

FORM
2
Rev
08/13

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:
400484157

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
10/08/2013

TYPE OF WELL OIL GAS COALBED OTHER Re-Plug
ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Refilling
Sidetrack

Well Name: Badger Federal Well Number: 1
Name of Operator: NOBLE ENERGY INC COGCC Operator Number: 100322
Address: 1625 BROADWAY STE 2200
City: DENVER State: CO Zip: 80202
Contact Name: Andrea Rawson Phone: (303)228-4253 Fax: (303)228-4286
Email: arawson@nobleenergyinc.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: _____

WELL LOCATION INFORMATION

QtrQtr: SESE Sec: 4 Twp: 8N Rng: 60W Meridian: 6
Latitude: 40.685944 Longitude: -104.088382

Footage at Surface: 660 feet FSL 660 feet FEL

Field Name: WILDCAT Field Number: 99999

Ground Elevation: 4905 County: WELD

GPS Data:
Date of Measurement: 10/23/2013 PDOP Reading: 6.0 Instrument Operator's Name: Noble Energy Inc.

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
Sec: _____ Twp: _____ Rng: _____ Sec: _____ Twp: _____ Rng: _____

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: Right of Way

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.)

T8N, R60W, Section 4: Lots 1,2, S/2NE/4, S/2 and other lands.

Total Acres in Described Lease: 965 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # COC 73402

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 660 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: 660 Feet

Above Ground Utility: 5280 Feet

Railroad: 5280 Feet

Property Line: 935 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: 1360 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 660 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

The Badger Federal #1 previously drilled and abandoned by Energy Minerals Corporation needs to be re-entered and re-plugged in accordance with the COGCC policies for horizontal Niobrara development.

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)

DRILLING PROGRAM

Proposed Total Measured Depth: 7045 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 1360 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 N/A

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
SURF	12+1/4	8+5/8	24	0	624	350	624	0

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

A Form 2A is not required for this re-entry because no pit will be constructed and there will be no additional surface disturbance beyond the originally disturbed area. Noble Energy Inc. will obtain the as built well location GPS and Submit it on the form 6 Subsequent Report of abandonment after plugging is completed. The Federal minerals under the Badger Federal #1 DA well will be produced and included in the new horizontal well the Badger Federal LF03-64HN. It is necessary to re-enter and re-plug this well in order to adequately isolate it from the horizontal development.

PROCEDURE:

- 1) Survey and locate abandoned well, mark with stake
- 2) Excavate to expose top of surface casing
- 3) Weld 2" collar to top of 8 5/8" surface casing cap. Make up to collar, pneumatic drill with non-sparking bit. Drill out cap venting possible trapped gas.
- 4) Once verified that no gas exists beneath top of surface casing plate, cut off surface casing below plate with torch, dress up smooth.
- 5) Butt weld 8 5/8" casing to dressed cut, bringing threaded end of casing to ground level.
- 6) Make up to 8 5/8" casing, one 8 5/8" collar and 8 5/8" starter well head
- 7) NU flange adaptor and 5k BOP, test BOP.
- 8) NU and RIH with 6 7/8" cone bit, PU 2 7/8" drill collar, 2 7/8" 8.7# tubing, and TIW valve
- 9) Drill out first cement plug inside surface casing, roll hole clean. Verify top of next cement plug inside of surface casing by tagging.
- 10) If unable to verify isolation of surface casing with tag of cement plug, set RBP inside surface casing
- 11) Once isolation of surface casing is established, either with tagging of surface plug or setting of RBP, pressure test surface casing to 200psi
- 12) After pressure test of surface casing, retrieve RBP or continue drill out of cement plug under surface casing shoe.
- 13) Assume pressure under surface casing shoe, roll hole with kill fluid until well dead, or blow down.
- 14) Continue RIH, cleaning out with drilling mud or water to 6100'
- 15) TOOH with cone bit, drill collars, and 2 7/8" tubing.
- 16) PU and RIH with mule shoe and 2 7/8" tubing to 6050'.
- 17) RU cement crew and pump a balanced plug of 50 sks 15.8 ppg Class G "neat" cement @ 6050'
- 18) POOH to 3000', RU cement crew and pump a balanced plug of 100 sks 15.8 ppg Class G "neat" cement @ 3000'
- 19) POOH to 860' (150' below Fox Hills Base @ 710')
- 20) RU cement crew and pump 356 sks of 15.8ppg Class G "neat" cement bring cement to surface
- 21) POOH with 2 7/8" tubing. Wait 4 hrs, and tag TOC. If cement has fallen, top off back to surface
- 22) Let cement set over night, verify cement has not settled and is still at surface. RDMO
- 23) Excavate around wellhead to 8' below grade, cut off 8 5/8" casing, weld on cap
- 24) Backfill hole and reclaim surface to original conditions

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

Location ID: 408504

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: Andrea Rawson

Title: Regulatory Analyst I Date: 10/8/2013 Email: arawson@nobleenergyinc.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 and applicable orders and is hereby approved.

COGCC Approved:  Director of COGCC Date: 12/28/2013

Expiration Date: 12/27/2015

API NUMBER

05 123 14372 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

	1) Provide 48 hour notice of plugging MIRU via electronic Form 42.
	Submit Form 6 Well Abandonment Report: Subsequent Report of Abandonment after plugging is completed.

Best Management Practices

No BMP/COA Type

Description

1	Drilling/Completion Operations	Noble Energy Inc. will obtain the as built GPS and submit it on the Form 6 Subsequent Report of Abandonment after plugging is completed.
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Total: 1 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

Att Doc Num

Name

1897814	PROPOSED PLUGGING PROCEDURE
2157385	RIGHT OF WAY
2157402	SURFACE AGRMT/SURETY
400484157	FORM 2 SUBMITTED
400491885	WELLBORE DIAGRAM
400491887	WELLBORE DIAGRAM

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Oper. submitted USFS special use permit for surface access. Final Review--passed.	12/23/2013 2:26:52 PM
Permit	Oper. submitted BLM permit to re-enter and re-plug. USFS to sign and email me a copy of the special use permit for access.	12/11/2013 10:35:11 AM
Permit	Re-req'd USFS access permit.	12/10/2013 10:47:49 AM
Permit	Oper. sub. add'l. drilling tab info & corrected dist. to nearest well. Waiting on USFS permit for surface access.	11/27/2013 9:45:34 AM
Permit	Req'd disposal methods for drilling fluids & cuttings.	11/20/2013 9:20:11 AM
Permit	Oper. supplied BMP regarding as built GPS. Put on hold pending BLM requirements for surface access. Oper. has contacted USFS for access. Oper. corrected dist. to lease line & prop. line.	10/30/2013 11:05:04 AM
Permit	Deleted plugging bond and selected "Right of Way" for right to construct. Req'd oper. BMP re as built GPS. Asked oper to review dist. to lease line & prop. line. Also dist. to nearest well permitted.	10/29/2013 4:16:03 PM
Engineer	Requested complete plugging procedure. The one attached #400491886 ends at step 18). It does not include the 356 sk plug from 860' to surface as shown on the WBD. Received complete procedure and attached #1897814. Deleted #400491886.	10/22/2013 8:49:44 AM
Permit	Need federal RTO, not surf. bond? Need revised distances to nearest well permitted and penetrating NBRR & prop. line.	10/21/2013 12:03:34 PM
Permit	Passed completeness. Scout card still carries as the Energy Minerals Corp. Badger Federal #1	10/9/2013 4:52:53 AM

Total: 10 comment(s)