

FORM  
2  
Rev  
08/16

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:  
401050082

APPLICATION FOR PERMIT TO:

Drill       Deepen       Re-enter       Recomplete and Operate

Date Received:  
08/04/2016

TYPE OF WELL    OIL     GAS     COALBED     OTHER \_\_\_\_\_  
ZONE TYPE      SINGLE ZONE     MULTIPLE ZONES     COMMINGLE ZONES

Refiling   
Sidetrack

Well Name: Bona State      Well Number: N35-620  
Name of Operator: NOBLE ENERGY INC      COGCC Operator Number: 100322  
Address: 1625 BROADWAY STE 2200  
City: DENVER      State: CO      Zip: 80202  
Contact Name: Susan Miller      Phone: (303)228-4246      Fax: ( )  
Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: SESE      Sec: 36      Twp: 5N      Rng: 67W      Meridian: 6  
Latitude: 40.350470      Longitude: -104.832900

Footage at Surface: 605 Feet      FNL/FSL      FSL      255 Feet      FEL/FWL      FEL

Field Name: WATTENBERG      Field Number: 90750  
Ground Elevation: 4825      County: WELD

GPS Data:  
Date of Measurement: 03/29/2016      PDOP Reading: 1.6      Instrument Operator's Name: Brian Rottinghaus

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  
660      FSL      460      FEL      660      FSL      535      FWL  
Sec: 36      Twp: 5N      Rng: 67W      Sec: 35      Twp: 5N      Rng: 67W

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: Yes

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.)

5N-67W Sec 36: All

Total Acres in Described Lease: 640 Described Mineral Lease is:  Fee  State  Federal  Indian

Federal or State Lease # OG 81/6923-S

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

**CULTURAL DISTANCE INFORMATION**

Distance to nearest:

Building: 1794 Feet  
 Building Unit: 2021 Feet  
 High Occupancy Building Unit: 5280 Feet  
 Designated Outside Activity Area: 5280 Feet  
 Public Road: 284 Feet  
 Above Ground Utility: 229 Feet  
 Railroad: 5280 Feet  
 Property Line: 255 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, and Designated Outside Activity Area - 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: 0 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 460 Feet (Enter 5280 for distance greater than 1 mile.)

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

**SPACING & FORMATIONS COMMENTS**

Spacing Unit contains State minerals: OG 81/6923-S  
 Unit Configuration: Sec 35: S/2S/2, Sec 36: S/2S/2, 5N-67W  
 Please see attached proposed spacing unit.

**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		320	GWA

## DRILLING PROGRAM

Proposed Total Measured Depth: 17050 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: 1483 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 318A

## 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+3/4	9+5/8	36	0	1850	535	1850	0
1ST	8+1/2	5+1/2	20	0	17050	1791		

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 4-well pad consists of: Bona State N35-630 Ref, doc no. 401050000, Bona State N35-625, doc no. 401050069, Bona State N35-620, 401050082, Bona State N35-615, doc. no. 401052087. Noble Energy intends to permit this well as a monobore. No intermediate casing will be run. The surface casing will be set to cover the base of the Pierre Aquifer for Oil Based Mud considerations. Oil Based Mud will be planned for the production hole interval only. Noble Energy shall isolate both the Fox Hills and Upper Pierre Aquifers with surface casing from hydrocarbon bearing zones and exposure to oil based drilling fluid. Noble Energy also agrees to not expose the Upper Pierre Aquifer to oil based mud. All cuttings will be taken to a certified disposal. Nearest well in same formation = Bernhardt State 15-36, API No. 05-123-21821, Noble. The lateral path will be less than the 150' minimum distance from other wells as required by Rule 317.r. Noble is the Operator of the encroached upon well, therefore a signed consent from the Offset Operator as required under Rule 317.s. is not required. The nearest well belonging to another Operator the Kerr McGee, Ehrlich 34-16H7, API NO 123-18779, which is P/A'd. See Anti-collision Report in the Attachments. Please see Page 4, Section 6, Paragraph A of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window and COGCC Rule 318A.c. to locate any well greater than fifty (50) feet from an existing well.

This application is in a Comprehensive Drilling Plan \_\_\_\_\_ CDP #: \_\_\_\_\_

Location ID: 328321

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: \_\_\_\_\_ Print Name: Susan Miller

Title: Regulatory Analyst III Date: 8/4/2016 Email: Regulatorynotification@nblener

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 and applicable orders and is hereby approved.

