

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:
400786963

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

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

Refilling
Sidetrack

Date Received:
02/05/2015

Well Name: COPPERHEAD Well Number: 27N-15HZX
Name of Operator: KERR MCGEE OIL & GAS ONSHORE LP COGCC Operator Number: 47120
Address: P O BOX 173779
City: DENVER State: CO Zip: 80217-3779
Contact Name: Cheryl Light Phone: (720)929-6461 Fax: (720)929-7461
Email: cheryl.light@anadarko.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20010124

WELL LOCATION INFORMATION

QtrQtr: NWSE Sec: 22 Twp: 2N Rng: 67W Meridian: 6
Latitude: 40.122945 Longitude: -104.875177

Footage at Surface: 2368 feet FNL/FSL FSL 2165 feet FEL/FWL FEL

Field Name: WATTENBERG Field Number: 90750

Ground Elevation: 5028 County: WELD

GPS Data:
Date of Measurement: 11/18/2013 PDOP Reading: 2.6 Instrument Operator's Name: OWEN MCKEE

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
71 FSL 980 FEL 50 FNL 1087 FEL
Sec: 15 Twp: 2N Rng: 67W Sec: 15 Twp: 2N Rng: 67W

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.)

Township 2 North, Range 67 West, 6th P.M.
Section 15: S/2
Weld County, Colorado

Total Acres in Described Lease: 320 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: 0 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1972 Feet
Building Unit: 1973 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 2225 Feet
Above Ground Utility: 2215 Feet
Railroad: 5280 Feet
Property Line: 270 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: 74 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 660 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

2N-67W Section 10: S/2SE/4; Section 15: E/2; Section 22: N/2NE/4

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 | | 480 | GWA |

DRILLING PROGRAM

Proposed Total Measured Depth: 13635 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 74 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: Recycle/reuse

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Other

Other Disposal Description:

Please see Comments section. Disposal description will not fit in space provided.

Beneficial reuse or land application plan submitted? Yes

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 |
|-------------|--------------|----------------|-------|---------------|---------------|-----------|---------|---------|
| SURF | 13+1/2 | 9+5/8 | 36 | 0 | 1320 | 500 | 1320 | 0 |
| 1ST | 8+3/4 | 7+0/0 | 26 | 0 | 8479 | 860 | 8479 | 0 |
| 1ST LINER | 6+1/8 | 4+1/2 | 11.6 | 7612 | 13635 | 390 | 13635 | 7712 |

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

UNPLANNED SIDETRACK - VERBAL GIVEN BY DIANA BURN 02/03/15 (see attached)

7" casing string fell to bottom after the box collar parted from the shop end of a casing joint. Noble Casing Crew had picked up the next joint of casing, tied it into the stump, filled the string with active mud, and proceeded to pick up on the elevators. After the Driller picked up just enough to clear the slips, and slips were removed, the casing dropped from the elevators and proceeded to descend down hole. The floor hands made a good effort to throw the slips, but the fall rate was too great. Note: The collar that separated from the pin end was recovered from the elevators.

Total measured depth reached (also have TVD) - - 8,445' MD 7,434' TVD

Casing sizes set and measured depth - 9-5/8" set at 1,320'

Description of fish-including top and bottom - - 7" casing (Top = 2,462'; Bottom = 6,637' MD)

Description of cement plugs - - Kick Off Plug ? Set Depth = 2,262' MD, Height = 800', Volume = 59.5 bbls
7" Casing Plug ? Set Depth = 6,276' MD, Height = 1,000', Volume = 65 bbls

Type of cement you will be using including weight, yield, and sacks. If an open hole sidetrack make that point clear - - Kick Off Plug ? 17#, Class G, 52 bbls, Yield 0.99 cf/sk
7" Casing Plug ? 12.7#, Type III, 65 bbls, Yield 2.11 cf/sk

Measured depth and TVD of sidetrack point - - 1,652' MD 1,647' TVD

Proposed target formation of sidetrack hole if different than permitted - Same as permitted

BHL of sidetrack hole. - BHL (i.e. 50' FNL, 1087' FEL, Section 15)

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: 439805

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: CHERYL LIGHT

Title: SR. REGULATORY ANALYST Date: 2/5/2015 Email: DJREGULATORY@ANADARK

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: *Matthew Lee* Director of COGCC Date: 2/6/2015

Expiration Date: 02/05/2017

API NUMBER
05 123 40562 01

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 |
|-----------------|--------------------|
| | |

Best Management Practices

No BMP/COA Type

Description

| | | |
|--|--|--|
| | | |
|--|--|--|

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

Att Doc Num

Name

| | |
|-----------|------------------------|
| 1696479 | DEVIATED DRILLING PLAN |
| 400786963 | FORM 2 SUBMITTED |
| 400786979 | WELLBORE DIAGRAM |
| 400786983 | CORRESPONDENCE |
| 400787021 | WELL LOCATION PLAT |
| 400787023 | DIRECTIONAL DATA |

Total Attach: 6 Files

General Comments

User Group

Comment

Comment Date

| | | |
|----------|--|---------------------|
| Engineer | Original permit submitted and approved used directional plan from 8 September 2014. Plan changed slightly and drilling engineer was using plan from 18 December 2014 which was never submitted to COGCC. So the drilling engineer thoguht the sidetrack and original well bottom hole locations were the same. Also corrected typo in email (well ends in section 15 instead of 25). | 2/6/2015 8:22:47 AM |
| Permit | Final Review Completed. | 2/6/2015 8:20:11 AM |
| Engineer | Offset wells evaluated. | 2/5/2015 3:44:39 PM |
| Permit | This is an Unplanned Sidetrack for the Copperhead 27N-15HZ (API# 123-40562). Attached corrected Deviated Drilling plan. Permitting Review Complete. | 2/5/2015 2:15:43 PM |
| Permit | Per operator there was a change in BHL. BHL for sidetrack = 50' FNL, 1087' FEL, Section 15). And, changed Section number from 22 to 15 for BHL. This permit has passed completeness. | 2/5/2015 2:05:29 PM |
| Permit | Returned to draft: BHL's don't match original APD as stated in correspondence. | 2/5/2015 1:46:37 PM |

Total: 6 comment(s)