

FORM

2

Rev  
06/19

## 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:

401971344

## APPLICATION FOR PERMIT TO:

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

Date Received:

03/15/2019

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

Well Name: EBC

Well Number: 2

Name of Operator: CATAMOUNT ENERGY PARTNERS LLC

COGCC Operator Number: 10464

Address: 1801 BROADWAY #1000

City: DENVER State: CO Zip: 80202

Contact Name: Nolan Redmond

Phone: (720)484-2344

Fax: ( )

Email: nredmond@catamountep.com

## RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20160137

## WELL LOCATION INFORMATION

QtrQtr: NENW Sec: 28 Twp: 34N Rng: 5W Meridian: M

Latitude: 37.167289

Longitude: -107.401780

Footage at Surface: 947 Feet FNL/FSL FNL 1519 Feet FEL/FWL FWL

Field Name: IGNACIO BLANCO

Field Number: 38300

Ground Elevation: 6930

County: ARCHULETA

GPS Data:

Date of Measurement: 11/16/2018 PDOP Reading: 2.0 Instrument Operator's Name: Nelson Ross

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  
 691 FSL 370 FWL 856 FSL 253 FWL  
 Sec: 21 Twp: 34N Rng: 5W Sec: 21 Twp: 34N Rng: 5W

## LOCAL GOVERNMENT INFORMATION

County: ARCHULETA

Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: County

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this COGCC application? If the local government has waived its right to precede the COGCC in siting determination, indicate by selecting "NO" here and selecting "Waived" below.

☒ Yes ☐ NoIf yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location. ☒

The local government siting permit type is: Land Use Permit

The local government siting permit was filed on: 03/15/2019

The disposition of the application filed with the local government is: Approved

Additional explanation of local process:

Land use permit approved on 4/26/2019

## 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.)

N/2, SW, SWSE SEC 21 T34N R5W

Total Acres in Described Lease: 520 Described Mineral Lease is: ☐ Fee ☐ State ☒ Federal ☐ Indian

Federal or State Lease # COC64933

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 253 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: 2680 Feet

Above Ground Utility: 5280 Feet

Railroad: 5280 Feet

Property Line: 3860 Feet

School Facility: 5280 Feet

School Property Line: 5280 Feet

Child Care Center: 5280 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, Designated Outside Activity Area, School Facility, and Child Care Center – 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: 1014 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 4261 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Bull Creek Unit

Unit Number: COC68667X

## SPACING & FORMATIONS COMMENTS

Bull Creek Unit: 34N 5W  
19-21: All  
26: W/2 SW  
27-31: All  
32: N/2, W/2 SW, NESE  
33: All  
34: NWNW  
Plus additional acreage

## OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
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FRUITLAND COAL	FRLDC			
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## DRILLING PROGRAM

Proposed Total Measured Depth: 4098 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 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 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
SURF	12+1/4	9+5/8	36	0	500	286	500	0
1ST	8+3/4	7	23	0	4098	372	4098	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 No CDP #: \_\_\_\_\_

Location ID: 456205

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: Nolan Redmond

Title: Geo/Eng Tech Date: 3/15/2019 Email: nredmond@catamountep.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, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved:  \_\_\_\_\_ Director of COGCC Date: 6/7/2019

Expiration Date: 06/06/2021

API NUMBER

05 007 06335 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**

	<p>1) 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 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.</p> <p>2) If borehole problems occur while drilling and an unplanned sidetrack is required, the following shall apply:</p> <p>a.) Before proceeding, contact the COGCC Engineer for verbal approval and provide an explanation as to what happened to the original borehole and what the plan is for the sidetrack.</p> <p>Contact Information: Alicia Duran – Area Engineer 303-894-2100 x 5690 303-548-7396 cell alicia.duran@state.co.us</p> <p>b.) Adhere to the instructions provided in the "UNPLANNED Sidetrack While Drilling: Approval and Reporting Process – Southwestern Colorado San Juan Basing ONLY" that can be found on the COGCC website at: Go to COGCC Web Site for more details if necessary Regulation, Forms, Form 2-Permit to Drill, Instructions</p> <p>3) Contact COGCC Engineer – Alicia Duran when encountering kicks requiring a mud weight increase of 0.5 ppg to control the kick, unexpected water flows, and unexpected Hydrogen Sulfide.</p>
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## **Best Management Practices**

### **No BMP/COA Type**

### **Description**

1	Drilling/Completion Operations	Rule 317.p: One of the first wells drilled on the pad will be logged with open-hole resistivity log with gamma-ray, from TD into the surface casing. All wells on the pad will have a cement bond log (CBL) 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 will state "No open-hole logs were run" and will clearly identify the type of log and the well (by API#) in which openhole logs were run.
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Total: 1 comment(s)

## **Applicable Policies and Notices to Operators**

Notice Concerning Operating Requirements for Wildlife Protection.  
[http://cogcc.state.co.us/documents/reg/Policies/Wildlife\\_Notice.pdf](http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf)

## **Attachment Check List**

### **Att Doc Num**

### **Name**

401971344	FORM 2 SUBMITTED
401974267	DIRECTIONAL DATA
401974269	DEVIATED DRILLING PLAN
401974274	WELL LOCATION PLAT
401974276	WELLBORE DIAGRAM

Total Attach: 5 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.  COGCC staff conducted its technical review of this Form 2 within the context of SB 19-181 and the required Director Objective Criteria. This Form 2 permit application did not meet any of the Director Objective Criteria and is compliant with all applicable COGCC rules.	06/04/2019
Permit	Corrected well deviation dropdown to DIRECTIONAL to reflect well location plat.	06/04/2019
Engineer	This Form 2 is for the Pilot Hole.	03/25/2019
Engineer	Alluvial Fresh Water Reservoirs The proposed gas well is located within an area where fresh water aquifers are developed in an alluvial deposit of gravel and sandstone commonly found in river, stream, and ephemeral creek valleys. Water wells in alluvium can vary in depth from 10' to 200'. These aquifers are commonly identified as the San Jose and Nacimiento formations.  Bedrock Aquifers The proposed gas well is located within an area where unconfined fresh water aquifers are developed in bedrock formations consisting mainly of shale with intermittent sandstone stringers with limited areal extent or having pockets of isolated water reservoirs. Water wells can vary in depth from 100' to 650'. These aquifers are commonly identified as the Animas formation.	03/25/2019
Engineer	Offset water well check: COGCC evaluated offset water wells within one mile of this proposed well's surface hole location. All permitted water wells within the search radius show zero for reported depths. There are no logs from offset wells within a 1500' radius to assist in determining the deepest fresh water aquifers. Offset Well Evaluation: There are no existing offset oil and gas wells within 1,500 feet of this wellbore.	03/25/2019
Permit	Passed completeness.	03/20/2019

Total: 6 comment(s)