

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

| | |
|---|------------------------------------|
| TYPE OF WELL OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____ | Refiling <input type="checkbox"/> |
| ZONE TYPE SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/> | Sidetrack <input type="checkbox"/> |

Date Received:
04/03/2019

Well Name: JODSTER NORTH Well Number: 25-3HZ

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: JOHN PIEKARA Phone: (720)929-3094 Fax: ()

Email: JOHN.PIEKARA@ANADARKO.COM

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20010124

WELL LOCATION INFORMATION

QtrQtr: SENE Sec: 25 Twp: 5N Rng: 68W Meridian: 6

Latitude: 40.373802 Longitude: -104.949091

Footage at Surface: 1548 Feet FNL/FSL FNL 1092 Feet FEL/FWL FEL

Field Name: WATTENBERG Field Number: 90750

Ground Elevation: 4861 County: LARIMER

GPS Data:
Date of Measurement: 09/03/2018 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 | FEL/FWL | Bottom Hole: | FNL/FSL | FEL/FWL |
| <u>441</u> | FNL <u>75</u> | FWL | <u>420</u> | FNL <u>160</u> | FEL |
| Sec: <u>30</u> | Twp: <u>5N</u> | Rng: <u>67W</u> | Sec: <u>29</u> | Twp: <u>5N</u> | Rng: <u>67W</u> |

LOCAL GOVERNMENT INFORMATION

County: LARIMER Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: County

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this COGCC application? If the local government has waived its right to precede the COGCC in siting determination, indicate by selecting "NO" here and selecting "Waived" below. Yes No

If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location.

The local government siting permit type is: _____

The local government siting permit was filed on: _____

The disposition of the application filed with the local government is: Other

Additional explanation of local process:

No permit is required in unincorporated Larimer County. Larimer County is aware that an oil and gas location is proposed as KMG has submitted an access permit.

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.)

Please see attached lease description and map. The wellbore does not cross lease described but the lease is within the PSU.

Total Acres in Described Lease: 47 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: | <u>928</u> Feet |
| Building Unit: | <u>996</u> Feet |
| High Occupancy Building Unit: | <u>5280</u> Feet |
| Designated Outside Activity Area: | <u>5280</u> Feet |
| Public Road: | <u>1076</u> Feet |
| Above Ground Utility: | <u>1117</u> Feet |
| Railroad: | <u>5280</u> Feet |
| Property Line: | <u>265</u> Feet |
| School Facility: | <u>5280</u> Feet |
| School Property Line: | <u>5280</u> Feet |
| Child Care Center: | <u>5280</u> 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, Designated Outside Activity Area, School Facility, and Child Care Center – 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: 08/29/2018

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: 49 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 877 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Proposed Spacing Unit:
05N67W SEC 19: S2S2;
05N67W SEC 20: S2S2;
05N67W SEC 21: SWSW;
05N67W SEC 28: NWNW;
05N67W SEC 29: N2N2;
05N67W SEC 30: N2N2;
05N68W SEC 24: SESE;
05N68W SEC 25: NENE

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 | | 800 | GWA |

DRILLING PROGRAM

Proposed Total Measured Depth: 17579 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: 374 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:

Cuttings and drilling fluids disposal descriptions and Waste Management Plan are included with associated Form 2A.

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 | 80 | 64 | 80 | 0 |
| SURF | 13+1/2 | 9+5/8 | 36 | 0 | 1500 | 590 | 1500 | 0 |
| 1ST | 7+7/8 | 5+1/2 | 17 | 0 | 17569 | 2082 | 17569 | |

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

PLEASE ENSURE ALL CORRESPONDENCE ASSOCIATED WITH THIS PERMIT GOES TO ANALYST AND DJREGULATORY EMAIL ADDRESSES, AS LISTED ON THIS PERMIT.

Offset well buffer description for the subject well has been attached to this permit for review (GIS BUFFER REVIEW/ANALYSIS).

