

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

| | |
|---|---|
| TYPE OF WELL OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____ ZONE TYPE SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/> | Refiling <input type="checkbox"/> Sidetrack <input type="checkbox"/> |
|---|---|

Date Received:
09/19/2018

Well Name: NPR Well Number: 15C-9-596

Name of Operator: CAERUS PICEANCE LLC COGCC Operator Number: 10456

Address: 1001 17TH STREET #1600

City: DENVER State: CO Zip: 80202

Contact Name: Michelle Molinar Phone: (720)880-6347 Fax: (303)565-4606

Email: mmolinar@caerusoilandgas.com

RECLAMATION FINANCIAL ASSURANCE
Plugging and Abandonment Bond Surety ID: 20130021

WELL LOCATION INFORMATION

QtrQtr: NWNE Sec: 16 Twp: 5S Rng: 96W Meridian: 6

Latitude: 39.619316 Longitude: -108.171993

| | | |
|--------------------------------------|------------|------------|
| Footage at Surface: <u>1098</u> Feet | FNL/FSL | FEL/FWL |
| <u>FNL</u> <u>2036</u> Feet | <u>FNL</u> | <u>FEL</u> |

Field Name: GRAND VALLEY Field Number: 31290

Ground Elevation: 8300 County: GARFIELD

GPS Data:
Date of Measurement: 09/05/2018 PDOP Reading: 2.2 Instrument Operator's Name: Bart Hunting

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

| | | | |
|--|--|-----------------------------|----------------|
| Footage at Top of Prod Zone: <u>FNL/FSL</u> | <u>FEL/FWL</u> | Bottom Hole: <u>FNL/FSL</u> | <u>FEL/FWL</u> |
| <u>389</u> <u>FSL</u> <u>1420</u> <u>FWL</u> | <u>359</u> <u>FSL</u> <u>1337</u> <u>FWL</u> | | |
| Sec: <u>9</u> Twp: <u>5S</u> Rng: <u>96W</u> | Sec: <u>9</u> Twp: <u>5S</u> Rng: <u>96W</u> | | |

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. 9 – T5S-R96W - All
 Sec. 16 – T5S-R96W - All
 And other lands

Total Acres in Described Lease: 25456 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: 3988 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: 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, 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: 250 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. 9 - 5S-96W, 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 | 1-229 | | |

DRILLING PROGRAM

Proposed Total Measured Depth: 10943 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 was submitted with 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 | 3000 | 1205 | 3000 | 0 |
| 1ST | 8+3/4 | 4+1/2 | 11.6# | 0 | 10943 | 991 | 10943 | 5342 |

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: 335967

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: Michelle Molinar

Title: Drilling Regulatory Tech Date: 9/19/2018 Email: mmolinar@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: 11/30/2018

Expiration Date: 11/29/2020

API NUMBER

05 045 24217 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> |
|-----------------|--|
| | <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 all Mesaverde 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) Comply with all provisions of the June 12, 2008 Notice to Operators Drilling Wells within 3/4 Mile of the Rim of the Roan Plateau in Garfield County - Pit Design, Construction and Monitoring Requirements.</p> |

Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|-----------|--------------------------------|--|
| 1 | Planning | One of the first wells drilled on the pad will be logged with 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 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 shall clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open-hole logs were run. |
| 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

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|--|
| 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 |
| Pit Design, Construction and Monitoring Requirements Within 3/4 mile of the Rim of the Roan Plateau. http://cogcc.state.co.us/documents/reg/Policies/RoanCliffsNTO-06-12-2008.pdf |

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|------------------------|
| 401759636 | FORM 2 SUBMITTED |
| 401759789 | WELL LOCATION PLAT |
| 401765270 | DEVIATED DRILLING PLAN |

401765273

DIRECTIONAL DATA

Total Attach: 4 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|---|----------------------------|
| Permit | -Input Field name and number -Corrected spacing order number from 510-13 to 1-229 -Referenced well with open hole log cannot be used as log does not log into surface casing. Requested to use new BMP and remove logging exception. -Changed BMP for 317.p. compliance | 11/26/2018 |
| Permit | Corrected lease description by adding "and other lands". Changed number of lease acres from 1280 to 25,456. Corrected distance to lease line from 1337' to 3988; all with operator concurrence. | 11/19/2018 |
| Permit | Corrected distance to property line in cultural section from 5287 to 5280 with operator concurrence. | 10/30/2018 |
| Engineer | Offset water well check: There are no permitted water wells within one mile of this proposed surface hole location. Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of the wellbores on this pad meet standards. No mitigation required. | 10/10/2018 |
| Permit | Replaced 317.p BMP as directed by operator. Form passes completeness. | 09/27/2018 |

Total: 5 comment(s)