

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
08/24/2018

TYPE OF WELL OIL GAS COALBED OTHER Unplanned Refilling

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES Sidetrack

Well Name: ZELDA Well Number: 25-5HZX

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: LISA SCHINDLER Phone: (720)929-3091 Fax: (720)929-7267

Email: LISA.SCHINDLER@ANADARKO.COM

RECLAMATION FINANCIAL ASSURANCE
Plugging and Abandonment Bond Surety ID: 20010124

WELL LOCATION INFORMATION

QtrQtr: NWNW Sec: 25 Twp: 2N Rng: 65W Meridian: 6

Latitude: 40.115730 Longitude: -104.617386

Footage at Surface: 373 Feet FNL/FSL FNL 1219 Feet FEL/FWL FWL

Field Name: WATTENBERG Field Number: 90750

Ground Elevation: 4899 County: WELD

GPS Data:
Date of Measurement: 07/27/2017 PDOP Reading: 1.2 Instrument Operator's Name: TRAVIS HOLLAND

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

950 FNL 1378 FWL 332 FNL 1301 FWL

Sec: 25 Twp: 2N Rng: 65W Sec: 1 Twp: 1N 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.)

Township 2 North, Range 65 West, 6th P.M.
Section 13: NW/4, S/2
Section 15: NW/4, S/2
Section 23: NW/4, S/2
Section 25: NW/4, S/2
Section 27: NW/4, S/2
Township 2 North, Range 64 West, 6th P.M.
Section 9: NW/4, S/2
Section 11: NW/4, S/2
Section 15: NW/4, S/2
Section 17: NW/4, S/2
Section 19: Lots 1 and 2 (W/2 W/2) (138.56), E/2 W/2, SE/4
Section 21: NW/4, S/2
Section 23: NW/4, S/2
Weld County, Colorado

Total Acres in Described Lease: 5739 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: 1440 Feet
Building Unit: 2079 Feet
High Occupancy Building Unit: 4672 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 2618 Feet
Above Ground Utility: 328 Feet
Railroad: 5280 Feet
Property Line: 373 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 proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 94 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 901 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Spacing Unit:
T01N-R65W SEC 1: N2NW
T02N-R65W SEC 25: W2; SEC 36: W2
Weld County, Colorado

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		720	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 17639 Feet
Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells:
Enter distance if less than or equal to 1,500 feet: 163 Feet No well belonging to another operator within 1,500 feet
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
CONDUCTOR	26	16	36.94	0	97	64	97	0
SURF	13+1/2	9+5/8	36	0	1814	590	1814	0
1ST	7+7/8	5+1/2	17	0	17729	2083	17729	

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

WELL SIDETRACK APPROVED BY DIANA BURN 8/23/2018.

CONDUCTOR AND SURFACE CASING DEPTHS REFLECT ACTUAL DEPTHS.

Explanation of situation and why we need to sidetrack

- Lateral Category: 2 section lateral
- During displacement of cement it appears that there was a wellbore collapse / bridge in the annulus causing a stoppage of the cement traveling back up the annulus making it impossible to complete the displacement out of casing. The cement then set inside casing.
- Plan forward is to cut casing at 5017'MD, pull 5 1/2 " casing out of wellbore and set a cement plug from 4217' to 5017'MD. We will then sidetrack off that plug and drill a new curve and lateral section to TD.

Casing depths reflect actual settings: 16" conductor casing set at 97 ft.; 9.625" surface casing set at 1,814 MD

Type of cement for sidetrack (if necessary)

- 17.5 ppg kick off plug will extend from 4217' to 5017' MD (GRANITECEM system by Halliburton)
- Plug slurries and placement will be provided by Halliburton

Measured Depth and TVD of open hole sidetrack point: 4217 ft. MD; 4207 ft. TVD

- See attached WBD describing sidetrack procedures

Sidetrack will target the original formation as permitted (Codell), however heel will shift 100' east and BHL will shift 80' east as shown in the attached plat.

Drilling fluids disposal: KMG will reuse water-based drilling fluids to the maximum extent possible, at which point they will either be land applied or taken to a licensed, commercial disposal site; the decision will be based upon laboratory analysis of fluids. 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.

Cuttings disposal: Water-based cuttings will be disposed of using a Centralized E&P Waste Management facility or a private spread field, depending on what is feasible at the time of drilling. Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site.

The following well(s) belong to Kerr-McGee and will have treated intervals within one hundred fifty (150) feet of this proposed well:

CC OPEN USX X 25-5
13-25 HSR-SHAKLEE
GUEST 4N-25HZ
SHAKLEE USX X25-20D
SHAKLEE USX X25-29D
GUEST 4N-25HZ

The following well(s) are not within 150' of KMG's proposed well, however may appear to be less than 150' in 2D view:
SHAKLEE USX X25-05D

The nearest well in the same formation is the HSR-SHAKLEE 13-25 at 94'. Distances are measured using COGCC data or as part of our anticollision analysis (as appropriate).

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

Location ID: 332381

Is this application being submitted with an Oil and Gas Location Assessment application? No

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

Signed: _____ Print Name: LISA SCHINDLER

Title: SR REGULATORY ANALYST Date: 8/24/2018 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:  Director of COGCC Date: 8/27/2018

Expiration Date: 08/26/2020

API NUMBER
05 123 46393 01

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>

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	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.
2	Drilling/Completion Operations	Anti-Collision: Kerr-McGee will perform an anti-collision evaluation of all active (producing, shut in, or temporarily abandoned) offset wellbores that have the potential of being within one hundred fifty (150) feet of a proposed well prior to drilling operations for the proposed well. Notice shall be given to all offset operators within one hundred fifty (150) feet prior to drilling.
3	Drilling/Completion Operations	317.p Logging Program: One of the first wells drilled on the pad will be logged with Cased-hole Pulsed Neutron Log with Gamma Ray Log the kick-off point into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The horizontal portion of every well will be logged with a measuredwhile-drilling gamma-ray log. The Form 5, Completion Report, for each well on the pad will list all logs run in that well and have those logs attached. The Form 5 for each well shall clearly state "No open-hole logs were run" and shall reference the Rule 317.p Exception granted for the well.

Total: 3 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.
http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.
<http://cogcc.state.co.us/documents/reg/Policies/PolicyGwaBradenheadMonitoringFinal.pdf>

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1696975	CORRESPONDENCE
401743848	FORM 2 SUBMITTED
401743984	OffsetWellEvaluations Data
401743990	WELL LOCATION PLAT
401743998	DEVIATED DRILLING PLAN
401744007	WELLBORE DIAGRAM
401744131	DIRECTIONAL DATA
401745684	OFFSET WELL EVALUATION

Total Attach: 8 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Attached copy of email of sidetrack approval. Final approval complete.	08/27/2018
Engineer	Waiting on copy of email of sidetrack approval.	08/27/2018
Permit	Permitting Review Complete.	08/24/2018
Permit	Passed completeness.	08/24/2018
Permit	LGD and public comment waived for this application for an unplanned sidetrack with drilling in progress.	08/24/2018

Total: 5 comment(s)