



## 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.)

Please 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: 651 Feet  
Building Unit: 720 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 459 Feet  
Above Ground Utility: 433 Feet  
Railroad: 5280 Feet  
Property Line: 433 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: 22 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 598 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: E2SW, W2SE, Sec. 27: E2W2, W2E2

## 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		480	GWA

## DRILLING PROGRAM

Proposed Total Measured Depth: 14765 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 22 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 a commercial disposal site. Cuttings will be land applied and treated with a bioremediation/solidification product. Open hole logs will be run on first well

Beneficial reuse or land application plan submitted?

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	0	1025	330	1025	0
1ST	8+3/4	7	26.0	0	7909	840	7909	0
1ST LINER	6+1/8	4+1/2	11.6	6909	14765			

☒ 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**

Operator comments and submittals are to be placed 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: \_\_\_\_\_

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

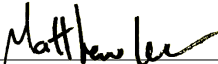
I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: \_\_\_\_\_ Print Name: LAUREN KUCERA

Title: Regulatory Analyst II Date: 9/10/2013 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 38392 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 854' 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).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.
2	Planning	604c.(2).V. Development From Existing Well Pads: Due to surrounding Xcel Energy facilities, KMG will be constructing a new well pad to ensure there is no interference with their activities.
3	Planning	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.
4	Traffic control	604c.(2).D. Traffic Plan: KMG will use Weld County roads. No additional traffic plans were required and/or requested.
5	General Housekeeping	604c.(2).O. Loadlines: All loadlines shall be bullplugged or capped.
6	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.
7	General Housekeeping	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.
8	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.
9	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.
10	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).
11	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.
12	Construction	604c.(2).M. Fencing Requirements: Per specific landowner request, no fencing will be installed to avoid interfering with farming operations.
13	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.

14	Noise mitigation	604c.(2).A. Noise: A sound mitigation burier (hay bales) will be placed on the south and north side of the pad location to damper noise during drilling and completions to the nearby County Road 4 and surrounding Xcel Energy facilities. Sound surveys have been conducted on each rig type; which is utilized to anticipate any additional noise mitigation if necessary.
15	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.
16	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.
17	Drilling/Completion Operations	604c.(2).E. Multiwell Pads: This application is new pad construction for three new wells and a tank battery.
18	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.
19	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.
20	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.
21	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.
22	Drilling/Completion Operations	604c.(2).L. Drill Stem Tests: No drill stem tests will be performed without prior approval from the director.
23	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.
24	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.
25	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: 25 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**

<u>Att Doc Num</u>	<u>Name</u>
400477942	FORM 2 SUBMITTED
400478291	OffsetWellEvaluations Data
400478314	OTHER
400478319	LEGAL/LEASE DESCRIPTION
400478320	DEVIATED DRILLING PLAN
400478322	PLAT
400478324	PROPOSED SPACING UNIT
400478330	VARIANCE REQUEST
400478920	DIRECTIONAL DATA

Total Attach: 9 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	11/4/2013 2:01:56 PM
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 10:14:12 AM
Permit	Confirmed Building unit at 720' & Building to 651'. ok to pass.	9/30/2013 8:46:27 AM
Permit	Per operator: Removed check for "is committed to an O&G lease" is checked and removed Exception Location request letter and waiver. ON HOLD: Requesting confirmation of Building unit at 676' & Building 651'.	9/24/2013 9:27:03 AM
Permit	ON HOLD: 1) requesting correction/clarification of Surface Owner is Mineral Owner is not checked. but "is committed to an O&G lease" is checked. Does Surface Owner is Mineral Owner need to be checked? and/or Does "Is the executer of the O&G lease" also need to be checked? 2) And the SHL of this well is in window. Request removal of Exception Location request and waiver. 3) Requesting confirmation of Building unit at 676' & Building 651'.	9/23/2013 2:49:34 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.	9/23/2013 2:49:33 PM
Permit	Operator's request for omission of open hole logs.	9/23/2013 2:49:33 PM
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 2:49:32 PM
Permit	This form has passed completeness.	9/11/2013 2:23:06 PM

Total: 9 comment(s)