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: JOHN PIEKARA

Title: SR REGULATORY ANALYST Date: 4/3/2019 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 place of use is applicable under Colorado SB 19-018 and is not applicable. Operator must have a valid water right or permit allowing for industrial use or purchased 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).~~

COGCC Approved: 

Director of COGCC

Date: 7/3/2019

Expiration Date: 07/02/2021

| |
|--------------------------------------|
| API NUMBER 05 069 06508 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

| | |
|--|---|
| | 1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (spud notice) for the first well activity with a rig on the pad and provide 48 hour spud notice via Form 42 for all subsequent wells drilled on the pad. 2) Comply with Rule 317.j. and provide cement coverage from TD to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 3) Oil-based drilling fluid is to be used only after all fresh water aquifers are covered. |
| | Operator acknowledges the proximity of the listed non-operated well. Operator assures that this offset will be remediated per the DJ Basin Horizontal Offset Policy (option 3). Operator will submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well. 05-123-12411, Klein 1-30J 05-123-12035, Tollgate 2-29J |
| | Per COGCC Order 1-232, Bradenhead tests shall be performed according to the following schedule and Form 17 submitted within 10 days of each test: 1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation. 2) If a delayed completion, 6 months after rig release and prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation. 3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance. |

Best Management Practices

| No | BMP/COA Type | Description |
|-----------|--------------------------------|--|
| 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 | Alternative Logging Program: One of the first wells drilled on the pad will be logged with open-hole resistivity log and gamma-ray log from 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 measured-while-drilling gamma-ray log. The Form 5, Completion Report, for each well on the pad will list all logs run and have those logs attached. The Form 5 for a well without open-hole logs shall state "Alternative Logging Program -No open-hole logs were run" and shall clearly identify the type of log and the well (by API#) in which open-hole logs were run. |
| 4 | Drilling/Completion Operations | Green Completions - Test separators and associated flow lines, sand traps and emission control systems shall be installed on-site to accommodate green completions techniques. When commercial quantities of salable quality gas are achieved at each well, the gas shall be immediately directed to a sales line or shut in and conserved. If a sales line is unavailable or other conditions prevent placing the gas into a sales line, the operator shall not produce the wells without an approved variance per Rule 805.b. (3)C. |
| 5 | Drilling/Completion Operations | 604c.(2).B. Closed Loop Drilling System: KMG will use a closed loop or "pitless" system for drilling and fluid management and will not construct a reserve pit. |
| 6 | 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. |
| 7 | Drilling/Completion Operations | 604c.(2).I. BOPE Testing for Drilling Operations: BOPEs will be tested upon rig-up and, at a minimum, every 30 days. |
| 8 | 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. |
| 9 | Drilling/Completion Operations | 604c.(2).K. Pit Level Indicators: All storage tanks used for active drilling operations (used in lieu of pits) contain pit level monitors with Electronic Drilling Recorders (EDR). KMG uses EDRs with pit level monitor(s) and alarm(s) for production rigs. Basic level gauges are used on tanks utilized for the surface rig. |
| 10 | Drilling/Completion Operations | 604c.(2).L. Drill Stem Tests: No drill stem tests are planned and none will be performed without prior approval from the Director. |

Total: 10 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

| Att Doc Num | Name |
|--------------------|------------------|
| 401912933 | FORM 2 SUBMITTED |
| 401913295 | DIRECTIONAL DATA |

| | |
|-----------|----------------------------|
| 401913296 | WELL LOCATION PLAT |
| 401913297 | DEVIATED DRILLING PLAN |
| 401963192 | LEASE MAP |
| 401963193 | EXCEPTION LOC WAIVERS |
| 401963211 | LEGAL/LEASE DESCRIPTION |
| 401963213 | OffsetWellEvaluations Data |
| 401984919 | EXCEPTION LOC REQUEST |
| 401985493 | PROPOSED SPACING UNIT |
| 401992721 | GIS BUFFER REVIEW/ANALYSIS |
| 402095537 | OFFSET WELL EVALUATION |

Total Attach: 12 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|---------------------|
| Final Review | The Director Objective Criteria Review Summary (Doc#2479097) is attached to the Form 2A associated with this APD. Following additional analysis of the Director Objective Criteria, the Director determined that this application meets the standard for the protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181. | 06/25/2019 |
| Final Review | •Final permitting review complete. Sent to Final Approval. | 06/25/2019 |
| Permit | •Added the local government siting permit information provided by the operator. | 06/19/2019 |
| Permit | •With concurrence from the operator, updated the open hole logging BMP. •With concurrence from the operator, corrected the distance from the completed portion of the wellbore to the closest lease line and added the comment, "The wellbore does not cross lease described but the lease is within the PSU.", as the completed portion of the wellbore does not penetrate the described lease but the lease is within the proposed spacing unit. •Initial permitting review complete and task passed. | 06/17/2019 |
| Permit | Passed completeness. | 04/04/2019 |

Total: 5 comment(s)