

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:
400676370

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
11/22/2014

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

Refilling
Sidetrack

Well Name: SKIM STATE Well Number: 29N-21HZ
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: SWSW Sec: 21 Twp: 3N Rng: 65W Meridian: 6
Latitude: 40.205449 Longitude: -104.673287

Footage at Surface: 638 feet FNL/FSL FSL 1286 feet FEL/FWL FWL

Field Name: WATTENBERG Field Number: 90750

Ground Elevation: 4846 County: WELD

GPS Data:
Date of Measurement: 08/07/2014 PDOP Reading: 1.4 Instrument Operator's Name: ROB WILSON

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

Footage at Top of Prod Zone: FNL/FSL FSL 1118 FWL 50 FNL 1182 FWL
Bottom Hole: FNL/FSL FNL 1182 FWL
Sec: 21 Twp: 3N Rng: 65W Sec: 21 Twp: 3N Rng: 65W

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.)

Please see attached Lease Description.

Total Acres in Described Lease: 5792 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: 950 Feet
 Building Unit: 3595 Feet
 High Occupancy Building Unit: 5280 Feet
 Designated Outside Activity Area: 5280 Feet
 Public Road: 3910 Feet
 Above Ground Utility: 3554 Feet
 Railroad: 5280 Feet
 Property Line: 638 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: 143 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 1118 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Unit Configuration: 3N-65W-SEC16: S2SW; SEC 21: W2; SEC 28: N2NW

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		480	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 12720 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 143 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? 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:

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

Beneficial reuse or land application plan submitted? Yes

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	1136	430	1136	0
1ST	8+3/4	7	26	0	7547	800	7547	0
1ST LINER	6+1/8	4+1/2	11.6	6547	12720			

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 The Skim State 4N-21HZ pad and the Milk 14N-28HZ pad will be located within one disturbance area and will be collected by the new production facility located onsite.

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: The surface owner has agreed to disposal of water-based cuttings onsite using bioremediation/solidification product.

COMPLIANCE WITH RULE 317.p:
 Requirement to log well is noted in attached Open Hole Logging Exception letter.

318A.n WAIVER REQUEST:
 Kerr-McGee Oil & Gas Onshore LP ("KMG") respectfully requests the Director to waive Rule 318A.n for this well. KMG is the operator of the encroached upon well(s). Please see attached Anti-Collision Waiver. KMG measures the Emma H #21-19 to be greater than 150 feet from the horizontal lateral of the captioned well per the deviated drilling plan and directional data template.

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

Location ID: 417881

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: Mike McConaughey

Title: Sr Regulatory Analyst Date: 11/22/2014 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: *Matthew Lee* Director of COGCC Date: 1/15/2015

Expiration Date: 01/14/2017

API NUMBER 05 123 41004 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>
	<p>1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.</p> <p>2) Comply with Rule 317.j and provide cement coverage from end of 7" casing to a minimum of 200' above Niobrara and from 200' below the Sussex to 200' above Sussex. Verify coverage with cement bond log.</p> <p>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.</p>
	<p>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.</p> <p>State 2 (API 123-07557) Megan H 16-15 (API 123-15059) Megan H 16-13 (API 123-15119) Megan H 16-14 (API 123-15120) Gunnel R H 20-1 (API 123-10777) Wardell 20-41 (API 123-17097) Wardell 20-44 (API 123-17098) Frank-UPRR 31-21 (API 123-12949) UPRR 22 Pan Am UT/U/#2 (API 123-14612) Frank H21-10 (API 123-15157) Frank H21-13 (API 123-15160) Moser 22-28 (API 123-10171) HSR-Muller 9-29A (123-16879) Moser Inc-UPRR 31-33 (API 123-13298)</p>
	<p>Operator acknowledges the proximity of the listed non-operated 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 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.</p> <p>Frank 1-21C (API 123-12549)</p>

Best Management Practices

No	BMP/COA Type	Description
1	Planning	This proposed oil and gas location is located in a rural rangeland area. The nearest building unit is located 3,595' away.
2	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.
3	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.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.</p>

Total: 3 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

Att Doc Num	Name
400676370	FORM 2 SUBMITTED
400676425	EXCEPTION LOC REQUEST
400717475	EXCEPTION LOC WAIVERS
400726586	WELL LOCATION PLAT
400726587	DEVIATED DRILLING PLAN
400726588	LEGAL/LEASE DESCRIPTION
400726590	DIRECTIONAL DATA
400734357	OFFSET WELL EVALUATION
400734361	OPEN HOLE LOGGING EXCEPTION
400734363	ANTI-COLLISION WAIVER
400736903	SURFACE AGRMT/SURETY
400736904	PROPOSED SPACING UNIT

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
#Error	Final Review Completed. No LGD or public comment received.	1/14/2015 8:26:13 AM
#Error	Horizontal wellbore crosses lease line. Distance to nearest lease line is 0 feet. Added location ID.	1/14/2015 8:25:40 AM
#Error	Offset wells evaluated.	1/9/2015 4:24:40 PM
#Error	added the following comment at operator's request: "KMG measures the Emma H #21-19 to be greater than 150 feet from the horizontal lateral of the captioned well per the deviated drilling plan and directional data template."	12/16/2014 12:00:38 PM
#Error	Requested revision to anti-collision waiver to include other offset wells within 150'	12/16/2014 10:33:25 AM
#Error	Request for Exception to Open Hole Logging Rule 317.p letter attached.	12/16/2014 10:24:14 AM
#Error	Operator requests approval of a Rule 318Aa, Rule 318Ae, and Rule 318Ac exception location: Wellhead is to be located outside of a GWA drilling window, the well will be drilled to a 318Ae infill location from outside of a GWA drilling window, and the wellhead will be located more than 50' from an existing well location. Request and waivers attached.	12/16/2014 10:24:06 AM
#Error	Operator requests approval of a Rule 318A.n exception location: Wellbore is to be located less than 150' from an existing wellbore. Request and waivers attached.	12/16/2014 10:23:52 AM
#Error	Emailed Tim Kelly at SLB for verification of PSU on SLB minerals.	12/16/2014 10:23:36 AM
#Error	Passed completeness.	11/24/2014 8:39:36 AM

Total: 10 comment(s)