

**APPLICATION FOR PERMIT TO:**

**Drill**
     
  Deepen
     
  Re-enter
     
  Recomplete and Operate

Date Received:

|   |                                    |
|---|------------------------------------|
| TYPE OF WELL    OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____             | Refiling <input type="checkbox"/>  |
| ZONE TYPE    SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/> | Sidetrack <input type="checkbox"/> |

|  |                                     |
|--|-------------------------------------|
| Well Name: <u>FRONT RANGE FARMS</u>                          | Well Number: <u>36N-14HZ</u>        |
| Name of Operator: <u>KERR MCGEE OIL &amp; GAS ONSHORE LP</u> | COGCC Operator Number: <u>47120</u> |
| Address: <u>P O BOX 173779</u>                               |                                     |
| City: <u>DENVER</u>  | State: <u>CO</u>                    |
|  | Zip: <u>80217-3779</u>              |
| Contact Name: <u>Cheryl Light</u>                            | Phone: <u>(720)929-6461</u>         |
|  | Fax: <u>(720)929-7461</u>           |
| Email: <u>cheryl.light@anadarko.com</u>                      |                                     |

**RECLAMATION FINANCIAL ASSURANCE**

Plugging and Abandonment Bond Surety ID: 20010124

**WELL LOCATION INFORMATION**

QtrQtr: NWSE    Sec: 11    Twp: 1N    Rng: 68W    Meridian: 6

Latitude: 40.065226    Longitude: -104.968150

|                                      |             |             |  |
|--------------------------------------|-------------|-------------|--|
| Footage at Surface: <u>2453</u> feet | FNL/FSL     | FEL/FWL     |  |
|                                      | FSL         | FEL         |  |
|                                      | <u>1947</u> | <u>1947</u> |  |

Field Name: WATTENBERG    Field Number: 90750

Ground Elevation: 5045    County: WELD

GPS Data:

Date of Measurement: 01/10/2014    PDOP Reading: 2.0    Instrument Operator's Name: BEN HARDENBERGH

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        |
|                              | FSL            | FEL            |                 | FSL             | FEL            |
|                              | <u>2202</u>    | <u>2450</u>    | <u>50</u>       | <u>2450</u>     | <u>2450</u>    |
|                              | Sec: <u>11</u> | Twp: <u>1N</u> | Rng: <u>68W</u> | Sec: <u>14</u>  | Twp: <u>1N</u> |
|                              |                |                |                 | Rng: <u>68W</u> |                |

**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: Surface Use Agreement

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.)

Township 1 North, Range 67 West, 6th P.M.  
Section 19: Lots 1 and 2 (W/2W/2) (154.68), E/2W/2, SE/4 474.68  
Section 29: NW/4, S/2 480.00  
Township 1 North, Range 68 West, 6th P.M.  
Section 3: Lot 2 (N/2NW/4) (77.94), S/2NW/4, SW/4, SE/4 477.94  
Section 10: NW/4, S/2 480.00  
Section 11: NW/4, S/2 480.00  
Section 13: NW/4, S/2 480.00  
Section 14: NW/4, S/2 480.00  
Section 15: NW/4, S/2 480.00  
Section 23: NW/4, S/2 480.00  
Section 25: NW/4, S/2 480.00  
Section 27: NW/4, S/2 480.00  
Section 35: NW/4, S/2 480.00  
Containing 5,752.62 acres, more or less  
Weld County, Colorado

Total Acres in Described Lease: 5753 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: 464 Feet

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1998 Feet  
Building Unit: 1998 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 1940 Feet  
Above Ground Utility: 623 Feet  
Railroad: 5040 Feet  
Property Line: 210 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: \_\_\_\_\_

## SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 147 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 464 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

## SPACING & FORMATIONS COMMENTS

UNIT CONFIGURATION:  
 1N 68W SEC 11: E/2SW/4, W/2SE/4  
 1N 68W SEC 14: E/2W/2, W/2E/2  
 1N 68W SEC 23: NE/4NW/4, NW/4NE/4

**OBJECTIVE FORMATIONS**

| Objective Formation(s) | Formation Code | Spacing Order Number(s) | Unit Acreage Assigned to Well | Unit Configuration (N/2, SE/4, etc.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| NIOBRARA               | NBRR           |                         | 560                           | GWA                                  |

**DRILLING PROGRAM**

Proposed Total Measured Depth: 15332 Feet  
 Distance to nearest permitted or existing wellbore penetrating objective formation: 147 Feet (Including plugged wells)  
 Will a closed-loop drilling system be used? Yes  
 Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H<sub>2</sub>S 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? No  
 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: Recycle/reuse  
 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             | 1161          | 440       | 1161    | 0       |
| 1ST         | 8+3/4        | 7              | 26    | 0             | 7942          | 840       | 7942    | 0       |
| 1ST LINER   | 6+1/8        | 4+1/2          | 11.6  | 6906          | 15332         |           |         |         |

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: 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. Cuttings disposal: If the surface owner authorizes, and if it is feasible for this location at the time of drilling, water-based cuttings will be disposed of onsite using bioremediation/solidification product.

If the surface owner does not authorize onsite disposal and/or it is not feasible for this location at the time of drilling, water-based cuttings will be disposed of using a Centralized E&P Waste Management facility or a private spread field.

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 Anti-Collision Waiver.

This application is in a Comprehensive Drilling Plan \_\_\_\_\_ CDP #: \_\_\_\_\_

Location ID: \_\_\_\_\_

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: Ronett Powers \_\_\_\_\_

Title: Regulatory Analyst II 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: \_\_\_\_\_

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.

## Best Management Practices

| No | BMP/COA Type                   | Description  |
|----|--------------------------------|--|
| 1  | Planning                       | The nearest building unit is located 1998' away from this oil and gas location, therefore it is not within a Designated Setback Location and is exempt from 604.c.   |
| 2  | Construction                   | 604c.(2).G. Berm Construction: Kerr-McGee will create tertiary containment by construction of a berm or diversion dike, site grading, or other comparable measures sufficient to further protect the ditch located 669' E of the proposed oil and gas location.  |
| 3  | 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.  |
| 4  | 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>Please see the attached 318A.m letter for a list of well(s) identified by the operator as being within 150 feet of the proposed well(s). If no letter is attached, the operator has not identified any wells as being within 150 feet of the proposed well(s) at the time of permitting.</p> |

Total: 4 comment(s)

## Attachment Check List

| Att Doc Num | Name                       |
|-------------|----------------------------|
| 400617434   | OffsetWellEvaluations Data |
| 400617450   | DIRECTIONAL DATA           |
| 400617451   | WELL LOCATION PLAT         |
| 400617454   | PROPOSED SPACING UNIT      |
| 400617461   | EXCEPTION LOC REQUEST      |
| 400617463   | EXCEPTION LOC WAIVERS      |
| 400617465   | DEVIATED DRILLING PLAN     |
| 400617472   | ANTI-COLLISION WAIVER      |
| 400617809   | SURFACE AGRMT/SURETY       |

Total Attach: 9 Files

## General Comments

| User Group | Comment | Comment Date |
|------------|---------|--------------|
|            |         |              |

Total: 0 comment(s)