

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



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07/05/2013

PluggingBond SuretyID

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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 ☐

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: Laura Abrams Phone: (720)929-6356 Fax: (720)929-7356

Email: laura.abrams@anadarko.com

7. Well Name: WIRKNER-VANCE

Well Number: 34N-1HZ

8. Unit Name (if appl):

Unit Number:

9. Proposed Total Measured Depth: 11710

WELL LOCATION INFORMATION

10. QtrQtr: SWSW Sec: 36 Twp: 3N Rng: 67W Meridian: 6

Latitude: 40.175109

Longitude: -104.845218

Footage at Surface: 336 feet FNL/FSL 859 feet FEL/FWL
 FSL FWL

11. Field Name: Wattenberg

Field Number: 90750

12. Ground Elevation: 4822

13. County: WELD

14. GPS Data:

Date of Measurement: 07/31/2013 PDOP Reading: 1.3 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 FEL/FWL Bottom Hole: FNL/FSL FEL/FWL
 651 FNL 226 FWL 460 FSL 270 FWL
 Sec: 1 Twp: 2N Rng: 67W Sec: 1 Twp: 2N 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: 250 ft

18. Distance to nearest property line: 250 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 304 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 | | 400 | 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):

1. See attached lease description(s). Horizontal wellbore crosses lease lines within drilling and spacing unit; distance to lease line is 0'; distance to unit boundary is 460'

25. Distance to Nearest Mineral Lease Line: 0 ft

26. Total Acres in Lease: 160

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 | 917 | 350 | 917 | 0 |
| 1ST | 8+3/4 | 7 | 26.0 | 0 | 7532 | 800 | 7532 | 0 |
| 1ST LINER | 6+1/8 | 4+1/2 | 11.6 | 6532 | 11709 | | | |

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

33. Comments No conductor will be used. Unit Configuration: 3N67W Sec 35: SESE; Sec 36: SWSW, 2N67W Sec 1: W/2W/2; Sec 2: E/2E/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: 331676

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: Laura Abrams

Title: Regulatory Analyst II Date: 7/5/2013 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: 8/23/2013

API NUMBER

05 123 37884 00

Permit Number: _____ Expiration Date: 8/22/2015

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.

| COA Type | Description |
|-----------------|---|
| | 1)Provide notice of MIRU via an electronic Form 42. 2)Comply with Rule 317.i and provide cement coverage a minimum of 200' above the Niobrara. Verify cement coverage with a cement bond log per Rule 317.o. |

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 |
|--------------------|-------------------------|
| 1695807 | WELL LOCATION PLAT |
| 1695808 | DEVIATED DRILLING PLAN |
| 400438480 | FORM 2 SUBMITTED |
| 400439735 | 30 DAY NOTICE LETTER |
| 400439741 | EXCEPTION LOC WAIVERS |
| 400439745 | EXCEPTION LOC REQUEST |
| 400443081 | OFFSET WELL EVALUATION |
| 400443655 | PROPOSED SPACING UNIT |
| 400443657 | SURFACE AGRMT/SURETY |
| 400443658 | LEGAL/LEASE DESCRIPTION |
| 400443660 | DIRECTIONAL DATA |
| 400445018 | OTHER |

Total Attach: 12 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|--------------------------|
| Permit | Final Review Completed. No LGD or public comment received. | 8/23/2013 9:01:36 AM |
| Permit | Received and attached Location Drawing, Well Loc Plat & Multi-Well Plan. Changed footage and lat/long., distance to nearest utility & property line. ON HOLD: w/o Engineering to review SHL move. ok to pass. | 8/13/2013 10:14:36 AM |
| Permit | ON HOLD: per operator's request. Moving SHL to 211' from OHP. | 7/31/2013 11:03:08 AM |
| Engineer | The existing surface casing check on file (Doc # 1339962) is still valid and the proposed surface casing setting depth is adequate Evaluated offset wells for adequate coverage. | 7/25/2013 10:10:35 AM |
| Permit | Per operator Mineral lease is correct. Changed lease description to 160 acres. ok to pass. | 7/18/2013 9:28:17 AM |
| Permit | ON HOLD: requesting confirmation of mineral lease. description has 160 acres. | 7/17/2013 2:09:14 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. | 7/17/2013 2:09:13 PM |
| Permit | Operator's request for omission of open hole logs. | 7/17/2013 2:09:07 PM |
| Permit | Horizontal wellbore crosses lease lines within drilling and spacing unit; distance to lease line is 0'; distance to unit boundary is 460'. | 7/17/2013 2:09:05 PM |
| Permit | Operator corrected attachment titled other. This form has passed completeness. | 7/10/2013 7:30:39 AM |
| Permit | Returned to draft: 1) Attachment labeled "OTHER" won't open. | 7/8/2013 10:34:56 AM |

Total: 11 comment(s)

Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|-----------|--------------------------------|---|
| 1 | Drilling/Completion Operations | 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. |
| 2 | 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. |

Total: 2 comment(s)