

FORM
2Rev
12/05

State of Colorado

Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



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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 ☐

Document Number:

400241161

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: Rebecca Heim Phone: (720)929-6361 Fax: (720)929-7361

Email: rebecca.heim@anadarko.com

7. Well Name: WARDELL Well Number: 29N-20HZ

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

9. Proposed Total Measured Depth: 16391

WELL LOCATION INFORMATION

10. QtrQtr: SWSW Sec: 29 Twp: 3N Rng: 65W Meridian: 6

Latitude: 40.190606 Longitude: -104.693882

 Footage at Surface: 518 feet FNL/FSL 850 feet FEL/FWL
 FSL FWL

11. Field Name: WATTENBERG Field Number: 90750

12. Ground Elevation: 4902 13. County: WELD

14. GPS Data:

Date of Measurement: 11/04/2011 PDOP Reading: 2.4 Instrument Operator's Name: OWEN McKEE

15. 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
 1068 FSL 1160 FEL 460 FNL 1160 FWL
 Sec: 29 Twp: 3N Rng: 65W Sec: 20 Twp: 3N 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: 483 ft

18. Distance to nearest property line: 503 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 443 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	20: W/2, 29: W/2

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):

Please see attached Oil and Gas Lease.

25. Distance to Nearest Mineral Lease Line: 460 ft

26. Total Acres in Lease: 480

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	12+1/4	9+5/8	36.0	0	900	670	900	0
1ST	8+3/4	7	26.0	0	7,354	720	7,354	
1ST LINER	6+1/8	4+1/2	11.6	6353	16,391			

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

33. Comments No conductor casing will be used. 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).

34. Location ID: 329106

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: Rebecca Heim

Title: Regulatory Analyst II Date: 1/18/2012 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: David S. Neslin Director of COGCC Date: 2/25/2012

API NUMBER

05 123 35141 00

Permit Number: _____ Expiration Date: 2/24/2014

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.

1)Provide 24 hour notice of MIRU to Mike Hickey via e-mail at mike.hickey@state.co.us.
 2)Comply with Rule 317.i and provide cement coverage from the end of the production casing to a minimum of 200' above the Niobrara and from 200' below Sussex to 200' above Sussex. Verify coverage with a cement bond log.
 3)Comply with Rule 321. Run and submit Directional Survey from the end of production casing to base of surface casing. Ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.

Requires water sampling. I've asked for a letter requesting exception to Rule 318A.m from Opr. Form on Hold.

Attachment Check List

Att Doc Num	Name
2113331	VARIANCE REQUEST
2481401	SURFACE CASING CHECK
400241161	FORM 2 SUBMITTED
400241162	DEVIATED DRILLING PLAN
400241163	PLAT
400241164	TOPO MAP
400241165	30 DAY NOTICE LETTER
400241166	SURFACE AGRMT/SURETY
400241167	OIL & GAS LEASE
400241169	PROPOSED SPACING UNIT
400241170	OTHER
400242490	DIRECTIONAL DATA

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Corrected top of production as directed by opr. Final review complete.	2/21/2012 2:17:05 PM
Permit	Final review complete.	2/16/2012 9:12:49 AM
Permit	Rec'd & attached variance request letter. Ready to pass pending public comment 2/9/12.	2/7/2012 10:33:08 AM

Total: 3 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Drilling/Completion Operations	<p>1. At least seven (7) days prior to fracture stimulation, the operator is to notify all operators of non-operated wells within 300 feet of the wellbore to be fracture stimulated of the anticipated date stimulation date and the recommended best management practice to shut-in all wells within 300' of the stimulated wellbore completed in the same formation.</p> <p>2. The operator will monitor the bradenhead pressure of all wells operated by the operator within 300 feet of the well to be fracture stimulated.</p> <p>3. Bradenhead pressure gauges are to be installed 24 hours prior to stimulation. The gauges are to read at least once during every 24-hour period until 24-hours after stimulation is completed (post flowback). The gauges are to be of the type able to read current pressure and record the maximum encountered pressure in a 24-hour period. The gauge is to be reset between each 24-hour period. The pressures are to be recorded and saved. Alternate electronic measurement may be used to record the prescribed pressures.</p> <p>4. If at any time during stimulation or the 24-hour post-stimulation period, the bradenhead annulus pressure of the treatment well or offset wells increases more than 200 psig, as per Rule 341, the operator of the well being stimulated shall verbally notify the Director as soon as practicable, but no later than twenty-four (24) hours following the incident. Within fifteen (15) days after the occurrence, the operator shall submit a Sundry Notice, Form 4, giving all details, including corrective actions taken.</p>
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> <ul style="list-style-type: none">- HSR-RAININ 13-29- WARDELL 29-29- WARDELL 22-20- WARDELL 35-29- WARDELL 33-29

Total: 2 comment(s)