

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:

400476155

## APPLICATION FOR PERMIT TO:

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate
TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER \_\_\_\_\_Refilling ☐

Date Received:

09/06/2013

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: XCEL

Well Number: 12N-22HZ

Name of Operator: KERR-MCGEE OIL &amp; GAS ONSHORE LP

COGCC Operator Number: 47120

Address: P O BOX 173779

City: DENVER

State: CO

Zip: 80217-3779

Contact Name: Lauren Kucera

Phone: (720)929-6107

Fax: (720)929-7107

Email: lauren.kucera@anadarko.com

## RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20010124

## WELL LOCATION INFORMATION

QtrQtr: SWSW Sec: 27 Twp: 1N Rng: 67W Meridian: 6

Latitude: 40.016186

Longitude: -104.884610

Footage at Surface: 496 feet FNL/FSL FSL 403 feet FEL/FWL FWL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 5026

County: WELD

GPS Data:

Date of Measurement: 01/16/2013 PDOP Reading: 1.7 Instrument Operator's Name: Bart Pfeiffer

If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**
 Footage at Top of Prod Zone: FNL/FSL FSL 569 FSL 761 FWL 2170 FSL 760 FWL  
 Sec: 27 Twp: 1N Rng: 67W Sec: 22 Twp: 1N Rng: 67W

## LOCATION SURFACE &amp; MINERALS &amp; RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ IndianThe 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.)

See the attached lease description.

Total Acres in Described Lease: 5742 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: 618 Feet  
Building Unit: 1549 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 400 Feet  
Above Ground Utility: 472 Feet  
Railroad: 5280 Feet  
Property Line: 400 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: 08/06/2013

## SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 116 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 569 Feet (Enter 5280 for distance greater than 1 mile.)

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

## SPACING & FORMATIONS COMMENTS

Unit configuration: Sec. 22: W2SW, Sec. 27: W2W2

## 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		240	GWA

## DRILLING PROGRAM

Proposed Total Measured Depth: 14741 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 35 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: ONSITE

Cuttings Disposal Method: Other

Other Disposal Description:

KMG will reuse drilling fluids to maximum extent then will either be land applied or taken to commercial disposal site. Cuttings will be land applied and treated with bioremediation/solidification product. Open hole logs will be run on first well on pad.

Beneficial reuse or land application plan submitted?

Reuse Facility ID: 149021 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	0	1025	330	1025	0
1ST	8+3/4	7	26.0	0	7883	830	7883	0
1ST LINER	6+1/8	4+1/2	11.6	6883	14741			

☒ 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 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: 428011

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: 9/6/2013 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:  Director of COGCC Date: 11/9/2013

Expiration Date: 11/08/2015

**API NUMBER**

05 123 38390 00

**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**

	Operator must meet water well testing requirements per Rule 318A.
	1)Note surface casing setting depth change from 843' to 1025'. 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 and from 200' below Sussex to 200' above Sussex. Verify coverage with a cement bond log. 4)Operator acknowledges the proximity of the UPRR 42 PAN AM K 1 (API# 123-07792), Grenemeyer Wagner C Unit 1 (API #123-10492), and the UPRR 42 Pan AM GU AM 1 (API #123-09215) wells. Operator agrees to: provide mitigation option 1, 2 or 3 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OTHER – AS SPECIFIED BY PERMIT CONDITION") stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.

**Best Management Practices**

No	BMP/COA Type	Description
1	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.
2	Planning	604c.(2).S. Access Roads: KMG will utilize the lease access road from WCR 4 for drilling operations and maintenance equipment. The road will be properly constructed and maintained to accommodate for local emergency vehicle access.
3	Planning	604c.(2).V. Development From Existing Well Pads: KMG is developing three new reservoirs on an existing six-well well pad.
4	Planning	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).
5	Planning	<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: 1 UPRR 42 PAN AM AU, DRY CREEK 5-27, XCEL 12-27, XCEL 13-27</p>
6	Traffic control	604c.(2).D. Traffic Plan: KMG will utilize Weld COuntry roads to access the pad. No additional traffic control was required and/or requested.
7	General Housekeeping	604c.(2).O. Loadlines: All loadlines shall be bullplugged or capped.
8	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.
9	Storm Water/Erosion Control	604c.(2).W. Site-specific Measures: KMG maintains a Stormwater Management Plan that includes each wellsite location that assesses erosion control for each well pad. This plan is updated every fourteen (14) days and after any major weather event.
10	Material Handling and Spill Prevention	604c.(2).F. Leak Detection Plan: Automation technology will be utilized at this facility. This technology includes the use of fluid level monitoring for the tanks and produced water sumps, high-level shut offs, and electronic sensors to monitor the interstitial space of double-walled produced water sumps. All automation is monitored by Kerr-McGee's Integrated Operations Center (IOC,) which is manned 24 hours per day, 7 days per week.
11	Material Handling and Spill Prevention	604c.(2).N. Control of Fire Hazards: KMG will ensure that any material that might be deemed a fire hazard will be will remain no less than twenty-five (25) feet from the wellhead(s), tanks and separator(s).
12	Construction	604c.(2).E. Multiwell Pads: This application is part of a nine-well pad (six existing, three new).
13	Construction	604c.(2).G. Berm Construction: A geosynthetic liner will be laid under the tanks on this location and a metal containment will be constructed.
14	Construction	604c.(2).M. Fencing Requirements: Per specific landowner request, no fencing will be installed to avoid interfering with farming operations.
15	Construction	604c.(2).R. Tank Specifications: Condensate storage tanks will be designed, constructed and maintained pursuant to code 30 of the National Fire Protection Association. KMG will maintain written records to verify proper design.

