

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:

400316040

Date Received:

08/31/2012

PluggingBond SuretyID

20010124

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 ☐

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: SPARBOE Well Number: 27N-26HZ

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

9. Proposed Total Measured Depth: 16952

WELL LOCATION INFORMATION

10. QtrQtr: SWSE Sec: 35 Twp: 2N Rng: 65W Meridian: 6

Latitude: 40.088446 Longitude: -104.628083

Footage at Surface: 342 feet FNL/FSL 1849 feet FEL/FWL FEL

11. Field Name: WATTENBERG Field Number: 90750

12. Ground Elevation: 4953 13. County: WELD

14. GPS Data:

Date of Measurement: 07/11/2012 PDOP Reading: 1.8 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
627 FSL 1341 FEL 460 FNL 1341 FEL
Sec: 35 Twp: 2N Rng: 65W Sec: 26 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: 296 ft

18. Distance to nearest property line: 296 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 317 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 ☐ 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/T2N-R65W SEC 26 SE/4; T2N-R65W SEC 35 E/2

25. Distance to Nearest Mineral Lease Line: 0 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	13+1/2	9+5/8	36.0	0	1,810	620	1,810	0
1ST	8+3/4	7	26.0	0	7,370	630	7,370	0
1ST LINER	6+1/8	4+1/2	11.6	6335	16,952			

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

33. Comments No conductor casing will be used. Unit Configuration NBRR: Sec. 26:E/2; Sec. 35: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. We met with Koch who has the lease on the NE/4 of T2N-R65W Section 26 and they requested that we BH this well on their acreage and allow them to participate in the well.

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: 8/31/2012 Email: DJRegulatory@anadarko.com

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: 10/30/2012

API NUMBER

05 123 36244 00

Permit Number: _____ Expiration Date: 10/29/2014

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)Note surface casing setting depth change from 1300' to 1810'. Increase cement coverage accordingly and cement to surface.
- 2)Provide notice of MIRU via an electronic Form 42.
- 3)Comply with Rule 317.i and provide cement coverage from the 7" casing TD to a minimum of 200' above the Niobrara. Verify coverage with a cement bond log.

Operator must meet water well testing requirements per Rule 318A.

Attachment Check List

Att Doc Num	Name
400316040	FORM 2 SUBMITTED
400316044	DEVIATED DRILLING PLAN
400316045	WELL LOCATION PLAT
400316046	TOPO MAP
400316047	30 DAY NOTICE LETTER
400316048	SURFACE AGRMT/SURETY
400316050	EXCEPTION LOC REQUEST
400316051	EXCEPTION LOC WAIVERS
400316052	VARIANCE REQUEST
400316054	PROPOSED SPACING UNIT
400316055	OTHER
400323053	DIRECTIONAL DATA

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. LGD comment addressed (see BMP's on form 2A); no public comment received.	10/29/2012 9:21:02 AM
Permit	ON HOLD for traffic BMPs on the Form 2A.	10/19/2012 9:08:27 AM
Permit	Final Review Completed. LGD comment addressed (see BMP's attached to form 2A); no public comment received.	10/12/2012 10:13:46 AM
Permit	Horizontal wellbore crosses lease lines within drilling and spacing unit; distance to lease line is 0'; distance to unit boundary is 460'.	10/12/2012 10:00:02 AM
Permit	changed: Question 29 to YES (oil base mud for drilling), Question 30 to NO, Question 31 to Disposal Facility per operator. ON HOLD: w/o 2A LGD issues.	10/1/2012 4:07:50 PM
Engineer	Evalated offset wells for adequate cement coverage.	9/10/2012 2:13:55 PM
Permit	Operator requests approval of a Rule 318Aa and Rule 318Ac exception location: Wellhead is to be located outside of a GWA drilling window and will be located more than 50' from an existing well location. Request and waivers attached.	9/7/2012 2:21:31 PM
Permit	Operator requests approval of a Rule 318Am exception location: Wellbore is to be located less than 150' from an existing wellbore. Request and waivers attached.	9/7/2012 2:21:31 PM
Permit	Reviewed and Approved Operator's request for omission of open hole logs.	9/7/2012 2:21:29 PM
Permit	ok to pass.	9/7/2012 2:21:28 PM

Total: 10 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>SPARBOE 27N-26HZ: - SHAKLEE GAS UNIT 1</p>
Drilling/Completion Operations	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.
Drilling/Completion Operations	<p>It was agreed in a consultation with Anadarko personnel on September 10, 2012 that precautions shall be taken during drilling and/or stimulation to decrease the risk of communicating with the Shaklee Gas Unit #1 (API# 123-08346), a producing well. The referenced well lacks isolation of the ground water aquifers and Niobrara formation. To reduce the risk of impacting any un-isolated zones, no segments of the wellbore within 300' of the referenced well shall be stimulated. At the Operator's discretion, a portion of or the entire 300' setback may be created during the drilling of the proposed wellbore. If this option is selected, a revised directional drilling plan must be submitted via Sundry Form 4 prior to drilling to ensure the wellbore is still within the lease. Also at least ten (10) days prior to stimulation, the Operator shall provide a Form 4 and Form 5 for COGCC approval. The Form 4 shall detail the stimulation plan and any segment of the borehole to be eliminated from stimulation due to the setback referenced above. The Form 5 shall contain an uploaded directional template to confirm either the setback distances were created during drilling or any segment of wellbore that may not be stimulated. This Sundry notice shall be submitted via email to the appropriate engineer.</p> <p>The identified setbacks could be eliminated by COGCC staff, if the Operator submits a Form 5 Final Drilling Completion Report and performs the remedial cementing to provide cement coverage from the current top of cement to 200' above the Niobrara formation to the referenced existing well prior to the stimulation of the proposed well.</p>

Total: 3 comment(s)