

FORM

2

Rev
08/16

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:

401549058

APPLICATION FOR PERMIT TO:

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

Date Received:

02/26/2018

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

Well Name: Jaques Well Number: 9

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)484-2347 Fax: ()

Email: nredmond@catamountep.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20160137

WELL LOCATION INFORMATION

QtrQtr: SENW Sec: 27 Twp: 33N Rng: 8W Meridian: NLatitude: 37.076490Longitude: -107.707860
 Footage at Surface: 2111 Feet FNL 1711 Feet FWL
Field Name: IGNACIO BLANCO Field Number: 38300Ground Elevation: 7031 County: LA PLATA

GPS Data:

Date of Measurement: 01/04/2018 PDOP Reading: 1.8 Instrument Operator's Name: Nelson RossIf 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

808 FNL 817 FWL 660 FNL 660 FWL

Sec: 27 Twp: 33N Rng: 8W Sec: 27 Twp: 33N Rng: 8W

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 ☐ IndianThe Minerals beneath this Oil and Gas Location will be developed by this Well: YesThe 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.)

W/2NW/4, SW/4SW/4, S/2NW/4SW/4 SEC 26 T33N R8W

S/2SE/4, S/2NE/4SE/4, NW/4SE/4, E/2SW/4, E/2NW/4, NW/4NW/4, E/2NE/4, SW/4NE/4 SEC 27 T33N Excepting 5 acres in the NW/4SE/4 of SEC. 27 commencing at NE corner of said forty, then South 660 feet, thence west 330 feet, thence North 660 feet, thence East 330 feet to beginning.

Total Acres in Described Lease: 595 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: 512 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 2892 Feet

Building Unit: 3008 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 5280 Feet

Above Ground Utility: 2805 Feet

Railroad: 5280 Feet

Property Line: 1909 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: 1340 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 660 Feet (Enter 5280 for distance greater than 1 mile.)

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

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.)
FRUITLAND COAL	FRLDC	112-278	320	W/2

DRILLING PROGRAM

Proposed Total Measured Depth: 4039 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: 1340 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
SURF	12+1/4	8+5/8	24	0	500	300	500	0
1ST	7+7/8	5+1/2	17	0	4039	550	4039	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: 333792

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: 2/26/2018 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 and applicable orders and is hereby approved.

COGCC Approved:  Director of COGCC Date: 4/24/2018

Expiration Date: 04/23/2020

API NUMBER

05 067 10021 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 (5+1/2" 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) The two closest water wells within 1/4 mile radius of the proposed lateral shall be sampled & analyzed (Cause 112 Orders 156-157 and rule 608) if not done previously.</p> <p>3) If borehole problems occur while drilling and an unplanned sidetrack is required, the following shall apply: 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. Contact Information: Craig Burger – Area Engineer 970-625-2497 ext 2 office 970-319-4194 cell Craig.burger@state.co.us 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>4) Contact COGCC Engineer – Craig Burger 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: Open-hole resistivity log with gamma-ray will be run from TD into the surface casing. A Cement Bond Log (CBL) with gamma-ray will be run on production casing, or on intermediate casing if a production liner is run. The Form 5, Completion Report, will list all logs run and have those logs attached.
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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

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401549058	FORM 2 SUBMITTED
401554722	WELL LOCATION PLAT
401554726	DEVIATED DRILLING PLAN
401554728	DIRECTIONAL DATA
401554729	SURFACE AGRMT/SURETY

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	04/16/2018
Permit	Per operator, corrected distance to nearest property line.	04/16/2018
Engineer	<p>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.</p> <p>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.</p> <p>A one mile radius of investigation of all offsetting fresh water wells has determined that the deepest surface casing required to protect the aquifers is a depth of 484' (includes a 50' margin of additional protection corrected for elevation differences). The operator proposed an acceptable surface casing depth of 500'. The surface casing on the proposed well will be cemented from total depth to surface. The production casing on the gas well is planned to be cemented from total depth to surface. This will serve two purposes (1) it will isolate and confine all hydrocarbon and brackish waters to their respective zones and (2) it will provide double protection for the fresh water aquifers which includes two concentric steel casing strings and two concentric external cement sheaths extending from total depth to surface. There are no logs run shallow enough in offset gas wells within a 1500' radius to assist in determining the deepest fresh water aquifers.</p> <p>Offset Well Evaluation: Offset wellbores within 1500 feet of the wellbores planned on this pad meet standards.</p>	04/05/2018
LGD	This facility will require a land use permit from the La Plata County Planning Department.	03/07/2018
Permit	Passed Completeness.	03/07/2018
Permit	<p>Returned to draft for:</p> <ul style="list-style-type: none"> - "Well Location" tab: QtrQtr for the surface location does not match the WELL LOCATION PLAT - "Offset Wells Evaluation" tab: missing wellbore email - "Related Forms" tab is blank 	03/02/2018

Total: 6 comment(s)