

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:

400346830

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 &amp; 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: CROWDER Well Number: 16N-19HZ

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

9. Proposed Total Measured Depth: 16993

## WELL LOCATION INFORMATION

10. QtrQtr: NENE Sec: 18 Twp: 2N Rng: 65W Meridian: 6

Latitude: 40.144567 Longitude: -104.700336

Footage at Surface: 504 feet FNL/FSL FNL 853 feet FEL/FWL FEL

11. Field Name: WATTENBERG Field Number: 90750

12. Ground Elevation: 4953 13. County: WELD

## 14. GPS Data:

Date of Measurement: 03/19/2012 PDOP Reading: 2.2 Instrument Operator's Name: CONNER MAHOSKEY

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

Footage at Top of Prod Zone: FNL/FSL FNL/FWL Bottom Hole: FNL/FSL FNL/FWL  
 633 FNL 1000 FEL 460 FSL 958 FEL  
 Sec: 18 Twp: 2N Rng: 68W Sec: 19 Twp: 2N Rng: 65W

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: 515 ft

18. Distance to nearest property line: 185 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 18 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.)
NIOBRARA	NBRR		640	GWA

21. Mineral Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian Lease #: \_\_\_\_\_22. Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian23. 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 ☒ No23b. 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: 0 ft 26. Total Acres in Lease: 6035

### 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	1,040	780	1,040	0
1ST	8+3/4	7	26.0	0	7,435	710	7,435	0
1ST LINER	6+1/8	4+1/2	11.6	6386	16,993			

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

33. Comments No conductor casing will be used. Unit Configuration NBRR: Sec. 18:E/2; Sec. 19:E/2. Kerr-McGee Oil & Gas Onshore LP ("KMG") respectfully requests the Director to waive Rule 318A.m for this well. KMG is the operator of the encroached upon well(s). 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./Operator intends to use an oil based drilling fluid during drilling of the lateral section of the wellbore. Cuttings will be processed on location and further remediated in our land farm and/or disposed of at a commercial waste disposal facility. The drilling fluid will be returned to the vendor and/or disposed at a commercial waste disposal facility.

34. Location ID: 305691

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:\Instrub\Net\Report\policy\_nto.rdl. Please check th

### Attachment Check List

Att Doc Num	Name
400346835	DEVIATED DRILLING PLAN
400346836	30 DAY NOTICE LETTER
400346837	PLAT
400346839	SURFACE AGRMT/SURETY
400346840	LEGAL/LEASE DESCRIPTION
400346841	EXCEPTION LOC REQUEST
400346843	EXCEPTION LOC WAIVERS
400346844	VARIANCE REQUEST
400346845	PROPOSED SPACING UNIT
400346846	OTHER
400368834	DIRECTIONAL DATA

Total Attach: 11 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>

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> <p>At the time of permitting; the operator has identified the following well(s) as being within close proximity of the proposed well:</p> <p>CROWDER 16N-19HZ: - MUSE 1</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)