

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:  
400867108

APPLICATION FOR PERMIT TO:

Drill       Deepen       Re-enter       Recomplete and Operate

TYPE OF WELL    OIL     GAS     COALBED     OTHER \_\_\_\_\_  
ZONE TYPE      SINGLE ZONE     MULTIPLE ZONES     COMMINGLE ZONES

Refiling   
Sidetrack

Date Received:  
07/15/2015

Well Name: Lamke 33-5-29      Well Number: 1  
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: (720)484-2363  
Email: nredmond@catamountep.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20130096

WELL LOCATION INFORMATION

QtrQtr: SESE      Sec: 29      Twp: 33N      Rng: 5W      Meridian: N  
Latitude: 37.069990      Longitude: -107.407360

Footage at Surface: 530 feet      FNL/FSL      FEL/FWL  
FSL      199 feet      FEL

Field Name: IGNACIO BLANCO      Field Number: 38300  
Ground Elevation: 6119      County: ARCHULETA

GPS Data:  
Date of Measurement: 07/09/2015    PDOP Reading: 2.2    Instrument Operator's Name: Scott Weibe

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  
1001    FNL    1059    FEL      1253    FNL    1197    FEL  
Sec: 32    Twp: 33N    Rng: 5W      Sec: 32    Twp: 33N    Rng: 5W

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: No

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.)

Township 33 North, Range 5 West, N.M.P.M. Section 32: S/2NE/4SE/4NE/4, S/2SE/4NE/4, S/2SW/4NE/4, NW/4SW/4NE/4, N/2SE/4

Total Acres in Described Lease: 149 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: 215 Feet

**CULTURAL DISTANCE INFORMATION**

Distance to nearest:

Building: 900 Feet

Building Unit: 942 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 202 Feet

Above Ground Utility: 113 Feet

Railroad: 5280 Feet

Property Line: 199 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: 07/15/2015

**SPACING and UNIT INFORMATION**

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 1980 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 1001 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	112-256	320	E/2

**DRILLING PROGRAM**

Proposed Total Measured Depth: 3642 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 1980 Feet (Including plugged wells)

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? Yes

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	350	250	350	0
1ST	7+7/8	5+1/2	17	0	3642	510	3642	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 603.a.(1)

### 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: \_\_\_\_\_

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: 7/15/2015 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: *Matthew Lee* Director of COGCC Date: 11/5/2015

Expiration Date: 11/04/2017

**API NUMBER**  
05 007 06322 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.

<u>COA Type</u>	<u>Description</u>
	Per the Setback Waiver Request letter provided by La Plata Electric Association, Inc. (LPEA) and attached to this form, operator will maintain a minimum 10 foot setback between any portion of this well pad and its related equipment and the nearest conductor or energized piece of equipment. This setback is in place to maintain the minimum clearance requirements of the National Electric Safety Code.
	Operator will notify La Plata Electric Association, Inc. (LPEA) 24 hours prior to rig-up operations and also 24 hours prior to rig-down operations.
	<p>1) Provide 48 hrs Notice of Spud and 24 hrs Notice to Run and Cement Casing via COGCC eform 42</p> <p>2) Sample and test two closest water wells within a 1/4 mile of that portion of the wellbore pathway that cuts through the Fruitland Coal (Horizontal dimension – Top to bottom of pay) (Rule 608) (see Policy-Ignacio Blanco Field – Notice to Operators 7/10/2009 and revised on 2/17/2011).</p> <p>3) Operators are required to obtain a bottom hole pressure utilizing a bottom hole gauge after a minimum 48 hour shut-in period following completion and prior to sales (Rule 608)</p> <p>4) Borehole problems encountered while drilling that require an unplanned sidetrack: Contact, discuss &amp; receive approval within 24 hrs of occurrence from COGCC Regional Engineer – Mark Weems</p> <p>970-259-4587 off 970-749-0624 cell mark.weems@state.co.us</p> <p>5) Contact COGCC Regional Engineer – Mark Weems when encountering a well control issue, unexpected water flows, and unexpected Hydrogen Sulfide.</p>

