

FORM
2
Rev
02/19

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:
401921472

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
02/20/2019

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

Refiling
Sidetrack

Well Name: Wolf Creek Well Number: 9-D3
Name of Operator: ROCKY MTN NATURAL GAS LLC ADBA BLACK HILLS ENERGY COGCC Operator Number: 100321
Address: 1515 WYNKOOP STREET #500
City: DENVER State: CO Zip: 80202
Contact Name: Mark Arnold Phone: (720)899-6965 Fax: ()
Email: Mark.Arnold@blackhillscorp.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: _____

WELL LOCATION INFORMATION

QtrQtr: NESW Sec: 36 Twp: 8S Rng: 90W Meridian: 6
Latitude: 39.312871 Longitude: -107.395739
Footage at Surface: FNL/FSL FEL/FWL
1654 Feet FSL 957 Feet FWL
Field Name: WOLF CREEK Field Number: 94010
Ground Elevation: 10163 County: PITKIN
GPS Data:
Date of Measurement: 08/20/2018 PDOP Reading: 1.7 Instrument Operator's Name: Lauren Vance
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
747 FSL 2772 FEL 747 FSL 2772 FEL
Sec: 36 Twp: 8S Rng: 90W Sec: 36 Twp: 8S Rng: 90W

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: oil and gas lease
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.)

T8S R90W S36 ALL, S35 ALL, S26 ALL, S25 SW4, W2SE4, SESE

Total Acres in Described Lease: 2200 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # COC0007498

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 747 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: 1662 Feet
Above Ground Utility: 5280 Feet
Railroad: 5280 Feet
Property Line: 5280 Feet
School Facility: 5280 Feet
School Property Line: 5280 Feet
Child Care Center: 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: 1006 Feet

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

Federal or State Unit Name (if appl): Wolf Creek Unit Unit Number: COC030114

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.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| COZZETTE | COZZ | | | |

DRILLING PROGRAM

Proposed Total Measured Depth: 5608 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: 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 |
|-------------|--------------|----------------|-------|---------------|---------------|-----------|---------|---------|
| CONDUCTOR | 26 | 18 | 40.25 | 0 | 60 | 163 | 60 | 0 |
| SURF | 13+1/2 | 9+5/8 | 36 | 0 | 1200 | 299 | 1200 | 0 |
| 1ST | 8+3/4 | 7 | 29 | 0 | 5608 | 374 | 5608 | 1100 |

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 well will be drilled from an existing location, the Wolf Creek Unit 9 pad. The pad will require minimal new disturbance, approximately 0.012 acres outside of its current configuration. This will include expanding the graveled surface of the pad to allow for the drilling rig to drill these two wells on this single pad.

This application is in a Comprehensive Drilling Plan No CDP #: _____

Location ID: 314168

Is this application being submitted with an Oil and Gas Location Assessment application? No

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Jessica Donahue

Title: Regulatory Supervisor Date: 2/20/2019 Email: Jessicadonahue@summiteng.n

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: _____

Expiration Date: _____

| |
|-------------------|
| API NUMBER |
| 05 |

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> |
|-----------------|--------------------|
| | |

Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|-----------|--------------------------------|--|
| 1 | Drilling/Completion Operations | Drilling of these replacement wells is to facilitate injection-withdrawal in an existing gas storage field. Past drilling in the field area indicated a high probability of loss circulation. Pressure gradients in the area are subnormal. Even if drilled conventionally to total depth, the mud weight differential pressure and loss of returns would make conventional logging a high risk method. To reduce risk, cased-hole drilling will be utilized above the Cozzette storage zone. Because of the of the cased-hole drilling method, logging will commence after casing is run. |

Total: 1 comment(s)

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|------------------------|
| 401942996 | DIRECTIONAL DATA |
| 401942999 | DEVIATED DRILLING PLAN |
| 401943005 | WELL LOCATION PLAT |

Total Attach: 3 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|---------------------|
| Permit | <p>Returned to draft:</p> <p>The captioned form was submitted on or after the effective date (February 14, 2019) of the school setback rules. The form has been updated to include the school data fields. The new fields must be completed prior to resubmitting.</p> <p>The open hole logging BMP must be updated per the guidance published February 19, 2019.</p> | 02/22/2019 |

Total: 1 comment(s)

Public Comments

No public comments were received on this application during the comment period.