

**APPLICATION FOR PERMIT TO:**

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

TYPE OF WELL    OIL     GAS     COALBED     OTHER UNPLANNED      Refilling

ZONE TYPE      SINGLE ZONE     MULTIPLE ZONES     COMMINGLE ZONES       Sidetrack

Date Received:

Well Name: QUARTER CIRCLE      Well Number: 24-1HZX

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: 24    Twp: 1N    Rng: 67W    Meridian: 6

Latitude: 40.030324      Longitude: -104.844302

Footage at Surface:      344    Feet      FNL/FSL      1141    Feet      FEL/FWL

Field Name: WATTENBERG      Field Number: 90750

Ground Elevation: 4941      County: WELD

GPS Data:

Date of Measurement: 03/05/2018    PDOP Reading: 1.6    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      FEL/FWL      Bottom Hole:    FNL/FSL      FEL/FWL

897    FSL      245    FWL      49    FNL      159    FWL

   Sec: 24    Twp: 1N    Rng: 67W      Sec: 13    Twp: 1N    Rng: 67W

**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 1 North, Range 67 West, 6th P.M.  
Section 24: S/2S/2 except a tract desc as: Comm. @ a pt. 1212' N.  
of SW/cor. of 24, th E 3132', th S28°15'E 223', th N83°15' E 371 ft.,  
th NO°45'E 272' to E/W centerline of said S/2 of 24, th due W 3601'  
to W boundary line of said 24, th due S 96' to p.o.b.

Total Acres in Described Lease: 148 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: 1340 Feet  
Building Unit: 1340 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 355 Feet  
Above Ground Utility: 342 Feet  
Railroad: 5280 Feet  
Property Line: 344 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: 05/12/2017

## 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: 130 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 897 Feet (Enter 5280 for distance greater than 1 mile.)

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

## SPACING & FORMATIONS COMMENTS

Spacing Unit: 1N/67W 24:W2W2, 23:E2E2, 13:W2W2, 14:E2E2, 11:SESE, 12:SWSW

## 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		720	GWA

## DRILLING PROGRAM

Proposed Total Measured Depth: 17549 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: 318 Feet  No well belonging to another operator within 1,500 feet

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? 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	42.1	0	80	30	80	0
SURF	13+1/2	9+5/8	36	0	1850	590	1850	0
1ST	7+7/8	5+1/2	17	0	17539	2079	17539	

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

Explanation of situation and why we need to sidetrack

- This well is a Nio C two section lateral. We reached a MD of 11,943' and had a motor failure. We tripped out of the hole to pick up a new motor and on the way back into the hole we encountered hole troubles at ~9,700'. The hole appears to be collapsing in at this depth. We attempted to clean up the hole without success, and need to sidetrack away from the part of formation that is giving us trouble.

Total Measured Depth Reached (Using KB of 20')

- 11,943' MD
- 7,386' TVD

Casing Sizes set and MD

- 16" conductor casing set at 80 ft. (using GL)
- 9.625" surface casing set at 1,850' MD (Using GL)

Type of cement (if necessary)

- We will first try an openhole sidetrack at 7,550 ft MD (Using KB). Only if this does not work, will we pump a cement plug and sidetrack off of plug.

- Contingency plug length = ~600'
- Weight: 17.0 ppg
- Yield: ~0.95 ft<sup>3</sup>/sk
- Sacks: ~249

Measured Depth and TVD of open hole sidetrack point (Using KB of 20')

- 7,550 ft. MD
- 7,279 ft. TVD

Proposed target formation of sidetrack hole if different than permitted

- Same well plan as permit

BHL of sidetrack hole

- Same well plan as permit

Wellbore diagram

- See attached

VERBAL APPROVAL GIVEN BY DIANA BURN ON 04/12/18. (see attached)

This application is in a Comprehensive Drilling Plan       No       CDP #: \_\_\_\_\_

Location ID:       453711      

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:       CHERYL LIGHT      

Title:       STAFF REGULATORY ANALYST       Date: \_\_\_\_\_ Email:       djregulatory@anadarko.com      

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: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

<b>API NUMBER</b>
05 123 46264 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.

**COA Type**

**Description**

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## Best Management Practices

**No BMP/COA Type**

**Description**

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## Attachment Check List

**Att Doc Num**

**Name**

401605975	WELL LOCATION PLAT
401605976	WELLBORE DIAGRAM
401606006	CORRESPONDENCE

Total Attach: 3 Files

## General Comments

**User Group**

**Comment**

**Comment Date**

		Stamp Upon Approval

Total: 0 comment(s)

**Public Comments**

No public comments were received on this application during the comment period.