COGCC Approved: *Matthew Lee* Director of COGCC Date: 1/29/2017

Expiration Date: 01/28/2019

**API NUMBER**  
05 123 44125 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>
	<p>Operator acknowledges the proximity of the 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.</p> <p>BERNHARDT 1-1 (API NO 123-13532)STROB N35-16 (API NO 123-13031) STROH N 35-9 (API NO 123-13033)SUSAN 1 (API NO 123-13480) LINDSEY 1-35 (API NO 123-13737)</p>
	<p>Operator acknowledges the proximity of the listed non-operated wells: Operator agrees to: provide mitigation option 3 (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 these wells.</p> <p>WAGNER POOLING UNIT 1 (API NO 123-07292)</p>
	<p>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. 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.</p>
	<p>Bradenhead tests shall be performed and reported according to the following schedule and Form 17 submitted within 10 days of each test: 1) Within 60 days of rig release and prior to stimulation or 2) If a delayed completion, 6-7 months after rig release and prior to stimulation. 3) Within 30 days after first production, as reported on Form 5A.</p>

## Best Management Practices

No	BMP/COA Type	Description
1	Planning	<p><b>Anti-collision:</b> 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 well path 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.</p> <p><b>Bradenhead Monitoring:</b> Operator will comply with the COGCC Policy for Bradenhead Monitoring during Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012. The Colorado Oil and Gas Conservation Commission has established this Policy regarding Bradenhead monitoring during Hydraulic Fracturing Treatments ("Treatment") in the Greater Wattenberg Area ("GWA") pursuant to COGCC Rule 207.a. Policy. This Policy applies to oil and gas operations in the GWA as defined by the COGCC Rules of Practice and Procedure.</p>
2	Drilling/Completion Operations	<p><b>When Using an Existing Well's Log as an Exception:</b> One of the first wells drilled on the pad will be logged with cased-hole pulsed neutron log with gamma ray log from 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 shall clearly state "No open-hole logs were run" and shall reference the Rule 317.p Exception granted for the well.</p>
3	Drilling/Completion Operations	<p><b>BOPE testing for drilling operations.</b> If a skid is performed for the subject well, then the only required BOPE tests are for the BOPE connection bonnet seal breaks, as long as a full BOPE test was performed at the beginning of the pad, and as long as all necessary BOPE tests are completed at least every 30 days during the pad operations. If a skid is performed for the subject well, then the only required BOPE tests are for the BOPE connection bonnet seal breaks, as long as a full BOPE test was performed at the beginning of the pad, and as long as all necessary BOPE tests are completed at least every 30 days during the pad operations.</p>

Total: 3 comment(s)

### Applicable Policies and Notices to Operators

Policy
<p>Notice Concerning Operating Requirements for Wildlife Protection. <a href="http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf">http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf</a></p>
<p>Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area. <a href="http://cogcc.state.co.us/documents/reg/Policies/PolicyGwaBradenheadMonitoringFinal.pdf">http://cogcc.state.co.us/documents/reg/Policies/PolicyGwaBradenheadMonitoringFinal.pdf</a></p>

### Attachment Check List

<b>Att Doc Num</b>	<b>Name</b>
1176071	ANTI-COLLISION REPORT
1696727	OPEN HOLE LOGGING EXCEPTION
401050082	FORM 2 SUBMITTED
401071155	DEVIATED DRILLING PLAN
401071157	WELL LOCATION PLAT
401071159	DIRECTIONAL DATA
401087497	OffsetWellEvaluations Data
401087502	SURFACE AGRMT/SURETY
401087504	PROPOSED SPACING UNIT
401093392	EXCEPTION LOC REQUEST
401196673	OFFSET WELL EVALUATION

Total Attach: 11 Files

### General Comments

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	Final Review Completed.	01/23/2017
Engineer	Revised the distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells, on the Drilling & Waste Plans tab, from 1358', to 1483', to the Kerr McGee, Ehrlich 34-16H7, API NO 123-18779, which is P/A'd. Operator agreed.	01/23/2017
Engineer	Review of nearest Non-operated well: Nearest non-operated well is the The Ehrlich 34-16H7 and is now PA status. The nearest well belonging to another Operator = Wagner 2-1, API No. 05-123-12826, Blue Chip Oil, at 1353' away. Operator to evaluate the distance from this well to the Wagner 2-1...	01/10/2017
Permit	SLB confirmed operator's lease, 06 81-6923-S is in good order. Permitting Review Complete.	01/05/2017
Permit	Operator requested Exception to Open Hole Logging Rule 317.p. See attached.	01/03/2017
Permit	Req'd SLB lease review. Deleted BMPs not related to drilling and completions. Deleted beneficial reuse information; this was deleted from related Form 2A during OGLA review. Req'd engineer review distance to nearest non-op well. Engineer Review: Revised the distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells, on the Drilling & Waste Plans tab, from 1358', to 1483', to the Kerr McGee, Ehrlich 34-16H7, API NO 123-18779, which is P/A'd. Operator agreed.	12/23/2016
Engineer	Offset Wells Evaluated	11/16/2016
Permit	Attached corrected Open Hole Logging exception letter.	09/07/2016
Permit	Checked attachments. Open Hole Logging Exception letter is incorrect. Well and log selected is more than 750' from the surface of this location. emailed operator.	09/01/2016
Permit	Passed completeness.	08/19/2016
Permit	Returned to draft: -- Missing required Exception Location Request -- Spacing Order Number box should be blank; Unit Config box should be "GWA"	08/12/2016

Total: 11 comment(s)