

FORM
2

Rev
12/05

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:

400370691

Date Received:

APPLICATION FOR PERMIT TO:

1. Drill, Deepen, Re-enter, Recomplete and Operate

2. TYPE OF WELL

OIL GAS COALBED OTHER _____
SINGLE ZONE MULTIPLE COMMINGLE

Refiling
Sidetrack

PluggingBond SuretyID

20010124

3. Name of Operator: KERR-MCGEE OIL & GAS ONSHORE LP

4. COGCC Operator Number: 47120

5. Address: P O BOX 173779

City: DENVER State: CO Zip: 80217-3779

6. Contact Name: Cheryl Light Phone: (720)929-6461 Fax: (720)929-7461

Email: cheryl.light@anadarko.com

7. Well Name: HOWARD Well Number: 4C-21HZ

8. Unit Name (if appl): _____ Unit Number: _____

9. Proposed Total Measured Depth: 12325

WELL LOCATION INFORMATION

10. QtrQtr: SESW Sec: 21 Twp: 1N Rng: 67W Meridian: 6

Latitude: 40.030503 Longitude: -104.899549

Footage at Surface: 431 feet FNL/FSL FSL 1522 feet FEL/FWL FWL

11. Field Name: WATTENBERG Field Number: 90750

12. Ground Elevation: 5025 13. County: WELD

14. GPS Data:

Date of Measurement: 11/05/2012 PDOP Reading: 1.9 Instrument Operator's Name: BEN HARDENBERGH

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

Footage at Top of Prod Zone: FNL/FSL 650 FSL 460 FWL 460 Bottom Hole: FNL/FSL 510 FEL/FWL FWL
Sec: 21 Twp: 1N Rng: 67W Sec: 21 Twp: 1N Rng: 67W

16. Is location in a high density area? (Rule 603b)? Yes No

17. Distance to the nearest building, public road, above ground utility or railroad: 404 ft

18. Distance to nearest property line: 209 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 650 ft

20. LEASE, SPACING AND POOLING INFORMATION

| Objective Formation(s) | Formation Code | Spacing Order Number(s) | Unit Acreage Assigned to Well | Unit Configuration (N/2, SE/4, etc.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| CODELL | CODL | | 160 | GWA |

21. Mineral Ownership: Fee State Federal Indian Lease #: _____

22. Surface Ownership: Fee State Federal Indian

23. Is the Surface Owner also the Mineral Owner? Yes No Surface Surety ID#: _____

23a. If 23 is Yes: Is the Surface Owner(s) signature on the lease? Yes No

23b. If 23 is No: Surface Owners Agreement Attached or \$25,000 Blanket Surface Bond \$2,000 Surface Bond \$5,000 Surface Bond

24. Using standard QtrQtr, Sec, Twp, Rng format enter entire mineral lease description upon which this proposed wellsite is located (attach separate sheet/map if you prefer):

Horizontal wellbore will produce from multiple leases, please see attached Lease Description.

25. Distance to Nearest Mineral Lease Line: 460 ft 26. Total Acres in Lease: 5741

DRILLING PLANS AND PROCEDURES

27. Is H2S anticipated? Yes No If Yes, attach contingency plan.

28. Will salt sections be encountered during drilling? Yes No

29. Will salt (>15,000 ppm TDS CL) or oil based muds be used during drilling? Yes No

30. If questions 28 or 29 are yes, is this location in a sensitive area (Rule 901.e)? Yes No

31. Mud disposal: Offsite Onsite

If 28, 29, or 30 are "Yes" a pit permit may be required.

Method: Land Farming Land Spreading Disposal Facility Other: _____

Note: The use of an earthen pit for Recompletion fluids requires a pit permit (Rule 905b). If air/gas drilling, notify local fire officials.

| 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 | 0 | 900 | 670 | 900 | 0 |
| 1ST | 8+3/4 | 7 | 26.0 | 0 | 8,169 | 800 | 8,169 | 0 |
| 1ST LINER | 6+1/8 | 4+1/2 | 11.6 | 7126 | 12,325 | | | |

32. BOP Equipment Type: Annular Preventer Double Ram Rotating Head None

33. Comments No conductor casing will be used. Unit Configuration CODL: W/2W/2. The surface location of this well is an exception to Rule 318A.a and to Rule 318A.c. This well is not within the GWA surface location window and does not meet the twinning requirement due to the number of wells planned for this area and at the request of the surface owner. An exception location request letter and signed waivers are attached to the Form 2 and Form 2A. Operator will run open hole logs into the surface casing on the first well drilled on this pad.

34. Location ID: _____

35. Is this application in a Comprehensive Drilling Plan ? Yes No

36. Is this application part of submitted Oil and Gas Location Assessment ? Yes 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: _____ Email: DJRegulatory@anadarko.com

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: _____

API NUMBER

05

Permit Number: _____ Expiration Date: _____

CONDITIONS OF APPROVAL, IF ANY:

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.

Data retrieval failed for the subreport 'IntPolicy_NTO' located at: W:\inetpub\Net\Reports\policy_nto.rdl. Please check th

Attachment Check List

| Att Doc Num | Name |
|-------------|-------------------------|
| 400370696 | DEVIATED DRILLING PLAN |
| 400370697 | PLAT |
| 400370698 | 30 DAY NOTICE LETTER |
| 400370699 | SURFACE AGRMT/SURETY |
| 400370700 | LEGAL/LEASE DESCRIPTION |
| 400370701 | EXCEPTION LOC WAIVERS |
| 400370702 | EXCEPTION LOC REQUEST |
| 400370703 | PROPOSED SPACING UNIT |
| 400370704 | OTHER |
| 400371768 | DIRECTIONAL DATA |

Total Attach: 10 Files

General Comments

| User Group | Comment | Comment Date |
|------------|---------|--------------|
| | | |

Total: 0 comment(s)

BMP

| <u>Type</u> | <u>Comment</u> |
|--------------------------------|--|
| Drilling/Completion Operations | <p>"Prior to drilling operations, Operator may perform an anti-collision review of existing offset wells that have the potential of being within close proximity of the proposed well. This anti-collision review may include MWD or gyro surveys and surface locations of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed wellpath with its respective error of uncertainty. If current surveys do not exist for the offset wells, Operator may have gyro surveys conducted to verify bottomhole location. The proposed well may only be drilled if the anti-collision review results indicate that the risk of collision is sufficiently low as defined by the anti-collision plan, with separation factors greater than 1.5, or if the risk of collision has been mitigated through other means including shutting in wells, plugging wells, increased drilling fluid in the event of lost returns or as is appropriate for the specific situation. In the event of an increased risk of collision, that risk will be mitigated to prevent harm to people, the environment or property. For the proposed well, upon conclusion of drilling operations, an as-constructed directional survey will be submitted to COGCC with the Form 5."</p> |
| Drilling/Completion Operations | <p>Kerr McGee acknowledges and will comply with the COGCC Policy for Bradenhead Monitoring during Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012.</p> |

Total: 2 comment(s)