

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:

TYPE OF WELL OIL GAS COALBED OTHER _____ Refiling

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES Sidetrack

Well Name: State Antelope Well Number: O34-21-16XRLNB

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: Julie L. Vigil Phone: (303)803-1718 Fax: (720)279-2331

Email: jvigil@bonanzacrk.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20120018

WELL LOCATION INFORMATION

QtrQtr: SESW Sec: 21 Twp: 5N Rng: 62W Meridian: 6

Latitude: 40.378960 Longitude: -104.331660

Footage at Surface: 369 feet FNL/FSL FSL FEL/FWL FWL 1817 feet

Field Name: WATTENBERG Field Number: 90750

Ground Elevation: 4634 County: WELD

GPS Data:

Date of Measurement: 09/30/2015 PDOP Reading: 1.7 Instrument Operator's Name: Brian Rottinghaus

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

631 FSL 2170 FEL 470 FNL 2564 FEL

Sec: 21 Twp: 5N Rng: 62W Sec: 16 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.)

ALL of Section 21, T5N-R62W; and other lands

Total Acres in Described Lease: 8115 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: 2252 Feet
Railroad: 5280 Feet
Property Line: 369 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: 380 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

E2W2, W2E2 of Section 21, T5N-R62W & E2W2, W2E2 of Section 16, T5N-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		640	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 16437 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 380 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: Land application
 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	1560	1159	1560	0
1ST	8+3/4	7	26	0	6874	739	6874	1460
1ST LINER	6+1/8	4+1/2	11.6	6024	16437			

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 Surface casing depth was determined from log correlation of the Upper Pierre Aquifer Base from the Allard Husky ETAL 6-21, API 05-123-08141.
Nearest well is the Antelope O-K-21HZ, API 05-123-36061.

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

Location ID: 430040

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: Julie L. Vigil

Title: Sr. Regulatory Specialist Date: _____ Email: jvigil@bonanzacrk.com

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

No	BMP/COA Type	Description
1	Construction	Operator shall submit a Form 42 to the COGCC 48 hours prior to commencement of construction activities.
2	Drilling/Completion Operations	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.
3	Drilling/Completion Operations	Bradenhead Monitoring: Operator will comply with COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012.

Total: 3 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400925030	WELL LOCATION PLAT
400926381	DEVIATED DRILLING PLAN
400926382	DIRECTIONAL DATA
400926766	SURFACE AGRMT/SURETY
400928979	PROPOSED SPACING UNIT
400928980	EXCEPTION LOC REQUEST
400931139	EXCEPTION LOC WAIVERS
400931145	WELLBORE DIAGRAM
400931157	OffsetWellEvaluations Data

Total Attach: 9 Files

General Comments

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

Total: 0 comment(s)

