

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:
401410323

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
01/09/2018

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

Refilling
Sidetrack

Well Name: NPR Well Number: 15D-11-596
Name of Operator: CAERUS PICEANCE LLC COGCC Operator Number: 10456
Address: 1001 17TH STREET #1600
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: SENE Sec: 15 Twp: 5S Rng: 96W Meridian: 6
Latitude: 39.616639 Longitude: -108.146706

Footage at Surface: 2075 Feet FNL/FSL FNL 177 Feet FEL/FWL FWL

Field Name: GRAND VALLEY Field Number: 31290
Ground Elevation: 6428 County: GARFIELD

GPS Data:
Date of Measurement: 08/28/2017 PDOP Reading: 3.4 Instrument Operator's Name: Bart Hunting

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

Footage at Top of Prod Zone: FNL/FSL FSL 1320 FWL Bottom Hole: FNL/FSL FSL 1320 FWL
127 FSL 1320 FWL 127 FSL 1320 FWL
Sec: 11 Twp: 5S Rng: 96W Sec: 11 Twp: 5S Rng: 96W

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: Right of Way

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. 10, T5S-R96W - SESE, SWSE; Sec. 11, T5S-R96W - SW; Sec. 14, T5S-R96W - NW, N2SW; Sec. 15, T5S-R96W - NE, N2SE
Caerus Piceance LLC is the mineral owner for all acres described.

Total Acres in Described Lease: 720 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: 1311 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: 5280 Feet
 Above Ground Utility: 5280 Feet
 Railroad: 5280 Feet
 Property Line: 177 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: 260 Feet

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

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

SPACING & FORMATIONS COMMENTS

Sec. 11, T5S-R96W - 10-acre density

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	510-13		

DRILLING PROGRAM

Proposed Total Measured Depth: 10160 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 609

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE 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	54	0	100	218	100	0
SURF	14+3/4	9+5/8	36	0	2500	994	2500	0
1ST	8+3/4	4+1/2	11.6	0	10160	1068	10160	

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: 425805

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: 1/9/2018 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: 3/9/2018

Expiration Date: 03/08/2020

API NUMBER
05 045 23855 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 (4+1/2" First String) to a minimum of 200' above the Wasatch G formation. Adjust cement quantities as needed. Verify production casing cement coverage with a cement bond log.</p> <p>4) The Operator shall monitor the bradenhead pressure of the proposed well and all offset wells under Operator's control which penetrate the stimulated formation and have a treated interval separation of 300 feet or less. Monitoring shall occur from 24 hours prior to stimulation and shall continue until 24 hours after stimulation is complete. Recording shall be at a frequency of at least once per 24 hours with the capability of recording the maximum pressure observed during each 24 hour period. Operator shall notify COGCC Engineering staff if bradenhead pressures increase by more than 200 psig.</p>
	Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).

Best Management Practices

No BMP/COA Type

Description

1	Planning	The first well drilled on the NPR H15 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	Closed loop system will be used. No pits will be built. Caerus will ensure 110 percent secondary containment for any potential volume of fluids that may be released.

Total: 2 comment(s)

Applicable Policies and Notices to Operators

Piceance Rulison Field - Notice to Operators.

<http://cogcc.state.co.us/documents/reg/Policies/NoticeToOp-20060623-2.pdf>

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

Att Doc Num

Name

401410323	FORM 2 SUBMITTED
401492341	WELL LOCATION PLAT

401492343	DEVIATED DRILLING PLAN
401492344	DIRECTIONAL DATA
401506366	SURFACE AGRMT/SURETY

Total Attach: 5 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	corrected bottom of cement for surfae casing to agree with setting depth	03/09/2018
Permit	Final review complete.	03/05/2018
Engineer	<p>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. Depths to formation tops in offset oil and gas wells, locally-available geophysical logs, and hydrogeologic information was used to evaluate the adequacy of the operator's proposed surface casing setting depth.</p> <p>Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of the wellbores on this pad meet standards. No mitigation required. N.PARACHUTE WF09D #M14 596 API #045-13367 (~720' from one planned well on the pad) was completed in the Wasatch and permitted to inject into the Williams Fork and Wasatch (doc# 2082609) in 2008 but injection was not performed. In 2009 a sundry was approved to return the well to production (doc #1905723). Emailed operator regarding Wasatch coverage. Operator provided geologic information that shows the Wasatch G zone is shale with a discontinuous sandstone that may be charged with hydrocarbons in the area. Referred issue to BLM (surface and mineral owner of the surface hole location). BLM requested Wasatch G coverage and operator agreed to increase the cement coverage. Removed operator's planned cement top. See condition of approval #3.</p>	03/02/2018
Permit	Preliminary review complete.	02/01/2018
Permit	Form passes completeness.	01/15/2018
Permit	Returned to draft per Permitting Supervisor.	01/10/2018

Total: 6 comment(s)