## Best Management Practices

No	BMP/COA Type	Description
1	Wildlife	Catamount will avoid drilling operations from Dec. 1st - April 15th to minimize disturbance to wildlife, assuming current rig availability does not change.
2	Drilling/Completion Operations	Rule 317.p: Logging Program Description: Open-hole Resistivity Log with Gamma Ray Log run from TD into the surface casing. Cement Bond Log run on production casing or on intermediate casing if production liner is run. The Form 5 Completion Report will list all logs run and the logs will be attached.
3	Drilling/Completion Operations	A closed loop system will be used during drilling operations so a pit will be unnecessary.
4	Drilling/Completion Operations	<p>Drilling mud or brine will be contained in above ground steel tanks. Drill cuttings and solids that have been separated from the drilling fluid by the shale shakers, mud cleaner or centrifuge will be captured in above ground portable steel cuttings bins and hauled to a 3rd party disposal site that is permitted as required by applicable State and Federal rules and regulations. Excess drilling fluid will be stored in above ground portable steel tanks and will be transferred to the active circulating system as needed. At the completion of drilling activity remaining drilling fluid will be used on another well or disposed of as allowed by Local, State and Federal law.</p> <p>The well pad will have a secondary containment berm to prevent spills, releases, and pollution. The berm will be capable of containing 110% of the fluids stored on location.</p>
5	Final Reclamation	<p>Equipment will be painted with dull, non reflective paint slightly darker than the surrounding landscape.</p> <p>Noxious weeds will be controlled onsite by herbicide application based on recommendations from the Archuleta County weed control technician and will be applied by a professional.</p>

Total: 5 comment(s)

## Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

## Attachment Check List

Att Doc Num	Name
901347	VARIANCE REQUEST
901348	WAIVERS
1857632	SELECTED ITEMS REPORT
400867108	FORM 2 SUBMITTED
400868362	WELL LOCATION PLAT
400868364	DEVIATED DRILLING PLAN
400868366	DIRECTIONAL DATA
400868388	OTHER
400868394	SURFACE AGRMT/SURETY
400868424	OffsetWellEvaluations Data

Total Attach: 10 Files

**General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	Final Review Completed. No LGD or public comment received.	11/5/2015 9:55:10 AM
Permit	COGCC Director approval has been granted on Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number 603.a.(1).	11/5/2015 9:06:30 AM
Permit	Per phone conversation with operator, 11/5/2015, salt-based mud dropdown changed to "YES."	11/5/2015 9:02:41 AM
Permit	Revised Spacing Order Number to reflect newly created Order 112-256.  Waiting on 502.b variance request decision.	10/29/2015 2:04:51 PM
Permit	Awaiting proposed drilling and spacing order, which is on September docket.  Was continued to Oct. docket.	8/13/2015 11:56:47 AM
Permit	Should spacing order be 112-85? Corrected to 112-85 per operator request on 8/6/2015. Lease description revised, per operator. Contacted operator to see if a voluntary pooling agreement is available for the area in question.	3/6/2015 9:12:47 AM
Engineer	No PA wells were found to exist within ¼ mile of the well bore penetrating the Fruitland coal.  There are no other gas wells within 1500' of the top and bottom of pay in this constant angle (straight line) directional wellbore.  For water well testing purposes there are no conventional gas wells within 1320' of the top and bottom of pay in this constant angle (straight line) directional wellbore.	3/4/2015 5:53:17 PM
Engineer	The proposed gas well is located within an area where unconfined fresh water aquifers are mostly 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 found in these locations can vary in depth from 100' to 650'. These aquifers are commonly identified as the Animas formation.  Respective to the proposed gas well, a one (1) 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 164' (includes a 50' margin of additional protection). The operator proposed a depth of 350' which is 186' more than the minimal requirement. The surface casing on the proposed well will be cemented from total depth to surface. The production casing on the proposed gas well will also 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 (2) steel casing strings and two concentric external (2) cement sheaths extending from total depth to surface (see attached SELECTED ITEMS REPORT).	3/4/2015 5:49:49 PM
Permit	Per phone conversation with operator 7/28/2015: 1) Changed Building Unit, Property Line, and Public Road distances. 2) Checked Buffer Zone checkbox, as distance to Building unit is now less than 1000'. 3) Added Buffer Zone notification date.	7/28/2015 9:55:08 AM
Permit	Per operator, county changed from La Plata to Archuleta. Is a lease map available?  Passed completeness.	7/20/2015 3:26:35 PM

Total: 10 comment(s)