

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: 09/14/2016

Well Name: DGU Federal 1289 Well Number: 17-13 CS2
 Name of Operator: GUNNISON ENERGY LLC COGCC Operator Number: 10515
 Address: 1801 BROADWAY #1200
 City: DENVER State: CO Zip: 80202
 Contact Name: Heather Lang Phone: (303)296-4222 Fax: (303)296-4555
 Email: heather.lang@oxbow.com

RECLAMATION FINANCIAL ASSURANCE
 Plugging and Abandonment Bond Surety ID: 20140052

WELL LOCATION INFORMATION
 QtrQtr: NWSW Sec: 17 Twp: 12S Rng: 89W Meridian: 6
 Latitude: 39.013656 Longitude: -107.366931
 Footage at Surface: 2415 Feet ^{FNL/FSL} FSL 529 Feet ^{FEL/FWL} FWL
 Field Name: WEST MUDDY CREEK Field Number: 91970
 Ground Elevation: 7285 County: GUNNISON
 GPS Data:
 Date of Measurement: 09/24/2013 PDOP Reading: 1.4 Instrument Operator's Name: Robert Kay
 If well is Directional Horizontal (highly deviated) **submit deviated drilling plan.**
 Footage at Top of Prod Zone: ^{FNL/FSL} 1093 ^{FEL/FWL} FSL 2095 ^{FEL} FEL 1093 ^{FNL/FSL} FSL 2095 ^{FEL/FWL} FEL
 Sec: 17 Twp: 12S Rng: 89W Sec: 17 Twp: 12S Rng: 89W

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.)

See Lease map

Total Acres in Described Lease: 1076 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # COC65106

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 795 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 2770 Feet

Building Unit: 3478 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 1770 Feet

Above Ground Utility: 4302 Feet

Railroad: 5280 Feet

Property Line: 786 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 proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 2099 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 795 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Deadman Gulch Unit Number: COC74489X

SPACING & FORMATIONS COMMENTS

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
WILLIAMS FORK-CAMEO COAL	WFCMC			

DRILLING PROGRAM

Proposed Total Measured Depth: 4815 Feet

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells:

Enter distance if less than or equal to 1,500 feet: _____ Feet No well belonging to another operator within 1,500 feet

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 608

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? _____

Reuse Facility ID: _____ 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
CONDUCTOR	24+0/0	16+0/0	42.1	0	120	200	120	0
SURF	12+1/4	9+5/8	36	0	1000	204	1000	0
1ST	8+3/4	7+0/0	23	0	4815	555	4815	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

This application is in a Comprehensive Drilling Plan Yes CDP #: 2028

Location ID: 324475

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: Heather Lang

Title: Office Manager Date: 9/14/2016 Email: heather.lang@oxbow.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: 12/22/2016

Expiration Date: 12/21/2018

API NUMBER
05 051 06127 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

	If conductors are preset, operator shall comply with Notice to Operators: Procedures for Preset Conductors (dated September 1, 2016, revised October 6, 2016).
	1) Operator shall comply with the most current revision of the Northwest Notification Policy. 2) Operator shall provide cement coverage from the production casing shoe (7" First String) to a minimum of 200' above the surface casing shoe to provide isolation of all Cretaceous (Ohio Creek and Mesaverde) and Tertiary (Wasatch) oil, gas, and water-bearing sandstone and coalbed formations that are not otherwise covered by surface casing. Verify production casing cement coverage with a cement bond log.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	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 TD 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 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.

Total: 1 comment(s)

Applicable Policies and Notices to Operators

Policy
NW Colorado Notification Policy. http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf
Notice Concerning Operating Requirements for Wildlife Protection. http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401108881	FORM 2 SUBMITTED

Total Attach: 1 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Clicked the "yes" box that well is in CDP and notified operator. Corrected distance to nearest wellbore in same formation from 1753' to 2099' with operator approval. Final review complete.	12/12/2016
Permit	Replaced the BMP for logging which deleted language relating to HZ wells, as directed by operator.	12/06/2016
Permit	Replaced the 816' distance to unit boundary with 795' as directed by operator.	11/29/2016
Permit	No change in drilling and waste management from previously approved APD.	10/28/2016
Engineer	Offset water well check: COGCC evaluated offset water wells within one mile of this proposed well's surface hole location. This information was used in addition to locally-available geophysical logs and hydrogeologic information was used to evaluate the adequacy of the operator's proposed surface casing setting depth. The deepest domestic use water well within one mile is 460 feet. The deepest registered water well within one mile is 3,500 feet and is a COGCC gas well. Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of this wellbore meet standards. No mitigation required. Evaluated offset dry and abandoned well McLaughlin-Goc #1 (API#051-05005) drilled to a TMD of 3552' and plugged back to 2130 in the Mesaverde formation. Casing was set at 2174 with 220 sacks cement. Plugged with 65 sacks from 2110' to 1800' and 35 sacks at surface. No mitigation required. Changed TMD to 4815' to match deviated drilling plan and casing plan.	09/28/2016
Permit	Passes completeness.	09/21/2016

Total: 6 comment(s)