

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:  
400597561

APPLICATION FOR PERMIT TO:

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

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

Date Received:

Well Name: Crow Creek Well Number: AE06-790  
Name of Operator: NOBLE ENERGY INC COGCC Operator Number: 100322  
Address: 1625 BROADWAY STE 2200  
City: DENVER State: CO Zip: 80202  
Contact Name: Justin Garrett Phone: (303)228 4449 Fax: (303)228 4286  
Email: JDGarrett@nobleenergyinc.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: Lot 1 Sec: 1 Twp: 6N Rng: 63W Meridian: 6  
Latitude: 40.522080 Longitude: -104.379070  
Footage at Surface: 290 feet FNL/FSL FNL 1175 feet FEL/FWL FEL  
Field Name: WATTENBERG Field Number: 90750  
Ground Elevation: 4857 County: WELD  
GPS Data:  
Date of Measurement: 02/11/2014 PDOP Reading: 1.9 Instrument Operator's Name: Mark Angell  
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  
908 FNL 2 FEL 30 FNL 1 FEL  
Sec: 1 Twp: 6N Rng: 63W Sec: 12 Twp: 6N Rng: 63W

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.)

T6N-R63W 6TH P.M. SEC. 1: All and other leases

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: 2498 Feet

Building Unit: 2498 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 278 Feet

Above Ground Utility: 262 Feet

Railroad: 5280 Feet

Property Line: 290 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: 533 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 908 Feet (Enter 5280 for distance greater than 1 mile.)

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

## SPACING & FORMATIONS COMMENTS

Unit configuration = T6N-R63W 6th P.M. SEC. 1: E/2/E/2, SEC. 12: NE/4NE/4, T6N-R62W 6th P.M. SEC. 6: W/2W/2, SEC. 7: NWNW

## 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           |                         | 400                           | GWA                                  |

## DRILLING PROGRAM

Proposed Total Measured Depth: 11551 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 533 Feet (Including plugged wells)

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? 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: Land application

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             | 100           | 6         | 100     | 0       |
| SURF        | 13+3/4       | 9+5/8          | 36    | 0             | 600           | 290       | 600     | 0       |
| 1ST         | 8+3/4        | 7              | 26    | 0             | 7162          | 490       | 7162    |         |
| 1ST LINER   | 6+1/8        | 4+1/2          | 11.6  | 7012          | 11551         |           |         |         |

☐ 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 1st string top of cement is 200' above Niobrara. The production liner will be hung off inside 7" casing. Well is part of a three-well pad consisting of the proposed Crow Creek AA01-724, Crow Creek AA01-734 (ref. well), & Crow Creek AE06-790. The production facility will be added via sundry to existing production facility (Loc ID 432762). Nearest producing well is the Wells Ranch AE06-65-1HN (API: 05-123-35573). Noble Energy Inc. requests approval of Rule 318A.a Surface location outside window; 318A.c Twinning location exception, request letter attached. Waiver language is included in attached SUA.

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: Justin Garrett

Title: Regulatory Analyst Date: \_\_\_\_\_ Email: RegulatoryNotification@noble

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: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

API NUMBER

05

## 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.

## Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u>                    | <u>Description</u>  |
|-----------|--|---|
| 1         | General Housekeeping                   | 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 pickup trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly. |
| 2         | Storm Water/Erosion Control            | STORM WATER/EROSION CONTROL:<br>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) 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.  |

Total: 3 comment(s)

## Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u>                |
|--------------------|----------------------------|
| 400658624          | OffsetWellEvaluations Data |
| 400658626          | WELL LOCATION PLAT         |
| 400658628          | SURFACE AGRMT/SURETY       |
| 400658629          | DIRECTIONAL DATA           |
| 400658632          | DEVIATED DRILLING PLAN     |
| 400659327          | EXCEPTION LOC REQUEST      |
| 400659330          | EXCEPTION LOC WAIVERS      |
| 400659343          | PROPOSED SPACING UNIT      |

Total Attach: 8 Files

## General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|----------------|---------------------|
|                   |                |                     |

Total: 0 comment(s)