

FORM
2

Rev
05/22

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:

403098063

Date Received:

10/18/2022

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: SWARTZ Well Number: 4-4HZ
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: RYAN SEASTROM Phone: (720)929-3139 Fax: ()
Email: Ryan_Seastrom@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: NWNE Sec: 4 Twp: 3N Rng: 67W Meridian: 6

Footage at Surface: 645 Feet FNL 1529 Feet FEL

Latitude: 40.260368 Longitude: -104.891533

GPS Data: GPS Quality Value: 1.9 Type of GPS Quality Value: PDOP Date of Measurement: 12/14/2021

Ground Elevation: 4826

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: 3N Rng: 67W Footage at TPZ: 236 FNL 1350 FEL
Measured Depth of TPZ: 7434 True Vertical Depth of TPZ: 6968 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 1 Twp: 3N Rng: 67W Footage at BPZ: 270 FNL 2427 FWL
Measured Depth of BPZ: 21623 True Vertical Depth of BPZ: 7082 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 1 Twp: 3N Rng: 67W Footage at BHL: 270 FNL 2427 FWL
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: WELD Municipality: 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: 06/30/2022

Comments: The Swartz 2-4HZ Pad 1041WOGLA21-0027 was approved on 6/30/2022.

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 ☐ Indian

Mineral 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 3 North, Range 67 West, 6th P.M.
Section 4: Lot 1, S2NE (NE)
Weld County, Colorado

See attached Lease Map.

Total Acres in Described Lease: 162

Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 735 Feet
Building Unit: 858 Feet
Public Road: 631 Feet
Above Ground Utility: 620 Feet
Railroad: 5280 Feet
Property Line: 616 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 | 4073374 | 3440 | T3N- 67W;1:NW4;2:N2;3:N2;4:N2;5:N2;6:N2;T 3N-68W;1:N2;T4N- 67W;31:S2;32:S2;33:S2 34:S2;T4N- 68W;36:E2SE4 |

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: 200 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: 255 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: 21623 Feet

TVD at Proposed Total Measured Depth 7082 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: 731 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

| <u>Casing Type</u> | <u>Size of Hole</u> | <u>Size of Casing</u> | <u>Grade</u> | <u>Wt/Ft</u> | <u>Csg/Liner Top</u> | <u>Setting Depth</u> | <u>Sacks Cmt</u> | <u>Cmt Btm</u> | <u>Cmt Top</u> |
|--------------------|---------------------|-----------------------|--------------|--------------|----------------------|----------------------|------------------|----------------|----------------|
| CONDUCTOR | 26 | 16 | ASTM A53 B | 36.94 | 0 | 80 | 64 | 80 | 0 |
| SURF | 13+1/2 | 9+5/8 | L80 | 36 | 0 | 1500 | 590 | 1500 | 0 |
| 1ST | 7+7/8 | 5+1/2 | HCP110 | 17 | 0 | 21613 | 2466 | 21613 | |

☐ Conductor Casing is NOT planned

POTENTIAL FLOW AND CONFINING FORMATIONS

| <u>Zone Type</u> | <u>Formation /Hazard</u> | <u>Top M.D.</u> | <u>Top T.V.D.</u> | <u>Bottom M.D.</u> | <u>Bottom T.V.D.</u> | <u>TDS (mg/L)</u> | <u>Data Source</u> | <u>Comment</u> |
|------------------|--------------------------|-----------------|-------------------|--------------------|----------------------|-------------------|--------------------------|---------------------|
| Groundwater | Fox Hills | 0 | 0 | 127 | 127 | 501-1000 | USGS | Depth data from DWR |
| Confining Layer | Pierre Shale | 128 | 128 | 398 | 398 | | | |
| Groundwater | Upper Pierre Aquifer | 399 | 399 | 1266 | 1263 | 501-1000 | Electric Log Calculation | |
| Confining Layer | Pierre Shale | 1267 | 1264 | 4136 | 4077 | | | |
| Hydrocarbon | Sussex | 4137 | 4078 | 4359 | 4297 | | | Non-productive |
| Confining Layer | Pierre Shale | 4360 | 4298 | 4651 | 4588 | | | |
| Hydrocarbon | Shannon | 4652 | 4589 | 4734 | 4671 | | | Non-productive |
| Confining Layer | Pierre Shale | 4735 | 4672 | 7049 | 6864 | | | |
| Hydrocarbon | Niobrara | 7051 | 6865 | 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: Swartz 4-6HZ: DOC ID #403098068

