

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:

403770510

(SUBMITTED)

Date Received:

07/18/2024

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: WINDOM Well Number: 15N
 Name of Operator: PDC ENERGY INC ECMC Operator Number: 69175
 Address: 1099 18TH STREET SUITE 1500
 City: DENVER State: CO Zip: 80202
 Contact Name: Patricia Minerich Phone: (303)228-4000 Fax: ()
 Email: RBUDevPermitting@chevron.com

FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

ECMC Financial Assurance

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

Surety ID Number (if applicable): 20230093

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: NWSE Sec: 24 Twp: 5N Rng: 67W Meridian: 6

Footage at Surface: 1847 Feet FSL 2384 Feet FEL

Latitude: 40.382892 Longitude: -104.840704

GPS Data: GPS Quality Value: 1.5 Type of GPS Quality Value: PDOP Date of Measurement: 10/30/2021

Ground Elevation: 4999

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: 24 Twp: 5N Rng: 67W Footage at TPZ: 1263 FNL 2460 FEL
Measured Depth of TPZ: 8155 True Vertical Depth of TPZ: 7403 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 20 Twp: 5N Rng: 66W Footage at BPZ: 1284 FNL 2503 FWL

Measured Depth of BPZ: 18420 True Vertical Depth of BPZ: 7398 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 20 Twp: 5N Rng: 66W Footage at BHL: 1285 FNL 2553 FWL

FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: WELD Municipality: Greeley

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: 08/17/2023

Comments: 1041WOGLA23-0037 was approved on 8/17/2023

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 5 North - Range 67 West Section 24: SE4

Total Acres in Described Lease: 160 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 2146 Feet
 Building Unit: 2292 Feet
 Public Road: 1833 Feet
 Above Ground Utility: 2113 Feet
 Railroad: 5280 Feet
 Property Line: 233 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 | 407-3556 | 2230 | Township 5 North, Range 66 West Section 19: All Section 20: W2 Township 5 North, Range 67 West Section 23: All Section 24: 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: 151 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: 295 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 PROGRAMProposed Total Measured Depth: 18470 Feet TVD at Proposed Total Measured Depth 7398 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: 135 Feet No well belonging to another operator within 1,500 feetWill a closed-loop drilling system be used? YesIs 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? NoWill salt sections be encountered during drilling? NoWill salt based (>15,000 ppm Cl) drilling fluids be used? NoWill oil based drilling fluids be used? YesBOP Equipment Type: Annular Preventor Double Ram Rotating Head NoneBeneficial reuse or land application plan submitted? No

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 | A-52A | 36.94 | 0 | 80 | 175 | 80 | 0 |
| SURF | 13+1/2 | 9+5/8 | J-55 | 36 | 0 | 1850 | 633 | 1850 | 0 |
| 1ST | 8+1/2 | 5+1/2 | P-110 | 17 | 0 | 18470 | 2163 | 18470 | 1000 |

 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> |
|-------------------|--------------------------|-----------------|-------------------|--------------------|----------------------|-------------------|--------------------|------------------------|
| Confining Layer | Pierre Shale | 0 | 0 | 545 | 545 | | | |
| Groundwater | UPIR/Pawnee Aquifer | 545 | 545 | 1513 | 1508 | 1001-10000 | Other | COGCC UPWQ Study |
| Confining Layer | Pierre Shale | 1513 | 1508 | 4018 | 3864 | | | |
| Hydrocarbon | Parkman | 4018 | 3864 | 4426 | 4245 | | | |
| Confining Layer | Pierre Shale | 4426 | 4245 | 4655 | 4460 | | | |
| Hydrocarbon | Sussex | 4655 | 4460 | 4919 | 4708 | | | |
| Confining Layer | Pierre Shale | 4919 | 4708 | 5184 | 4956 | | | |
| Hydrocarbon | Shannon | 5184 | 4956 | 5393 | 5152 | | | |
| Confining Layer | Pierre Shale | 5393 | 5152 | 7548 | 7150 | | | |
| Subsurface Hazard | Sharon Springs Shale | 7548 | 7150 | 7598 | 7187 | | | least competent shales |
| Hydrocarbon | Niobrara | 7598 | 7187 | 18470 | 7398 | | | Nio Target |

