

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:

400504570

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:

10/30/2013

Well Name: Pronghorn

Well Number: 12-42-28HNB

Name of Operator: BONANZA CREEK ENERGY OPERATING COMPANY LLC

COGCC Operator Number: 8960

Address: 410 17TH STREET SUITE #1400

City: DENVER

State: CO

Zip: 80202

Contact Name: Randy Edelen

Phone: (720)440-6100

Fax: (720)279-2331

Email: REdelen@BonanzaCrk.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20120018

WELL LOCATION INFORMATION

QtrQtr: SWNW Sec: 28 Twp: 5N Rng: 61W Meridian: 6

Latitude: 40.375280

Longitude: -104.222360

Footage at Surface: 1412 feet FNL/FSL FNL 350 feet FEL/FWL FWL

Field Name: RIVERSIDE

Field Number: 73800

Ground Elevation: 4616

County: WELD

GPS Data:

Date of Measurement: 10/03/2013 PDOP Reading: 1.3 Instrument Operator's Name: Aaron Lund

If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL FNL/FWL Bottom Hole: FNL/FSL FEL/FWL

1996 FNL 631 FWL 1941 FNL 470 FEL
Sec: 28 Twp: 5N Rng: 61W Sec: 28 Twp: 5N Rng: 62W

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: oil and gas lease

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-61W-28 NW/4

Total Acres in Described Lease: 160 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: 1075 Feet
Building Unit: 5280 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 358 Feet
Above Ground Utility: 5280 Feet
Railroad: 5280 Feet
Property Line: 367 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: 675 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 470 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

New spacing order approved during September hearing Docket Number 1309-AW-48

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 | 407-855 | 640 | All |

DRILLING PROGRAM

Proposed Total Measured Depth: 10792 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 675 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: UIC Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Beneficial reuse

Other Disposal Description:

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 427606 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 |
|-------------|--------------|----------------|-------|---------------|---------------|-----------|---------|---------|
| SURF | 13+1/2 | 9+5/8 | 36.00 | 0 | 410 | 200 | 410 | 0 |
| 1ST | 8+3/4 | 7 | 26.00 | 0 | 6482 | 500 | 6482 | 2500 |
| 1ST LINER | 6+1/8 | 4+1/2 | 11.60 | 6382 | 10792 | | | |

☒ 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 New spacing order approved during September hearing Docket Number 1309-AW-48

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

Location ID: 433478

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: Randy Edelen

Title: Regulatory Specialist Date: 10/30/2013 Email: REdelen@BonanzaCrk.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: 12/20/2013

Expiration Date: 12/19/2015

API NUMBER

05 123 38634 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 spud via electronic Form 42.
- 2) Set at least 750' of surface casing, or set 410' as proposed and stage cement from 750' to 50' above surface casing shoe. Verify stage cement with cement bond log.
- 3) Provide cement coverage to a minimum of 200' above Niobrara. Verify coverage with cement bond log.
- 4) Run and submit Directional Survey from TD to base of surface casing. Ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.

Best Management Practices

| No | BMP/COA Type | Description |
|----|--------------------------------|--|
| 1 | Drilling/Completion Operations | <p>Anti-Collision</p> <p>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.</p> |
| 2 | Drilling/Completion Operations | <p>1. At least twenty (20) days prior to initiating a Treatment, the operator ("Operator") shall provide written notice, via hand delivery, via confirmed receipt email, or via certified mail, return-receipt requested, to all adjacent operators ("Adjacent Operators") where the Adjacent Operator's wellbore is located within 300 feet of the Operator's wellbore and the Adjacent Operator's wellbore penetrates the productive zone which is to be treated by the Operator. Such notice shall include the anticipated date of the Treatment and shall provide a copy of this Policy.</p> |
| 3 | Drilling/Completion Operations | <p>2. Within seven (7) days of receipt of such notice, the Adjacent Operator shall confirm in writing to the Operator that it will comply with this Policy. If the Adjacent Operator refuses to confirm that it will comply with this Policy, or fails to timely respond to the Operator's notice, the Operator shall advise the Commission staff of such refusal or failure by email. The Commission may then order the Adjacent Operator's compliance.</p> |
| 4 | Drilling/Completion Operations | <p>3. The Operator shall monitor the bradenhead pressure of all wells under Operator's control within 300 feet of the well which is to be treated, provided such other wells penetrate the productive zone which is to be treated.</p> |
| 5 | Drilling/Completion Operations | <p>4. The Operator and Adjacent Operator(s) shall install bradenhead pressure gauges on their respective wells 24 hours prior to the Operator initiating a Treatment. The Operator and Adjacent Operator(s) shall monitor their respective gauges at least once during every 24-hour period until 24 hours after the Treatment is completed and shall continue to do so until the pressure stabilizes. The bradenhead pressure gauges shall be capable of monitoring current pressure and also capable of recording the maximum pressure encountered in a 24 hour period. Such gauges shall be reset between each 24 hour period. The pressures shall be recorded and saved for a period of one year. Alternate electronic measurement may be used to record the prescribed pressures.</p> |

| | | |
|---|--------------------------------|--|
| 6 | Drilling/Completion Operations | 5. If at any time during the Treatment or the 24-hour post-stimulation period, the bradenhead annulus pressure of the Treatment well or any offset wells subject to this Policy increases by more than 200 psig, the Operator of the well being treated, or the Adjacent Operator(s) of an affected offsetting well, as the case may be, shall verbally notify each other and the Director, as soon as practicable, but no later than twenty-four (24) hours following such incident. Within fifteen (15) days after the occurrence, the Operator or Adjacent Operator(s), as the case may be, shall submit a Sundry Notice, Form 4, giving all details, including corrective actions taken. |
|---|--------------------------------|--|

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

| <u>Att Doc Num</u> | <u>Name</u> |
|---------------------------|------------------------|
| 2167631 | EXCEPTION LOC REQUEST |
| 2167632 | EXCEPTION LOC WAIVERS |
| 400504570 | FORM 2 SUBMITTED |
| 400505180 | DEVIATED DRILLING PLAN |
| 400505181 | DIRECTIONAL DATA |
| 400505182 | WELL LOCATION PLAT |
| 400520388 | DIRECTIONAL DATA |

Total Attach: 7 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|---|----------------------------|
| Final Review | Operator concurs with distance to nearest lease line of 0'. | 12/20/2013 12:52:48 PM |
| Permit | Corrected Spacing order and attached Exception Loc Request and Waiver as per opr. Final Review complete. | 12/16/2013 8:39:33 AM |
| Permit | Added anti-collision and Bradenhead monitoring BMPs as per opr. Spacing order is not correct. Need exception location request and waiver. | 12/4/2013 3:25:45 PM |
| Permit | Oper. submitted corrected Xcel template. | 12/2/2013 7:33:34 AM |
| Engineer | Evaluated any existing wells within 1500' of proposed directional. | 11/25/2013 2:31:56 PM |
| Permit | Rq'd dist. to lease line. Oper. submitted dist. to lease line as 470'. | 11/4/2013 8:29:35 AM |
| Permit | This form has passed completeness. | 11/4/2013 8:29:03 AM |
| Permit | Returned to draft. | 11/1/2013 6:43:10 AM |

Total: 8 comment(s)