This application is in a Comprehensive Area Plan No CAP #: _____

Oil and Gas Development Plan Name Democrat OGD OGD ID#: 482251

Location ID: 482983

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

Signed: _____ Print Name: RYAN SEASTROM

Title: REGULATORY ANALYST Date: 10/18/2022 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: 12/13/2022

Expiration Date: 09/06/2025

API NUMBER

05 123 51914 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

| | |
|--------------------------------|--|
| Drilling/Completion Operations | Operator will log two (2) wells during the first rig occupation 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 side of the pad. |
| Drilling/Completion Operations | 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 is observed or if there is continuous flow, Operator must contact COGCC engineering for approval prior to stimulation. 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 COGCC engineering for approval 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 | 1) Submit Form 42 electronically to COGCC 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. 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. |
| Drilling/Completion Operations | Operator acknowledges the proximity of the listed wells. Operator assures that this offset list will be remediated per the Offset Well Evaluation and Hydraulic Fracturing Operator Guidance Document (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 ensure the well is equipped with at least a 5,000 psi wellhead and monitor casing (surface and production) pressures during the entire stimulation treatment. Surface and production casing pressures of this offset well list will be actively monitored during the entire stimulation treatment of this pad. If there is indication of communication between the stimulation treatment and an offset well, treatment will be stopped and COGCC Engineering notified. 123-17970HSR-SCOTTDAL RANCHES #8-2 123-19193HSR-PESCO #4-2A 123-21855MCDONALD #1-4 123-22576CAMENISCH #23-33 123-23137PSC #24-3 123-23969MCCORMICK #10-1 123-26245PLATTE #28-2 |

| | |
|--------------------------------|---|
| Drilling/Completion Operations | Operator acknowledges the proximity of the non-operated listed well. Operator agrees to: provide mitigation option 1 or 2 (per the Offset Well Evaluation and Hydraulic Fracturing Operator Guidance Document) 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. 123-23578CAMENISCH #32-16 |
| Drilling/Completion Operations | Operator acknowledges the proximity of the listed wells. Operator agrees to: provide mitigation option 1 or 2 (per the Offset Well Evaluation and Hydraulic Fracturing Operator Guidance Document) 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. 123-10530JOHNSON #1-34 123-10807FORT SAINT VRAIN #17 123-16618HSR-OLSON #2-2 123-17483HSR-WALTER #6-1A 123-17870KOESTER #24-33 123-17920KOESTER #14-33 123-17980KOESTER #13-33 123-18815PSC #43-34 123-21598PSC #10-34 123-21684MCDONALD #5-3A 123-22670WCR PROPERITES #41-5 |

6 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 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 to 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 clearly state "Alternative Logging Program - No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open-hole logs were run." |

Total: 3 comment(s)

Attachment List

| <u>Att Doc Num</u> | <u>Name</u> |
|---------------------------|------------------------|
| 1310969 | SURFACE CASING CHECK |
| 403098063 | FORM 2 SUBMITTED |
| 403139914 | DIRECTIONAL DATA |
| 403139915 | DEVIATED DRILLING PLAN |
| 403139916 | WELL LOCATION PLAT |

| | |
|-----------|------------------------|
| 403192132 | OTHER |
| 403192142 | LEASE MAP |
| 403259846 | OFFSET WELL EVALUATION |

Total Attach: 8 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|---|----------------------------|
| Permit | Final Review Completed. | 12/08/2022 |
| Permit | With operator's concurrence removed Open Hole Logging Exception letter and BMP and added alternative Open Hole Logging BMP. | 12/08/2022 |
| Permit | With operator's concurrence added Open Hole Logging COA Permitting review complete | 12/05/2022 |
| Permit | Requesting additional Open Hole logging COA. | 12/01/2022 |
| Permit | Open: Emailed the SLB to notify them of this pending application. Close: SLB has no concerns with this application | 11/29/2022 |
| OGLA | The Commission approved OGDG #482251 on September 07, 2022 for the Oil and Gas Location related to this Form 2. OGLA task passed. | 10/19/2022 |

Total: 6 comment(s)