

FORM

2

Rev
05/22

State of Colorado

Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number:

403497347

Date Received:

11/09/2023

APPLICATION FOR PERMIT TO

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate
Amend ☐
 TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: _____
Refile ☐
 ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐
Sidetrack ☐

Well Name: SCHMERGE

Well Number: 4-2HZ

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: Loryn Spady

Phone: (720)929-3504

Fax: ()

Email: Loryn_Spady@oxy.com

FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

COGCC Financial Assurance

☒ The Operator has provided or will provide Financial Assurance to the COGCC for this Well.

Surety ID Number (if applicable): 20010124

Federal Financial Assurance

☐ In checking this box, the Operator certifies that it has provided or will provide at least this amount of Financial Assurance to the federal government for this Well. (Per Rule702.a.)

Amount of Federal Financial Assurance \$ _____

WELL LOCATION INFORMATION

Surface Location

QtrQtr: NESE Sec: 4 Twp: 5N Rng: 67W Meridian: 6

FNL/FSL

FEL/FWL

Footage at Surface: 1839 Feet FSL 689 Feet FEL

Latitude: 40.426344

Longitude: -104.890674

GPS Data:

GPS Quality Value: 1.6

Type of GPS Quality Value: PDOP

Date of Measurement: 11/03/2022

Ground Elevation: 4902

Field Name: WATTENBERG

Field Number: 90750

Well Plan: is ☐ Directional ☒ Horizontal (highly deviated) ☐ Vertical

If Well plan is Directional or Horizontal attach Deviated Drilling Plan and Directional Data.

Subsurface Locations

Top of Productive Zone (TPZ)

Sec: 4 Twp: 5N Rng: 67W

Footage at TPZ: 1088 FNL 373 FWL

Measured Depth of TPZ: 8597

True Vertical Depth of TPZ: 6928

FNL/FSL

FEL/FWL

Base of Productive Zone (BPZ)Sec: 1 Twp: 5N Rng: 68WFootage at BPZ: 1113 FNL 60 FWLMeasured Depth of BPZ: 25053True Vertical Depth of BPZ: 6841 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 1 Twp: 5N Rng: 68WFootage at BHL: 1113 FNL 60 FWLFNL/FSLFEL/FWL**LOCAL GOVERNMENT PERMITTING INFORMATION**County: WELDMunicipality: N/A

Is the Surface Location of this Well in an area designated as one of State interest and subject to the requirements of §

24-65.1-108 C.R.S.? Yes

Per § 34-60-106(1)(f)(I)(A) C.R.S., the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas Location.

SB 19-181 provides that when "applying for a permit to drill," operators must include proof that they sought a local government siting permit and the disposition of that permit application, or that the local government does not have siting regulations. § 34-60-106(1)(f)(I)(A) C.R.S.

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this Location? ☒ 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 disposition of the application filed with the Relevant Local Government is: Approved Date of Final Disposition: 07/20/2023Comments: WOGLA #: 1041WOGLA23-0001**SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS LOCATION**Surface Owner of the land at this Well's Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☐ IndianMineral Owner beneath this Well's Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☐ Indian

Surface Owner Protection Bond (if applicable): _____

Surety ID Number (if applicable): _____

MINERALS DEVELOPED BY WELL

The ownership of all the minerals that will be developed by this Well is (check all that apply):

☒ Fee☐ State☐ Federal☐ Indian☐ N/A

LEASE INFORMATION

Using standard QtrQtr, Section, Township, Range format describe one entire mineral lease as follows:

* If this Well is within a unit, describe a lease that will be developed by the Well.

* If this Well is not subject to a unit, describe the lease that will be produced by the Well.

(Attach a Lease Map or Lease Description or Lease if necessary.)

Township 5 North, Range 68 West, 6th P.M.
Section 1: N2NE (E2 of Lot 2)
Larimer County, Colorado

Total Acres in Described Lease: 80 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian
Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1770 Feet
Building Unit: 2376 Feet
Public Road: 1934 Feet
Above Ground Utility: 1862 Feet
Railroad: 2098 Feet
Property Line: 720 Feet

INSTRUCTIONS:

- Specify all distances per Rule 308.b.(1).
- 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 – as defined in 100 Series Rules.

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	407-3497	2920	T5N-67W: SEC 3: N2, N2S2 SEC 4: S2, S2N2, NWNW SEC 5: ALL SEC 6: ALL T5N-68W: SEC 1: ALL

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

SUBSURFACE MINERAL SETBACKS

Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? Yes

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: 60 Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: 310 Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: _____ Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: _____ Feet

Exception Location

☐ If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers. _____

SPACING & FORMATIONS COMMENTS

DRILLING PROGRAM

Proposed Total Measured Depth: 25053 Feet

TVD at Proposed Total Measured Depth 6841 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: 367 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 Plan unless a plan was already submitted with the Form 2A per Rule 304.c.(10).

