

FORM
2
Rev
08/13

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:
400494277

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
10/15/2013

TYPE OF WELL OIL GAS COALBED OTHER _____
ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Refilling
Sidetrack

Well Name: DEEPE Well Number: 34C-27HZ
Name of Operator: KERR-MCGEE OIL & GAS ONSHORE LP COGCC Operator Number: 47120
Address: P O BOX 173779
City: DENVER State: CO Zip: 80217-3779
Contact Name: Cheryl Light Phone: (720)929-6461 Fax: (720)929-7461
Email: cheryl.light@anadarko.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20010124

WELL LOCATION INFORMATION

QtrQtr: NWNW Sec: 22 Twp: 2N Rng: 67W Meridian: 6
Latitude: 40.129207 Longitude: -104.883198

Footage at Surface: 656 feet FNL/FSL FNL 810 feet FEL/FWL FWL

Field Name: WATTENBERG Field Number: 90750

Ground Elevation: 5007 County: WELD

GPS Data:
Date of Measurement: 05/06/2013 PDOP Reading: 1.2 Instrument Operator's Name: DAVID MACDONALD

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

Footage at Top of Prod Zone: FNL/FSL FNL 330 FWL Bottom Hole: FNL/FSL FSL 330 FWL
Sec: 22 Twp: 2N Rng: 67W Sec: 27 Twp: 2N Rng: 67W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: Fee State Federal Indian

The Surface Owner is: is the mineral owner beneath the location.
(check all that apply) is committed to an Oil and Gas Lease.
 has signed the Oil and Gas Lease.
 is the applicant.

The Mineral Owner beneath this Oil and Gas Location is: Fee State Federal Indian

The Minerals beneath this Oil and Gas Location will be developed by this Well: Yes

The right to construct the Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

Lease description: CO-000011082-001: Township 2 North - Range 67 West Sec. 22: W/2

Horizontal Well crosses multiple leases.

Total Acres in Described Lease: 320 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # _____

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 725 Feet

Building Unit: 729 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 649 Feet

Above Ground Utility: 670 Feet

Railroad: 5280 Feet

Property Line: 649 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: Buffer Zone
 Exception Zone
 Urban Mitigation Area

- Buffer Zone – as described in Rule 604.a.(2), within 1,000' of a Building Unit
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: 08/08/2013

SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 121 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 650 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

Unit configuration: 2N-67W-SEC. 21: E2E2; SEC. 22: W2W2; SEC. 27: W2W2; SEC. 28: E2E2; SEC. 33: NE4NE4; SEC. 34: NW4NW4

OBJECTIVE FORMATIONS

| Objective Formation(s) | Formation Code | Spacing Order Number(s) | Unit Acreage Assigned to Well | Unit Configuration (N/2, SE/4, etc.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| CODELL | CODL | | 720 | GWA |

DRILLING PROGRAM

Proposed Total Measured Depth: 17896 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 121 Feet (Including plugged wells)

Will a closed-loop drilling system be used? Yes

Is H2S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H2S Drilling Operations Plan)

Will salt sections be encountered during drilling? No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? Yes

BOP Equipment Type: Annular Preventor Double Ram Rotating Head None

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Other

Other Disposal Description:

Please see comments section. Disposal description will not fit in space provided.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

| 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 | 500 | 220 | 500 | 0 |
| 1ST | 8+3/4 | 7 | 26 | 0 | 7985 | 810 | 7985 | 0 |
| 1ST LINER | 6+1/8 | 4+1/2 | 11.6 | 6934 | 17896 | | | |

Conductor Casing is NOT planned

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- Rule 318A.a. Exception Location (GWA Windows).
- Rule 318A.c. Exception Location (GWA Twinning).

RULE 502.b VARIANCE REQUEST

Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

OTHER LOCATION EXCEPTIONS

Check all that apply:

- Rule 318.c. Exception Location from Rule or Spacing Order Number _____
- Rule 603.a.(2) Exception Location (Property Line Setback).

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

OPERATOR COMMENTS AND SUBMITTAL

Comments

Other disposal description:

Drilling fluids disposal: Water-based drilling fluids will be used to drill the curve of the well. KMG will reuse water-based drilling fluids to the maximum extent at which point they will either be land applied or taken to a licensed, commercial disposal site; decided upon based off of laboratory analysis of fluids.

Oil-based drilling fluids will be used to drill the lateral of the well. KMG will reuse oil-based drilling fluids to maximum extent at which point they will be returned to the fluids manufacturer for re-conditioning or disposal at a licensed, commercial disposal site.

Cuttings disposal: Water based cuttings will be used to drill the curve of the well. They will be disposed of using a Centralized E&P Waste Management facility or a private spread field depending on what is feasible at time of drilling. Oil based cuttings will be used to drill the lateral of the well. They will be disposed of offsite and at a licensed, commercial disposal site.

Operator will run open hole logs into the surface casing on the first well drilled on this pad.

