

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:

400822379

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:

07/20/2015

Well Name: Terrell

Well Number: 25-761-0460AH

Name of Operator: CAERUS WASHCO LLC

COGCC Operator Number: 86610

Address: 600 17TH STREET - STE #1600N

City: DENVER State: CO

Zip: 80202-5403

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: 20070099

WELL LOCATION INFORMATION

QtrQtr: SESW Sec: 24 Twp: 7N Rng: 61W Meridian: 6

Latitude: 40.556210

Longitude: -104.159503

Footage at Surface: 1040 feet FNL/FSL FSL 1731 feet FEL/FWL FWL

Field Name: WILDCAT

Field Number: 99999

Ground Elevation: 5018

County: WELD

GPS Data:

Date of Measurement: 01/16/2015 PDOP Reading: 1.6 Instrument Operator's Name: James A. Kalmon

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

460 FNL 2561 FWL 460 FSL 2561 FWL
Sec: 25 Twp: 7N Rng: 61W Sec: 25 Twp: 7N Rng: 61W

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.)

Mineral Lease Map attached.

Total Acres in Described Lease: 640 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: 460 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1257 Feet
Building Unit: 1257 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 4405 Feet
Above Ground Utility: 294 Feet
Railroad: 5280 Feet
Property Line: 418 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 Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 159 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 460 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Sec. 25, T7N, R61W. Attached find a copy of the corrected spacing order, "Corrected July 15, 2015". This document is labeled "Other".

OBJECTIVE FORMATIONS

| Objective Formation(s) | Formation Code | Spacing Order Number(s) | Unit Acreage Assigned to Well | Unit Configuration (N/2, SE/4, etc.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| NIOBRARA | NBRR | 407-1283 | 640 | 7N61W Sec 25: ALL |

DRILLING PROGRAM

Proposed Total Measured Depth: 11337 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 159 Feet (Including plugged wells)

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 318A

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: ONSITE Cuttings Disposal Method: Beneficial reuse

Other Disposal Description:

It is anticipated drilling fluids will be recycled and re-used in future drilling operations

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 | 75 | 163 | 75 | 0 |
| SURF | 12+1/4 | 9+5/8 | 36# | 0 | 1565 | 116 | 900 | 0 |
| 1ST | 8+3/4 | 7 | 26# | 0 | 6945 | 355 | 6945 | 3500 |
| 1ST LINER | 6+1/8 | 4+1/2 | 11.6# | 5925 | 11337 | 285 | 11337 | 5925 |

☐ 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 Operator's Wellbore Integrity Contact: Jace Smith at jsmith@caerusoilandgas.com

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: Reed Haddock

Title: Sr. Regulatory Specialist Date: 7/20/2015 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: 8/27/2015

Expiration Date: 08/26/2017

API NUMBER

05 123 42105 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>Kirchoff #34-25 (API #123-10125)</p> <p>Operator acknowledges the proximity of the above listed well. Operator agrees to provide mitigation Option 3 (per the DJ Basin Horizontal Offset Policy) ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 "OFFSET MITIGATION COMPLETED" for the remediated well, referencing the API Number of the proposed horizontal well(s) stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of the proposed wells.</p> |
| | <p>1) Note surface casing setting depth change from 900' to 1565'. Increase cement coverage accordingly and cement to surface.</p> <p>2) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.</p> <p>3) Comply with Rule 317.j and provide cement coverage from TD to a minimum of 200' above Niobrara. Verify coverage with cement bond log.</p> <p>4) Comply with Rule 321. Run and submit Directional Survey from TD to base of surface casing. Ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.</p> |

Best Management Practices

No BMP/COA Type

Description

| | | |
|---|--------------------------------|--|
| 1 | Planning | Rule 317.p - One of the first wells drilled on the pad will be logged with open-hole Resistivity Log and Gamma Ray Log from the kick-off point 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 horizontal portion of every well will be logged with a measured-while-drilling gammaray log. 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 | 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

Notice Concerning Operating Requirements for Wildlife Protection.

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|----------------------------|
| 400822379 | FORM 2 SUBMITTED |
| 400859993 | WELL LOCATION PLAT |
| 400859994 | TOPO MAP |
| 400867425 | SURFACE AGRMT/SURETY |
| 400867427 | MINERAL LEASE MAP |
| 400867429 | DEVIATED DRILLING PLAN |
| 400867430 | DIRECTIONAL DATA |
| 400867670 | OffsetWellEvaluations Data |
| 400870290 | OTHER |
| 400874605 | EXCEPTION LOC REQUEST |

Total Attach: 10 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|--------------------------|
| Permit | Final Review Completed. No LGD or public comment received. | 8/27/2015 8:15:30 AM |
| Engineer | Surface casing setting depth changed fromm 900' to 1565' at the operator's request. | 8/17/2015 3:31:46 PM |
| Permit | Operator revised Drilling Fluid Disposal to Offsite – Commercial Disposal and added comment. Distance to Building is further than the distance to Building Unit. Changed distance to Building to match Building Unit. Revised spacing order attached as 'other' | 8/10/2015 1:09:48 PM |
| Permit | Passed completeness. | 7/27/2015 10:49:12 AM |
| Permit | Returned to draft. 1.) Please amend the Exception Location Request attachment-a statement that includes the specific section in the SUA that contains the 318A.a waiver. | 7/24/2015 12:52:38 PM |
| Permit | Returned to draft. 1.) Zone Type cannot be N/A if there are Objective Formations listed. 2.) Exception Location Request attachment is missing. 3.) Operator's Wellbore Integrity Contact requires an email address. 4.) Rule 318A.a should be selected. | 7/22/2015 7:24:12 AM |

Total: 6 comment(s)