OPERATOR COMMENTS AND SUBMITTAL

Comments

PDC Energy shall isolate both the Fox Hills and UPIR/Pawnee Aquifers with surface casing from hydrocarbon bearing zones and exposure to oil-based drilling fluid. PDC Energy also agrees to not expose the UPIR/Pawnee Aquifers to oil-based mud.

Fox Hills is not anticipated to be encountered.

The nearest well in the same formation is located on the same pad, the WINDOM 3NA operated by PDC Energy Inc. Measured in 2D.

The distance to another wellbore belonging to an outside operator is the D.L. PHILLIPS #24-24 (05-123-19879) Operated by NOBLE ENERGY INC, status TA. The distance was calculated using the anti-collision summary. 408.u consent attached.

Wells within 150':
SW GREELEY #18-20 05-123-26603 (PA) 27' operated by PDC ENERGY INC, no 408.u is required, well has been plugged and abandoned.

This well has a bottom-hole location beyond the unit boundary setback. The bottom of the completed interval will be within the unit boundary setback at 1284' FNL and 2503' FWL of Section 20. The wellbore beyond the unit boundary setback will be physically isolated and will not be completed.

This application is in a Comprehensive Area Plan Yes CAP #: 210200012

Oil and Gas Development Plan Name Cameron 2 OGDP ID#: 485239

Location ID: 485814

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

Signed: _____ Print Name: Kim Bauer

Title: Regulatory Analyst II Date: 7/18/2024 Email: kimberlybauer@chevron.com

Based on the information provided herein, this Application for Permit-to-Drill complies with ECMC Rules, applicable orders, and SB 19-181 and is hereby approved.

ECMC Approved: _____ Director of ECMC Date: _____

Expiration Date: _____

API NUMBER
05

CONDITIONS OF APPROVAL, IF ANY LIST

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 |
|-----------------|--------------------|
| 0 COA | |

Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|-----------|--------------------------------|--|
| 1 | Drilling/Completion Operations | During and Post stimulation: PDC Energy Inc will comply with the COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated 5/29/12.` |
| 2 | Drilling/Completion Operations | If a skid is performed for the subject well, then the only required BOPE tests are for the BOPE connection bonnet seal breaks, as long as a full BOPE test was performed at the beginning of the pad, and as long as all necessary BOPE tests are completed at least every 30 days during the pad operations.` |
| 3 | Drilling/Completion Operations | Operator will perform anti-collision evaluation of all active (producing, shut-in, or temporarily abandoned) offset wellbores that have the potential of being within 150' of the proposed well prior to drilling operations.` |
| 4 | Drilling/Completion Operations | One of the first wells drilled on the pad during the first rig occupation will be logged with open-hole resistivity log with gamma-ray log from the kick-off point into the surface casing for one of the stratigraphically deepest wells on the pad. 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 will state "Alternative Logging Program - No open-hole logs were run" and will clearly identify the type of log and the well (by API#) in which open-hole logs were run.` |

Total: 4 comment(s)

ATTACHMENT LIST

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|-----------------------------|
| 403770532 | WELL LOCATION PLAT |
| 403789959 | SURFACE AGRMT/SURETY |
| 403795065 | OffsetWellEvaluations Data |
| 403816215 | DEVIATED DRILLING PLAN |
| 403816216 | STIMULATION SETBACK CONSENT |
| 403816892 | DIRECTIONAL DATA |

Total Attach: 6 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|---------------------|
| Engineer | ON HOLD: APD's placed on hold pending information regarding PFZ table inconsistencies, both internal to itself, and when compared to directional data. | 07/17/2024 |

Total: 1 comment(s)