16	Noise mitigation	604c.(2).A. Noise: A sound mitigation burier (hay bales) will be placed on the north and west side of the pad location to dampen noise during drilling and completions to the nearby Weld County Road 4 and 19.  Sound surveys have been conducted on each rig type; which is utilized to anticipate any additional noise mitigation if necessary.
17	Drilling/Completion Operations	604c.(2).B. Closed Loop Drilling System: A closed loop drilling system will be utilized during drilling of the wells on this location.
18	Drilling/Completion Operations	604c.(2).C. Green Completions: KMG will install Vapor Recovery Unit(s) (VRU's) to prevent uncontrolled venting of flash gas. Environmental Control Devices (ECD) will be used to control working and breathing vapor losses for oil and water tanks. Produced oil and gas will be piped off of location to minimize air pollution.
19	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.
20	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.
21	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.
22	Drilling/Completion Operations	604c.(2).K. Pit Level Indicators: All mud pits contain pit level monitors with Electronic Drilling Recorders (EDR) KMG uses an Electronic Drilling Recorder (EDR) with pit level monitor(s) and alarm(s) for production rigs. Basic level gages are used on pits utilized for the surface rig.
23	Drilling/Completion Operations	604c.(2).L. Drill Stem Tests: No drill stem tests will be performed without prior approval from the director.
24	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.
25	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.
26	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: 26 comment(s)

### **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**

<b>Att Doc Num</b>	<b>Name</b>
1695961	EXCEPTION LOC WAIVERS
1695965	EXCEPTION LOC REQUEST
400476155	FORM 2 SUBMITTED
400477291	OTHER
400477293	LEGAL/LEASE DESCRIPTION
400477294	DEVIATED DRILLING PLAN
400477296	WELL LOCATION PLAT
400477300	PROPOSED SPACING UNIT
400477329	DIRECTIONAL DATA
400477336	SURFACE AGRMT/SURETY
400477338	VARIANCE REQUEST
400477619	OffsetWellEvaluations Data

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.	11/6/2013 11:12:58 AM
Permit	Per operator change the distances to the nearest building unit to XCEL 12N-22HZ: 1549'.	11/6/2013 11:12:57 AM
Permit	ON HOLD: emailed operator. Distance to nearest Building Unit on form 2A was change from 651' to 1599'. Checking to see if form 2 needs changed too.	11/6/2013 10:56:10 AM
Permit	Received and attached Exception Location & Twinning request and waiver. ok to pass.	11/1/2013 9:12:40 AM
Engineer	Evaluated offset wells for adequate coverage.  The existing surface casing check on file is still valid and the proposed surface casing setting depth is adequate. See document number 2578155.	10/11/2013 10:04:52 AM
Permit	Per operator changed 1.) Drilling fluids disposal will be offsite. 2.) The surface owner is not the mineral owner. The "is committed to an O&G lease" box should not have been checked for any well on this pad. 3.) This well pad is in the buffer zone only. 4.) Water sampling rule 318A. ON HOLD: SHL not within window per SUA. Needs Exception Location & Twinning request and waiver.	9/27/2013 9:13:40 AM
Permit	ON HOLD: SHL not within window per SUA. Needs Exception Location & Twinning request and waiver. Needs: onsite or offsite for Drilling fluids Needs: Is Surface owner the Mineral owner? shows committed to O&G lease Is location in Urban Mitigation Area? or just Buffer Zone? Needs Request for Exception Location (403' FWL) and waiver.	9/23/2013 11:00:36 AM
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.	9/23/2013 11:00:13 AM
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.	9/23/2013 11:00:12 AM
Permit	Operator's request for omission of open hole logs.	9/23/2013 11:00:11 AM
Permit	Horizontal wellbore crosses lease lines within drilling and spacing unit; distance to lease line is 0'; distance to unit boundary is 460'.	9/23/2013 11:00:10 AM
Permit	Passed completeness.	9/9/2013 7:33:40 AM

Total: 12 comment(s)