

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:

400941537

#### 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:

12/01/2015

Well Name: Battlement Mesa

Well Number: 43D-26-795

Name of Operator: CAERUS PICEANCE LLC

COGCC Operator Number: 10456

Address: 600 17TH STREET #1600N

City: DENVER

State: CO

Zip: 80202

Contact Name: Reed Haddock

Phone: (720)880-6369

Fax: (303)565-4606

Email: rhaddock@caerusoilandgas.com

#### RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20130021

#### WELL LOCATION INFORMATION

QtrQtr: SESW Sec: 26 Twp: 7S Rng: 95W Meridian: 6

Latitude: 39.404425

Longitude: -107.967160

Footage at Surface: 1291 feet FNL/FSL FSL 1948 feet FEL/FWL FWL

Field Name: RULISON

Field Number: 75400

Ground Elevation: 8964.4

County: GARFIELD

GPS Data:

Date of Measurement: 10/13/2015 PDOP Reading: 1.8 Instrument Operator's Name: Robert Wood

If well is ☒ Directional ☐ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL FSL 1600 FSL 674 FEL FEL 1600 FSL 674 FEL  
Sec: 26 Twp: 7S Rng: 95W Sec: 26 Twp: 7S Rng: 95W

#### 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: applicant is owner

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.)

Sec. 26, T7S, R95W: N2S2, SWNE, S2NW, S2S2, Lot 4 (483.68-acres) more or less

Total Acres in Described Lease: 484 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: 674 Feet

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5028 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 4607 Feet

Above Ground Utility: 5169 Feet

Railroad: 5280 Feet

Property Line: 2340 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: 285 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 674 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

## SPACING & FORMATIONS COMMENTS

Sec. 26 - T7S-R95W

## 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	WMFK	139-53	640	All - Sec. 26

## DRILLING PROGRAM

Proposed Total Measured Depth: 10526 Feet

Distance from proposed wellbore to nearest existing or permitted wellbore belonging to another operator:

5280 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? 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 609

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: ONSITE Drilling Fluids Disposal Methods: Recycle/reuse

Cuttings Disposal: ONSITE Cuttings Disposal Method: Beneficial reuse

Other Disposal Description:

Waste Management Plan attached to Form 2A.

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	30	20	52.8#	0	100	218	100	0
SURF	14+3/4	9+5/8	36#	0	2500	623	2500	0
1ST	8+3/4	4+1/2	11.6#	0	10526	997	10526	5686

☐ 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 \_\_\_\_\_ CDP #: \_\_\_\_\_

Location ID: 334128

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: Reed Haddock

Title: Sr. Regulatory Specialist Date: 12/1/2015 Email: rhaddock@caerusoilandgas.co

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: 1/16/2016

Expiration Date: 01/15/2018

### API NUMBER

05 045 23064 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 comply with the most current revision of the Northwest Notification Policy.</p> <p>(2) Operator shall comply with the most current revision of the Garfield County Rulison Field Notice to Operators, with the following exception: All field notice requirements specified in that Notice to Operators are superseded by the requirements of the most current revision of the Northwest Colorado Notification Policy (see Condition of Approval #1).</p> <p>(3) Operator shall provide cement coverage from the production casing shoe to a minimum of 200' above all Mesa Verde Group (and Ohio Creek Formation, if present) oil, gas, and water-bearing sandstone and coalbed formations. Verify production casing cement coverage with a cement bond log.</p> <p>(4) In lieu of the standard Form 42 spud notice required by the Northwest Notification Policy, submit Form 42 Rulison SAP - Spud Notice, specifying the bottom hole location sector and tier.</p> <p>(5) Operator shall comply with all provisions of the most recent COGCC-approved revision of the Rulison Sampling and Analysis Plan.</p> <p>(6) Operator shall provide complete well-specific emergency contact information to COGCC via email prior to spudding this well. Rulison.Submittal@state.co.us</p> <p>(7) Perform a high-accuracy gyroscopic directional wellbore survey upon reaching total depth of the well. Submit a copy of the survey with a Form 4, Sundry Notice, requesting approval to DNR_Rulison.Submittal@state.co.us and Barbara.Westerdale@state.co.us. The directional drilling survey report shall include a map view and a vertical profile view showing wellbore trajectory and distance from the 1/2-mile radius from Project Rulison. The operator shall obtain approval from COGCC permitting staff prior to commencing casing perforating and other completion operations.</p>
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## **Best Management Practices**

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

### **Description**

1	Planning	In compliance with Rule 317.p the first well that is operationally feasible on the Battlement Mesa 26N-795 pad will be logged with an 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 cased-hole Gamma Ray run on the production casing. The Form 5 Completion Report will list all the logs run in the subject well and identify the well that was logged with the open-hole Resistivity Log.
2	Drilling/Completion Operations	Caerus Operating LLC will adhere to the COGCC Policy for Bradenhead Monitoring effective May 29, 2012.

Total: 2 comment(s)

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

Policy
Piceance Rulison Field - Notice to Operators. <a href="http://cogcc.state.co.us/documents/reg/Policies/NoticeToOp-20060623-2.pdf">http://cogcc.state.co.us/documents/reg/Policies/NoticeToOp-20060623-2.pdf</a>
NW Colorado Notification Policy. <a href="http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf">http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf</a>

## **Attachment Check List**

<u>Att Doc Num</u>	<u>Name</u>
2168057	DOE APPROVAL LETTER
400941537	FORM 2 SUBMITTED
400941592	DEVIATED DRILLING PLAN
400941594	DIRECTIONAL DATA
400945065	WELL LOCATION PLAT
400945066	TOPO MAP

Total Attach: 6 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Corrected lease description and number of acres in the lease from 1296 to 484 as per operator. Changed that minerals beneath this location will be produced from no to yes as per operator. Final review complete.	1/8/2016 10:31:27 AM
LGD	Pass, KHW	12/21/2015 12:07:05 PM
Permit	Added DOE Approval Letter. Ready to pass.	12/11/2015 1:37:20 PM
Permit	Required files sent to DOE for their approval. Questioning the distance to wellbore by other operator.	12/9/2015 4:15:44 PM
Engineer	Evaluated existing offset oil and gas wells within 1,500 feet of this wellbore. No mitigation required.  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 to evaluate the adequacy of the operator's proposed surface casing setting depth. The deepest water well within one mile is 78 feet.	12/7/2015 9:19:46 AM
Permit	Passed completeness.	12/3/2015 8:58:06 AM

Total: 6 comment(s)