 13 Twp: 9N Rng: 58W

LOCAL GOVERNMENT INFORMATION

County: WELD Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: County

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this location? If the local government does regulate the siting, but has waived its right to precede the COGCC in siting determination, indicate by selecting "YES" here and selecting "Waived" for the disposition below. ☒ 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 local government siting permit type is: WOGLA

The local government siting permit was filed on: 10/22/2018

The disposition of the application filed with the local government is: Approved

Additional explanation of local process:

WOGLA18-0149 approved on 11/26/2018.

## LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Surface Owner is: ☐ is the mineral owner beneath the location.

(check all that apply)

☐ is committed to an Oil and Gas Lease.

☐ has signed the Oil and Gas Lease.

☐ is the applicant.

The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed by this Well: No

The right to construct the Oil and Gas Location is granted by: Surface Use Agreement

Surface damage assurance if no agreement is in place: \_\_\_\_\_ Surface Surety ID: \_\_\_\_\_

## LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

S2SE4 of Section 13, NWSW of Section 14, SWNW of Section 15, E2SE4 of Section 23, and E2SW, SE of Section 24, T9N-R58W, 6th P.M.

The completed portion of the wellbore does not penetrate the described lease but the lease is within the unit.

Total Acres in Described Lease: 480 Described Mineral Lease is: ☐ Fee ☐ State ☒ Federal ☐ Indian

Federal or State Lease # COC76993

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 3839 Feet

Building Unit: 4210 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 4296 Feet

Above Ground Utility: 323 Feet

Railroad: 5280 Feet

Property Line: 335 Feet

School Facility: 5280 Feet

School Property Line: 5280 Feet

Child Care Center: 5280 Feet

### INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).
- 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, High Occupancy Building Unit, Designated Outside Activity Area, School Facility, and Child Care Center – as defined in 100 Series Rules.

## DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: ☐ Buffer Zone  
☐ Exception Zone  
☐ Urban Mitigation Area

- Buffer Zone – as described in Rule 604.a.(2), within 1,000' of a Building Unit  
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.  
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: \_\_\_\_\_

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: \_\_\_\_\_

## SPACING and UNIT INFORMATION

Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 620 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 200 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

## SPACING & FORMATIONS COMMENTS

If this Form 2 is associated with a Drilling and Spacing Unit application, provide docket number: \_\_\_\_\_

## OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
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NIOBRARA	NBRR	535-911	1280	Sec 13&14ALL 9N58W
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## DRILLING PROGRAM

Proposed Total Measured Depth: 16174 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: 107 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 Operations Plan)

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

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: \_\_\_\_\_ or Document Number: \_\_\_\_\_

## CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	26	16	42	0	80	6	80	0
SURF	13+1/2	9+5/8	36	0	1850	658	1850	0
1ST	8+1/2	5+1/2	17	0	16174	1729	16174	2500

☐ Conductor Casing is NOT planned

## DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- ☐ Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- ☐ Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- ☐ Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- ☐ Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

## GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 318A.a. Exception Location (GWA Windows).
- ☐ Rule 318A.c. Exception Location (GWA Twinning).

## RULE 502.b VARIANCE REQUEST

☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number \_\_\_\_\_

## OTHER LOCATION EXCEPTIONS

Check all that apply:

☐ Rule 318.c. Exception Location from Rule or Spacing Order Number \_\_\_\_\_

☐ Rule 603.a.(2) Exception Location (Property Line Setback).

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

## OPERATOR COMMENTS AND SUBMITTAL

Comments

Permit is being refiled due to expiration. No changes have been made from the previously approved Form 2. This pad has not been built and has a valid Form 2A.

Nearest well in the same formation is the proposed Tatanka Federal LD13-650 (API # 123-49499), Operated by Noble Energy. The distance was calculated in 2D.

Nearest well belonging to another operator is the BRADY #1 (API # 123-05666), operated by NEBRASKA DRILLERS INC. The distance was calculated in 3D using the Anti-collision summary. The status is (DA) 317.s is not required.

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 360' FSL and 200' FEL of Section 13. The wellbore beyond the unit boundary setback will be physically isolated and will not be completed.

This application is in a Comprehensive Drilling Plan \_\_\_\_\_ No \_\_\_\_\_ CDP #: \_\_\_\_\_

Location ID: 460646

Is this application being submitted with an Oil and Gas Location Assessment application? \_\_\_\_\_ No \_\_\_\_\_

