

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

TYPE OF WELL OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____	Refiling <input type="checkbox"/>
ZONE TYPE SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input type="checkbox"/>

Date Received:
08/20/2015

Well Name: Guttersen State Well Number: DD18-785

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: NWNW Sec: 7 Twp: 3N Rng: 63W Meridian: 6

Latitude: 40.246130 Longitude: -104.488780

Footage at Surface: <u>370</u> feet	FNL/FSL	FEL/FWL
<u>FNL</u> <u>368</u> feet	<u>FNL</u> <u>368</u> feet	<u>FWL</u>

Field Name: WATTENBERG Field Number: 90750

Ground Elevation: 4805 County: WELD

GPS Data:
Date of Measurement: 02/03/2014 PDOP Reading: 1.6 Instrument Operator's Name: Antonio Smith

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
<u>993</u> <u>FNL</u> <u>333</u> <u>FWL</u>	<u>993</u> <u>FNL</u> <u>333</u> <u>FWL</u>	<u>75</u> <u>FSL</u> <u>330</u> <u>FWL</u>	<u>75</u> <u>FSL</u> <u>330</u> <u>FWL</u>	<u>75</u> <u>FSL</u> <u>330</u> <u>FWL</u>	<u>75</u> <u>FSL</u> <u>330</u> <u>FWL</u>
Sec: <u>7</u> Twp: <u>3N</u> Rng: <u>63W</u>	Sec: <u>7</u> Twp: <u>3N</u> Rng: <u>63W</u>	Sec: <u>18</u> Twp: <u>3N</u> Rng: <u>63W</u>			

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.)

T3N-R63W Section 7: All.

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

Federal or State Lease # _____

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5280 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 5280 Feet

Above Ground Utility: 5280 Feet

Railroad: 5280 Feet

Property Line: 368 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 Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 180 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 981 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

Unit Configuration: T3N-R63W Sec 7: W/2W/2, Sec 18: W/2W/2, Sec 19: NW/4NW/4; T3N-R64W Sec 12: E/2E/2, Sec 13: E/2E/2, Sec 24: NE/4NE/4. Spacing Unit contains State Leases: ST CO 70-7851S, ST CO 70-7882S.

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		726	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 16578 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 159 Feet (Including plugged wells)

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 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? No
 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: Recycle/reuse

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Beneficial reuse

Other Disposal Description:

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	0	0	80	6	80	0
SURF	13+3/4	9+5/8	36	0	760	242	760	0
1ST	8+3/4	7	26	0	7040	510	7040	
1ST LINER	6+1/8	4+1/2	11.6	6890	16578			

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 First string top of cement will be 200' above the Niobrara formation. The production liner will be hung off inside of the 7" casing string. 4-well pad: Gutttersen State DD18-790 Ref, Gutttersen State DD18-785, Gutttersen State DD18-780, and Gutttersen State DD18-775. Nearest well = Karch Blue DD18-13, API No. 05-123-16229 and offset operated Gutttersen 44-13, API 05-123-26354, (PDC). Noble calculates the distance to nearest well using COGIS data. Noble Energy shall isolate the Upper Pierre Aquifer from the Fox Hills Aquifer with surface casing and cement and utilize intermediate casing and cement to ensure isolation from below.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

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 Date: 8/20/2015 Email: Regulatorynotification@noble

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:  Director of COGCC Date: 10/29/2015

Expiration Date: 10/28/2017

API NUMBER

05 123 42376 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>
	Operator acknowledges the proximity of the listed wells. Operator agrees to: provide mitigation option 1 (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") stating that appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well. State 10 API# 123-07607
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 2) Comply with Rule 317.j and provide cement coverage from the intermediate casing (7" first string) shoe to a minimum of 200' above Niobrara. Verify coverage with cement bond log.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	General Housekeeping	General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.
2	Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.
3	Material Handling and Spill Prevention	Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.

4	Drilling/Completion Operations	<p>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 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>Bradenhead Monitoring: 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>
5	Drilling/Completion Operations	<p>BOPE testing for drilling 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. 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>
6	Drilling/Completion Operations	<p>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 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 "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.</p>

Total: 6 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.

Attachment Check List

Att Doc Num	Name
400670130	FORM 2 SUBMITTED
400754103	DEVIATED DRILLING PLAN
400754106	DIRECTIONAL DATA
400754113	EXCEPTION LOC WAIVERS
400866050	OffsetWellEvaluations Data
400885171	PROPOSED SPACING UNIT
400890001	SURFACE AGRMT/SURETY
400894169	WELL LOCATION PLAT
400894170	EXCEPTION LOC REQUEST
400925313	SURFACE CASING CHECK
400925314	OFFSET WELL EVALUATION

Total Attach: 11 Files

General Comments

User Group	Comment	Comment Date
Permit	Final Review Completed. No LGD or public comment received.	10/28/2015 4:07:16 PM
Engineer	Evaluated offset wells for adequate isolation. No Sussex production within 1 mile. Changed distance to nearest wellbore from 991' to 159' per offset spreadsheet and COGIS.	10/27/2015 10:26:50 AM
Permit	Surface Restoration Bond on file with SLB. Permitting Review Complete.	10/26/2015 12:58:13 PM
Permit	Per operator the Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in same formation is correct. ON HOLD: Emailed the State Land Board (SLB) for verification of Surface Restoration Bond.	10/22/2015 10:10:27 AM
Permit	ON HOLD: Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in same formation. Emailed the State Land Board (SLB) for verification of Surface Restoration Bond.	10/19/2015 10:13:22 AM
Permit	Open Hole Logging BMP submitted by operator.	10/19/2015 10:13:20 AM
Permit	Pass completeness	9/9/2015 7:59:05 AM
Permit	Returned to draft. 1.) The title of the Exception Location Request letter should be changed from "Surface Location Exception" to "Exception Location Request". 2.) The Top of Production information box located in the Well Location Plat attachment can be deleted.	8/28/2015 11:53:22 AM
Permit	Returned to draft. 1.) Surface Use Agreement is not properly redacted.	8/25/2015 7:49:12 AM

Total: 9 comment(s)