Will there be hydraulic fracture treatment at a depth less than 2,000 feet in this well? No

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

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	26	16	ASTM A53 B	36.94	0	80	64	80	0
SURF	13+1/2	9+5/8	L80	36	0	2852	1090	2852	0
1ST	7+7/8	5+1/2	HCP110	17	0	25043	2885	25043	1000

☐ Conductor Casing is NOT planned

POTENTIAL FLOW AND CONFINING FORMATIONS

Zone Type	Formation /Hazard	Top M.D.	Top T.V.D.	Bottom M.D.	Bottom T.V.D.	TDS (mg/L)	Data Source	Comment
Confining Layer	Pierre Shale	17	17	371	371			A small amount of the Fox Hills Transition Zone may be present at the surface per a USGS map
Groundwater	Upper Pierre Aquifer	372	372	1209	1198	501-1000	Electric Log Calculation	Controlled by samples
Confining Layer	Pierre Shale	1210	1199	2557	2416			
Groundwater	A Sand	2559	2417	2726	2552	1001-10000	Electric Log Calculation	Controlled by samples
Confining Layer	Pierre Shale	2727	2553	4601	4036			
Hydrocarbon	Sussex	4602	4037	4904	4276			Non productive
Confining Layer	Pierre Shale	4906	4277	5311	4598			
Hydrocarbon	Shannon	5313	4599	5423	4686			Non productive
Confining Layer	Pierre Shale	5424	4687	8292	6871			
Hydrocarbon	Niobrara	8294	6872	0	0			

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 included on this permit for review as an attachment labeled "Other." Base of Productive Zone is the same as Bottom Hole Location. The nearest offset wellbore permitted or completed in the same formation is: Schmerge 4-3HZ, DOC ID: 403497392.
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This application is in a Comprehensive Area Plan No CAP #: _____
Oil and Gas Development Plan Name Flower OGDID #: 484452
Location ID: 485056
I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.
Signed: _____ Print Name: Loryn Spady
Title: Regulatory Analyst Date: 11/9/2023 Email: DJREGULATORY@OXY.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, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved:  Director of COGCC Date: 11/21/2023
Expiration Date: 08/15/2026

API NUMBER 05 123 52321 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	Operator will log two (2) additional wells with open-hole resistivity log with gamma-ray log from the kick-off point into the surface casing for the two stratigraphically deepest wells on each directional side of the pad for a total of three (3) wells logged.
Drilling/Completion Operations	<p>Operator acknowledges the proximity of the listed non-operated wells. Operator assures that this offset list 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.</p> <p>123-10778 THORNTON *1</p> <p>Operator acknowledges the proximity of the listed wells. Operator assures that this offset list will be remediated per the DJ Basin Horizontal Offset Policy (option 4). Operator will submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating that appropriate mitigation will be completed, during the hydraulic stimulation of this well. This Form 42 shall be filed 48 hours prior to stimulation. Operator will assure that the well's Bradenhead is open and monitored during the entire stimulation treatment – a person will monitor for any evidence of fluid, a Bradenhead test will be performed prior to the beginning of stimulation.</p> <p>123-40291 Greeley-Rothe Federal *33N-2C-L 123-36427 RANCHO WATER VALLEY *5 123-46536 Bluff Federal *32N-2C-L 123-36122 SHURVIEW *13N-3HZ 123-36426 RANCHO WATER VALLEY 13 *7-6-33-270-6-CH 123-36428 RANCHO WATER VALLEY 11 *7-7-33-270-6-CH 123-36433 RANCHO WATER VALLEY *6 123-34891 RANCHO WATER VALLEY *3-9-4 123-36430 RANCHO WATER VALLEY *12</p>
Drilling/Completion Operations	<p>Per ECMC Order 1-232, Bradenhead tests shall be performed according to the following schedule and Form 17 submitted within 10 days of each test:</p> <p>1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi is observed or if there is continuous flow, Operator must contact ECMC engineering for approval prior to stimulation.</p> <p>2) If a delayed completion, a second test is required between 6-9 months after rig release and must be conducted prior to stimulation. If any pressure greater than 200 psi is observed or if there is continuous flow, Operator must contact ECMC engineering for approval prior to stimulation.</p> <p>3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance.</p>
Drilling/Completion Operations	<p>1) Submit Form 42 electronically to ECMC 2 business days prior to MIRU (spud notice) for the first well activity with a rig on the pad and provide 2 business day spud notice via Form 42 for all subsequent wells drilled on the pad.</p> <p>2) Comply with Rule 408.j. and provide cement coverage from TD to a minimum of 500' above Niobrara. Verify coverage with a cement bond log.</p> <p>3) Oil based drilling fluid can only be used after all groundwater has been isolated.</p>
4 COAs	

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 ECMC 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: Operator will log three (3) of the stratigraphically deepest wells (two [2] of the wells drilled to west, and one [1] of the wells drilled to the east) on the pad 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)

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
403497347	FORM 2 SUBMITTED
403502283	DIRECTIONAL DATA
403502284	WELL LOCATION PLAT
403521054	DEVIATED DRILLING PLAN
403578135	OTHER
403603458	OFFSET WELL EVALUATION

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	11/17/2023
Engineer	operator requested return to Draft to complete the requested items - PFZ, OWE	10/19/2023
Permit	<p>ON HOLD: This application has been reviewed by CECMC staff and cannot be approved based on the information submitted; therefore, the CECMC is placing this form ON HOLD until additional information is received from the applicant.</p> <p>In compliance with § 24-65.1-108(1), C.R.S., the CECMC is providing this written request for all additional information necessary for the CECMC to respond to this application. The applicant may provide all requested additional information to CECMC via email. Upon receipt of all requested information, the CECMC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review. If the applicant no longer requires this application be approved, the applicant may request to withdraw the application.</p> <p>In addition to all standard required information and attachments, the CECMC hereby confirms the following information is necessary for review:</p> <ol style="list-style-type: none">1. . . . The Potential Flow Zone table2. . . . The offset reviews	10/13/2023
Permit	Permitting review complete.	09/21/2023
OGLA	The Commission approved OGDG #484452 on August 16, 2023 for the Oil and Gas Location related to this Form 2. OGLA task passed.	09/12/2023

Total: 5 comment(s)