

**APPLICATION FOR PERMIT TO:**

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

Date Received:  
01/07/2015

TYPE OF WELL    OIL     GAS     COALBED     OTHER \_\_\_\_\_

ZONE TYPE      SINGLE ZONE     MULTIPLE ZONES     COMMINGLE ZONES

Refiling   
Sidetrack

Well Name: BAT      Well Number: 3N2-9HZ

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: SESW      Sec: 9      Twp: 1N      Rng: 65W      Meridian: 6

Latitude: 40.060444      Longitude: -104.669077

Footage at Surface: 620 feet      FNL/FSL      FSL      2633 feet      FEL/FWL      FWL

Field Name: WATTENBERG      Field Number: 90750

Ground Elevation: 4931      County: WELD

GPS Data:  
Date of Measurement: 09/25/2014    PDOP Reading: 2.0    Instrument Operator's Name: BART PFEIFER

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
<u>471</u>	FSL	<u>2137</u>	<u>460</u>	FNL	<u>2082</u>
		FWL		FWL	
Sec: <u>9</u>	Twp: <u>1N</u>	Rng: <u>65W</u>	Sec: <u>9</u>	Twp: <u>1N</u>	Rng: <u>65W</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: applicant is owner

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 65 West, 6th P.M.  
Section 9: All of the S/2 lying East of the Beebe Canal  
Weld County, Colorado

Total Acres in Described Lease: 179 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: 602 Feet  
Building Unit: 1386 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 2204 Feet  
Above Ground Utility: 1449 Feet  
Railroad: 3171 Feet  
Property Line: 620 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: 289 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 460 Feet (Enter 5280 for distance greater than 1 mile.)

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

**SPACING & FORMATIONS COMMENTS**

Section 9 E/2 W/2

**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		160	GWA

**DRILLING PROGRAM**

Proposed Total Measured Depth: 11904 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 41 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: Commercial Disposal

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	1475	560	1475	0
1ST	7+7/8	5+1/2	17	0	11904	1518	11904	1400

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:

KMG will reuse oil-based drilling fluids to the maximum extent possible, at which point they will be returned to the fluids manufacturer for reconditioning or disposal at a licensed, commercial disposal site.

Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site.

Drilling fluids disposal: Anadarko 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.

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: CRAIG RICHARDSON \_\_\_\_\_

Title: REGULATORY ANALYST Date: 1/7/2015 Email: DJREGULATORY@ANADARK \_\_\_\_\_

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: 3/21/2015

Expiration Date: 03/20/2017

API NUMBER

05 123 41287 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.

<u>COA Type</u>	<u>Description</u>
	Drilling fluids and cuttings shall be disposed at licensed, commercial disposal site, as indicated. Any changes to drilling fluids or cuttings management shall be subject to prior Director approval.
	Changed to oil-based mud and 5 1/2" casing with no liner as per operator instructions.
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.  2) Comply with Rule 317.j and provide cement coverage from end of 5 1/2" casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log.  3) Comply with Rule 321. Run and submit Directional Survey from TD to base of surface casing. Ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.
	Operator acknowledges the proximity of the listed wells. Operator agrees to provide mitigation Option 1 or 2 (per the DJ Basin Horizontal Offset Policy), ensure all applicable documentation is submitted, and submit a Form 42(s) ("OFFSET MITIGATION COMPLETED") for the remediated wells, referencing the API Number of the proposed horizontal well(s) stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.  PK Farms 1 (API 123-07810)
	Operator requested Exception to Open Hole Logging Rule 317.p. Will run a Cased Hole Log. See attached.
	Operator will comply with COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012. (attached)

## 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 bottom hole 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.  Please see the attached 318A.n 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.

Total: 1 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>
1696509	OPEN HOLE LOGGING EXCEPTION
2483305	SURFACE CASING CHECK
400742567	FORM 2 SUBMITTED
400752203	OffsetWellEvaluations Data
400758945	ANTI-COLLISION WAIVER
400758947	PROPOSED SPACING UNIT
400762002	DIRECTIONAL DATA
400762003	DEVIATED DRILLING PLAN
400762004	EXCEPTION LOC WAIVERS
400762005	EXCEPTION LOC REQUEST
400763326	WELL LOCATION PLAT

Total Attach: 11 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Operator changed waste disposal to Commercial and added a Comment for the oil based mud. Final Review Completed.	3/20/2015 4:23:09 PM
Permit	Operator revised Open Hole Exception letter to include a Cased Holed Compensated Neutron log will be run on one of the wells on the pad per Permit Manager's request. Permitting review complete.	3/20/2015 12:59:35 PM
Permit	ON HOLD: requesting operator revise Open Hole Exception letter to include a Cased Holed Compensated Neutron log will be run on all the wells on the pad.	3/20/2015 10:10:50 AM
Permit	Final Review Completed. No LGD or public comment received.	3/18/2015 3:49:51 PM
Engineer	Offset wells evaluated.	2/25/2015 5:27:17 PM
Permit	Per operator the Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in same formation and the Distance to nearest permitted or existing wellbore penetrating object formation will remain the same. Permitting Review Complete.	1/28/2015 10:19:16 AM
Permit	ON HOLD: requesting confirmation of Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in same formation and Distance to nearest permitted or existing wellbore penetrating object formation.	1/26/2015 3:25:40 PM
Permit	Operator requests approval of an Anti-Collision Waiver for Rule 318A.n. Wellbore is to be located less than 150' from an existing wellbore. Request and waivers attached.	1/26/2015 3:25:39 PM
Permit	Passed Completeness	1/9/2015 9:23:16 AM

Total: 9 comment(s)