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). Please see attached Compliance Letter.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: 331349

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Lauren Kucera

Title: Regulatory Analyst II Date: 10/15/2013 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: _____

Expiration Date: _____

API NUMBER

05

Conditions Of Approval

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

| <u>COA Type</u> | <u>Description</u> |
|-----------------|--------------------|
| | |

Best Management Practices

No BMP/COA Type

Description

| <u>No</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|-----------|---------------------|---|
| 1 | Planning | 604c.(2).E. Multiwell Pads: In order to reduce surface impact, this 2A application is for a three-well pad. |

| | | |
|----|--|--|
| 2 | Planning | 604c.(2).Q. Guy Line Anchors: Should guy line anchors be left buried for future use, they shall be identified by a bright marker greater than four (4) feet high and no more than one (1) foot east of the guy line anchor. |
| 3 | Planning | 604c.(2).R. Tank Specifications: Two 500 barrel skid mounted frac tanks will be temporarily placed on-site for use of the pre-spud rig only. One tank will store water and the other will store water based mud. |
| 4 | Planning | 604c.(2).S. Access Roads: KMG will utilize a lease access road from Weld County Road 20 for drilling operations and maintenance equipment. The road will be properly constructed and maintained to accommodate for local emergency vehicle access. Water will be placed on dirt access roads to mitigate dust. Magnesium chloride will be used as needed on access roads to further abate dust. |
| 5 | Planning | 604c.(2).V. Development From Existing Well Pads: KMG will locate the three new horizontal wells on the existing Deepe 4-22 well pad to reduce the amount of surface disturbance. |
| 6 | Planning | 604c.(2).W. Site-specific Measures: KMG maintains a Stormwater Management Plan that assesses erosion control for every KMG operated location. This well pad will be added to this plan once construction begins. This plan is updated every fourteen (14) days and after any major weather event. |
| 7 | Traffic control | 604c.(2).D. Traffic Plan: If required by the local government, a traffic plan will be coordinated with the local jurisdiction prior to commencement of operations. |
| 8 | General Housekeeping | 604c.(2).O. Loadlines: All loadlines shall be bullplugged or capped. |
| 9 | General Housekeeping | 604c.(2).P. Removal of Surface Trash: A commercial size trash bin for removing debris will be located on site. This bin will be for use by all parties affiliated with the operation. |
| 10 | Material Handling and Spill Prevention | 604c.(2).N. Control of Fire Hazards: KMG and its contractors will employ best management practices during the drilling and production of its wells and facilities and will comply with appropriate COGCC rules concerning safety and fire. KMG will ensure that any material that might be deemed a fire hazard will remain no less than twenty-five (25) feet from the wellhead(s), tanks and separator(s). |
| 11 | Construction | 604c.(2).M. Fencing Requirements: The completed wellsites will be surrounded with a fence and gate with adequate lock to restrict access to authorized personnel only. KMG personnel will monitor the wellsites regularly upon completion of the wells. Authorized representatives and/or KMG personnel shall be on-site during drilling and completion operations. |
| 12 | Noise mitigation | 604c.(2).A. Noise: Sound mitigation barriers (hay bales) will be placed along the northern and western sides of the pad location to damper noise during drilling and completions to the nearby residence and to Weld County Roads 19 and 20. Sound surveys that have been conducted on each rig type are utilized to anticipate any additional noise mitigation once a drilling rig is determined. |
| 13 | 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. |

| | | |
|----|--------------------------------|--|
| 14 | 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 wells: FRANCIS 5-22A Anti-collision: HSR-DEEPE 4-22</p> |
| 15 | Drilling/Completion Operations | 604c.(2).B. Closed Loop Drilling System: KMG will use a closed loop or "pitless" system for drilling and fluid management and will not construct a reserve pit. |
| 16 | Drilling/Completion Operations | 604c.(2).H. BOPE: Our rigs at a minimum will have a double ram with blind and pipe ram; and annular preventer. |
| 17 | Drilling/Completion Operations | 604c.(2).I. BOPE Testing for Drilling Operations: Upon initial rig-up, BOPE's will be tested at a minimum of every 30 days. |
| 18 | Drilling/Completion Operations | 604c.(2).J. BOPE for Well Servicing Operations: Blowout prevention equipment will be used on any servicing operations associated with this well. Backup stabbing valves will be used during any future servicing operations during reverse circulation. Valves shall be pressure tested before each well servicing operation using low-pressure air and high-pressure fluid. |
| 19 | Drilling/Completion Operations | 604c.(2).K. Pit Level Indicators: All mud tanks (used in lieu of pits) contain pit level monitors with Electronic Drilling Recorders (EDR). KMG uses EDRs with pit level monitor(s) and alarm(s) for production rigs. Basic level gages are used on tanks utilized for the surface rig. |
| 20 | Drilling/Completion Operations | 604c.(2).L. Drill Stem Tests: No drill stem tests are planned and none will be performed without prior approval from the director. |
| 21 | Final Reclamation | 604c.(2).T. Well Site Cleared: The wellsite will be cleared of all non-essential equipment within ninety (90) days after all wells associated with the pad have been plugged and abandoned. |
| 22 | Final Reclamation | 604c.(2).U. Identification of Plugged and Abandoned Wells: Pursuant to rule 319.a.(5)., once the well has been plugged and abandoned, KMG will identify the location of the wellbore with a permanent monument that will detail the well name and date of plugging. |

Total: 22 comment(s)

Data retrieval failed for the subreport 'IntPolicy_NTC' located at: \\lnetpub\Net\Reports\policy_ntc.rdl. Please check th

Attachment Check List

| Att Doc Num | Name |
|--------------------|----------------------------|
| 400494277 | FORM 2 SUBMITTED |
| 400494322 | OffsetWellEvaluations Data |
| 400494332 | EXCEPTION LOC WAIVERS |
| 400494333 | EXCEPTION LOC REQUEST |
| 400494334 | WAIVERS |
| 400494340 | DEVIATED DRILLING PLAN |
| 400494347 | OTHER |
| 400494348 | DIRECTIONAL DATA |
| 400494353 | WELL LOCATION PLAT |
| 400494853 | PROPOSED SPACING UNIT |

Total Attach: 10 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|---|----------------------------|
| Permit | Unit configuration is all in 2N. Proposed spacing letter includes 1N incorrectly. You have no comment explaining the 0 distance to the nearest lease line. Back to draft. | 10/16/2013 11:26:20 AM |

Total: 1 comment(s)