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

Signed: \_\_\_\_\_ Print Name: Julie Webb

Title: Sr. Regulatory Analyst Date: 9/24/2020 Email: julie.webb@nblenergy.com

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: 12/30/2020

Expiration Date: 12/29/2022

### API NUMBER

05 123 49498 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.**

<u>COA Type</u>	<u>Description</u>
Drilling/Completion Operations	<p>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:</p> <ol style="list-style-type: none"> <li>1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation.</li> <li>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.</li> <li>3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance.</li> </ol>
Drilling/Completion Operations	<ol style="list-style-type: none"> <li>1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (Spud Notice), for the first well/activity on the pad and provide 48 hour spud notice for all subsequent wells drilled on the pad.</li> <li>2) Comply with Rule 317.j and provide cement coverage from the end of production casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log.</li> <li>3) Oil-based drilling fluid is to be used only after all aquifers are covered.</li> </ol>
Drilling/Completion Operations	<p>Operator acknowledges the proximity of the listed non-producing well(s). Operator agrees to provide mitigation Option 3 (per the DJ Basin Horizontal Offset Policy, ensure all applicable documentation is submitted , and submit Form 42(s) "OFFSET MITIGATION COMPLETED" for the remediated well(s), referencing the API Number of the proposed horizontal wells stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of the proposed wells.</p> <p>Brandy 1 (API NO 123-05666)Zimith 1 (API NO 123-05659)  Nay 1 (API NO 123-05660)Raugh G (API NO 123-05661)  Alice Nay 1 (API NO 123-07067)Alice Nay 1 (API NO 123-05654)  Alice Nay 2 (API NO 123-05652)Alice Nay 1 (API NO 123-05651)  McDermott 1-14 (API NO 123-12137)Alice G Nay 1 (API NO 123-08285)  Ingram 1 (API NO 123-05639)Hensley A-1 (API NO 123-11085)</p>
Construction	If location is not constructed by 2A expiration 1/11/2022, a refile Form 2A must be approved prior to location construction.
Drilling/Completion Operations	Operator will ensure the wellbore beyond the unit boundary setback is physically isolated and is not completed. In the Operator Comments on the Form 5A the operator will (1) report the footages from the section lines of the bottom of the completed interval (2) describe how the wellbore beyond the unit boundary setback is physically isolated and (3) certify that none of the wellbore beyond the setback was completed.

## **Best Management Practices**

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Drilling/Completion Operations	Anti-collision: Prior to drilling operations, Operator will perform an anti-collision scan of existing offset wells that have the potential of being within close proximity of the proposed well. This anti-collision scan will include definitive MWD or gyro surveys of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed wellpath with its respective error of uncertainty. If current surveys do not exist for the offset wells, Operator may have gyro surveys conducted to verify bottomhole location. The proposed well will only be drilled if the anti-collision scan results indicate that there is not a risk for collision, or harm to people or the environment. For the proposed well, upon conclusion of drilling operations, an as constructed gyro survey will be submitted to COGCC with the Form 5.
2	Drilling/Completion Operations	During and Post stimulation: Operator will comply with the COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated 5/29/12
3	Drilling/Completion Operations	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.

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>
402495399	FORM 2 SUBMITTED
402496738	OffsetWellEvaluations Data
402564093	OFFSET WELL EVALUATION

Total Attach: 3 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	12/04/2020
Permit	Permitting review complete.	12/04/2020
Permit	Following additional analysis arising out of the Objective Criteria, 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 Objective Criteria Review Memo (Doc# 1348002) can be found in the document file for Location ID 460646.	12/04/2020
OGLA	IN PROCESS comment - Received requested information from operator on 11/18/2020. COGCC review will resume and be conducted within 60 days (by 1/17/2021).	11/19/2020
OGLA	<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. 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> <p>1. This Form 2 application meets one or more Objective Criteria. The applicant must address the Objective Criteria on a Form 4 Sundry Notice submitted to the related Location ID (Loc ID# 460646). The Form 4 shall include updated Best Management Practices to address the following:</p> <p>a. Pertaining to Objective Criteria #5c &amp; #8: Provide a tank berm BMP for any berm and liner planned to be used for the tank area.</p> <p>b. Pertaining to Objective Criteria #5c &amp; #8: Provide a BMP for any berm and liner containment surrounding the separators.</p> <p>c. Pertaining to Objective Criteria #5c &amp; #8: Provide a BMP for any berm, liner, or any secondary containment surrounding the temporary frac tanks planned for this location.</p> <p>d. Pertaining to Objective Criteria #5c &amp; #8: Provide a BMP for any liner or extra containment to be used with the buried produced water vaults.</p> <p>e. Pertaining to Objective Criteria #5c &amp; #8: Provide a BMP for any liner planned for use under the drilling rig.</p> <p>f. Pertaining to Objective Criteria #5c &amp; #8: Provide a BMP for remote monitoring/shut-in capabilities at the location.</p> <p>2. The following informational questions relating to the Objective Criteria Review must also be answered, but may be answered in indirect response to this email, rather than via the above mentioned Form 4 Sundry:</p> <p>a. Pertaining to Objective Criteria #8: Is there an Emergency Response Plan in place for this location? If so, with which local Emergency Responders? Please add this information to the "Submit" tab comment box for any Sundry submitted to update location BMPs.</p> <p>b. Pertaining to Objective Criteria #8: what are the planned volumes for the four oil tanks, four water tanks, two buried produced water vaults, and 20 temporary frac tanks.</p> <p>c. Pertaining to Objective Criteria #8: Provide an estimate for how long the 20 temporary frac tanks will be on location.</p>	11/18/2020
Engineer	Offset Wells Evaluated	10/19/2020
Permit	Passed Completeness.	10/07/2020
Permit	Right to Construct information does not match previously approved APD. Return to draft.	10/01/2020

Total: 8 comment(s)