

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:
402031814

APPLICATION FOR PERMIT TO:

☒ Drill ☐ Deepen ☐ Re-enter ☐ Recomplete and Operate

TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER: _____

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Date Received:
01/29/2020

Well Name: CUMMINGS

Well Number: 19-1HZ

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: ERIN HAMPE

Phone: (720)929-3242

Fax: ()

Email: ERIN_HAMPE@OXY.COM

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20010124

WELL LOCATION INFORMATION

QtrQtr: NWNW Sec: 19 Twp: 5N Rng: 67W Meridian: 6

Latitude: 40.389215

Longitude: -104.940714

Footage at Surface: 1175 Feet FNL/FSL FNL 1164 Feet FEL/FWL FWL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4859

County: WELD

GPS Data: GPS Quality Value: 1.5 Type of GPS Quality Value: PDOP Date of Measurement: 03/20/2019

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 FNL 75 FEL 93 FNL 2146 FEL
Sec: 24 Twp: 5N Rng: 68W Sec: 22 Twp: 5N Rng: 68W

LOCAL GOVERNMENT INFORMATION

County: WELD

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 location? If the local government does regulate the siting, but has waived its right to precede the COGCC in siting determination, indicate by selecting "YES" here and selecting "Waived" for the disposition 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: WOGLA

The local government siting permit was filed on: 06/18/2019

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

Additional explanation of local process:

APPROVED WOGLA ID: WOGLA19-0130

See attachment "OTHER" to review the Cummings 18-19HZ WOGLA Approval Letter.

Location is in unincorporated Weld County, and within 1500' of the Larimer County line. It is greater than 1500' from neighboring municipalities. On May 15, 2019, KMG sent notification to the following LGDs: Jason Maxey (Weld County) and Matt Lafferty (Larimer County). No meetings were requested, nor feedback provided.

The WOGLA application for the CUMMINGS 18-19HZ PAD was approved October 24, 2019 (WOGLA #19-0130). The Access permit has been reviewed by Weld County Public Works and was approved October 3, 2019. The Emergency Action Plan has been reviewed by Front Range Fire District and the Weld County Office of Emergency Management and was approved on October 23, 2019.

KMG held a community meeting on October 16, 2019 to discuss this location and other proposed locations in the area (i.e. – Prowant, Damore, Folley, Cummings). Landowners within 1 mile of these locations were invited to attend. KMG had subject matter experts present to address all phases of operations and to hear any concerns. Landowners within 1 mile of location will be notified by mail prior to construction.

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.)

See attached lease map. The completed portion of the wellbore does not penetrate the described lease but the lease is within the DSU.

Total Acres in Described Lease: 96 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>707</u> Feet
Building Unit:	<u>707</u> Feet
High Occupancy Building Unit:	<u>5280</u> Feet
Designated Outside Activity Area:	<u>5280</u> Feet
Public Road:	<u>1152</u> Feet
Above Ground Utility:	<u>914</u> Feet
Railroad:	<u>453</u> Feet
Property Line:	<u>425</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.

School Facility: 5280 Feet
School Property Line: 5280 Feet
Child Care Center: 5280 Feet

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: 04/03/2019

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: 168 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 481 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

DSU:

T5N-R67W
SEC 18: ALL;
SEC 17: ALL;
SEC 20: N2;
SEC 19: N2;

T5N-R68W
SEC 24: N2;
SEC 23: N2;
SEC 22: NE;
SEC 15: E2;
SEC 14: ALL;
SEC 13: ALL

If this Form 2 is associated with a Drilling and Spacing Unit application, provide docket number: _____

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	407-2796	4320	N/2 24, N/2 23, NE22

DRILLING PROGRAM

Proposed Total Measured Depth: 20407 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: 604 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 waste management plan attached to the associated 2A - CUMMINGS 18-19HZ PAD (402031852).

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	20397	2428	20397	

☐ 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 _____ No _____ CDP #: _____

Location ID: 471021

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: ERIN HAMPE

Title: REGULATORY ANALYST Date: 1/29/2020 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, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved:  _____ Director of COGCC Date: 2/26/2020

Expiration Date: 02/25/2022

API NUMBER

05 123 50811 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/Completion Operations	This Permit to Drill is approved subject to all the BMPs and COAs on the most recently approved Form 2A and any subsequently approved Form 4 for the Oil and Gas Location (Location ID #471021). The most recently approved Form 2A and any subsequent Form 4s containing applicable COAs for this location shall be posted onsite during construction, drilling, and completions operations.
Drilling/Completion Operations	<p>Operator acknowledges the proximity of the non-operated listed well. Operator agrees to: provide mitigation option 1 or 2 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating that appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.</p> <p>Hankins 43-20U 123-25085 PDC Wiedeman 13-21 123-25216 PDC Wiedeman 11-21U 123-25245 PDC Wiedeman 12-21U 123-25246 PDC Zimmerman 14-17 123-21351 PDC Calkins 24-11 069-06338 Extraction</p>
Drilling/Completion Operations	<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) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating that appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.</p> <p>Cummings 19-23 123-27397 Kerr McGee Cummings 19-22 123-27398 Kerr McGee HSR-Croissant 11-20 123-19512 Kerr McGee Zimmerman 3-20 123-21827 Kerr McGee Croissant 12-20 123-21849 Kerr McGee UIV 18-20 123-23926 Kerr McGee UIV 6-20 123-24074 Kerr McGee UIV 22-20 123-24083 Kerr McGee</p>
Drilling/Completion Operations	<p>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:</p> <ol style="list-style-type: none"> 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.
Drilling/Completion Operations	<ol style="list-style-type: none"> 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.

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.

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

Att Doc Num	Name
402031814	FORM 2 SUBMITTED
402170827	OffsetWellEvaluations Data
402170828	DIRECTIONAL DATA
402185074	EXCEPTION LOC REQUEST
402185075	EXCEPTION LOC WAIVERS
402220108	WELL LOCATION PLAT
402220109	SURFACE AGRMT/SURETY
402220112	DEVIATED DRILLING PLAN
402220117	GIS BUFFER REVIEW/ANALYSIS
402221082	LEASE MAP
402228116	OTHER
402324716	OFFSET WELL EVALUATION

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	02/25/2020
OGLA	COGCC conducted the technical review for the related Oil and Gas Location Assessment permit, Form 2A document #402031852 under the statutory authority provided through SB 19-181, including the Objective Criteria. The Director approved the Form 2A on 1/28/2020, establishing Location ID #471021 subject to conditions included in the permit. The well proposed by this related Form 2 was contemplated during COGCC's review of the Form 2A. The Objective Criteria Review Memo (Doc# 2479348) can be found in the document file for this Location.	02/25/2020
Permit	Corrected WOGLA submit date with operator concurrence Unit configuration updated with operator concurrence	02/20/2020
Permit	Passed completeness.	01/30/2020

Total: 4 comment(s)