

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:

400719149

APPLICATION FOR PERMIT TO:

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

Date Received:

11/10/2014

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____Refilling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: State Crow Valley

Well Number: 41-21-20XRLNB

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: Keith Caplan

Phone: (720)440-6112

Fax: (720)279-2331

Email: KCaplan@BonanzaCrk.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20120018

WELL LOCATION INFORMATION

QtrQtr: NENE Sec: 21 Twp: 7N Rng: 62W Meridian: 6

Latitude: 40.563234

Longitude: -104.318704

Footage at Surface: 1293 feet FNL/FSL FNL 341 feet FEL/FWL FEL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4896

County: WELD

GPS Data:

Date of Measurement: 07/29/2014 PDOP Reading: 1.4 Instrument Operator's Name: Rob Wilson

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

 660 FNL 631 FEL 660 FNL 610 FWL
 Sec: 21 Twp: 7N Rng: 62W Sec: 20 Twp: 7N Rng: 62W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ IndianThe 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.)

T7N-R62W-6th: Section 21; NE/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: 955 Feet
Building Unit: 2383 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 341 Feet
Above Ground Utility: 310 Feet
Railroad: 5280 Feet
Property Line: 341 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 610 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Spacing order 407-1103 forms a 1280 acre unit consisting of Sec 21 & Sec 20-T7N-R62W

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	407-1103	1280	S. 21 & 20:All

DRILLING PROGRAM

Proposed Total Measured Depth: 15580 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 180 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: Commercial 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	0	505	200	505	0
1ST	8+3/4	7	26	0	6988	500	6900	2500
1ST LINER	6+1/8	4+1/2	11.6	6888	15580			

☒ 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

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

Location ID: 159489

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: Keith Caplan

Title: Sr Regulatory Specialist Date: 11/10/2014 Email: KCaplan@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: 2/4/2015

Expiration Date: 02/03/2017

API NUMBER

05 123 41116 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) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 2) Comply with Rule 317.i and provide cement coverage from end of 7" casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 3) Comply with Rule 321. 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.
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Best Management Practices**No BMP/COA Type****Description**

1	Drilling/Completion Operations	Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage on either this well or one of the other remaining proposed offset wells not yet drilled on this pad. The Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.
2	Drilling/Completion Operations	Operator will comply with COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012.

Total: 2 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>
400719149	FORM 2 RESUBMITTED
400761678	FORM 2 SUBMITTED
400761679	FORM 2 REJECTED
400762075	WELL LOCATION PLAT
400762076	DEVIATED DRILLING PLAN
400762081	DIRECTIONAL DATA
400762093	EXCEPTION LOC WAIVERS
400762095	EXCEPTION LOC REQUEST
400762099	OffsetWellEvaluations Data
400762102	SURFACE AGRMT/SURETY

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Operator revised drilling fluid disposal from Reuse/Recycle to Commercial Disposal. Final Review Completed. No LGD or public comment received.	2/2/2015 4:45:59 PM
Permit	Drilling fluid disposal does not match 2A. Emailed operator to correct.	1/26/2015 2:32:29 PM
Permit	Passed Completeness	12/31/2014 2:18:40 PM
Permit	Deviated Drilling Plan, Well Plat and Directional Spreadsheet are the three attachments that are incorrect. This APD is being rejected per the COGCC rejection policy which states that a Form 2 that requires 2 or more attachments to be replaced will be rejected. Discussion with BCEI regulatory staff resulted in their concurrence with rejection of this APD. Discussion with COGCC staff resulted in their concurrence with rejection of this APD.	12/31/2014 8:11:00 AM
Permit	Spacing Order 407-1103 states "The productive interval of the wellbore shall be located no closer than 600 feet from the unit boundaries, and no closer than 150 feet from the productive interval of any other wellbore located in the unit, without exception being granted by the Director." BHL is 470' FWL and not legal under SO 407-1103.	12/9/2014 12:38:13 PM
Engineer	Evaluated offset wells. No active wells within 150'	12/5/2014 2:16:16 PM
Permit	Passed Completeness	11/13/2014 12:06:21 PM

Total: 7 comment(s)