

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:

403069173

(SUBMITTED)

Date Received:

07/21/2022

APPLICATION FOR PERMIT TO

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

Amend ☐

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: \_\_\_\_\_

Refill ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: Drake Well Number: 18N  
Name of Operator: PDC ENERGY INC COGCC Operator Number: 69175  
Address: 1775 SHERMAN STREET - STE 3000  
City: DENVER State: CO Zip: 80203  
Contact Name: Ally Ota Phone: (303)860-5800 Fax: ( )  
Email: alexandria.ota@pdce.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): 20160047

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: SWNW Sec: 17 Twp: 4N Rng: 64W Meridian: 6

FNL/FSL

FEL/FWL

Footage at Surface: 2311 Feet FNL 1013 Feet FWL

Latitude: 40.313290 Longitude: -104.580230

GPS Data: GPS Quality Value: 1.6 Type of GPS Quality Value: PDOP Date of Measurement: 02/06/2021

Ground Elevation: 4733

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: 18 Twp: 4N Rng: 64W Footage at TPZ: 1433 FSL 450 FEL  
Measured Depth of TPZ: 7791 True Vertical Depth of TPZ: 6877 FNL/FSL FEL/FWL

**Base of Productive Zone (BPZ)**Sec: 16 Twp: 4N Rng: 64WFootage at BPZ: 1432 FSL 200 FELMeasured Depth of BPZ: 18584True Vertical Depth of BPZ: 6791 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 16 Twp: 4N Rng: 64WFootage at BHL: 1432 FSL 200 FEL

FNL/FSL

FEL/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: 03/17/2022

Comments: 1041WOGLA21-0007 CDP is approved

**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.)

T4N-R64W Section 17: NW/4, S/2, among other lands

Total Acres in Described Lease: 5660 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # \_\_\_\_\_

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1102 Feet  
Building Unit: 1241 Feet  
Public Road: 979 Feet  
Above Ground Utility: 710 Feet  
Railroad: 5280 Feet  
Property Line: 307 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	407-3328	3770	S.4: S2S2S2, S.5: S2S2SE, S.7: SESESE, S.8: E2, S2S2SW, S.9: All, S.16: All, S.17: All, S.18: E2E2E2, S.20: All, S.21: 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: 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: 218 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: 18584 FeetTVD at Proposed Total Measured Depth 6791 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: 30 Feet ☐ No well belonging to another operator within 1,500 feetWill a closed-loop drilling system be used? YesIs H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No If yes, attach an H<sub>2</sub>S 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**

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
SURF	13+1/2	9+5/8	J-55	36	0	1600	920	1600	0
1ST	8+1/2	5+1/2	P-110	20	0	18584	2035	18584	2000

☒ 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
Groundwater	Fox Hills Sandstone	495	495	880	880	1001-10000	Other	COGCC UPWQ Study
Confining Layer	Pierre Shale	925	925	975	975			
Groundwater	UPIR/Pawnee Aquifer	975	975	1493	1493	1001-10000	Other	COGCC UPWQ Study
Confining Layer	Pierre Shale	1493	1493	3655	3655			
Hydrocarbon	Parkman	3655	3655	3955	3955			
Confining Layer	Pierre Shale	3955	3955	4047	4047			
Hydrocarbon	Sussex	4047	4047	4430	4430			
Confining Layer	Pierre Shale	4430	4430	4897	4897			
Hydrocarbon	Shannon	4897	4897	4967	4967			
Confining Layer	Pierre Shale	4967	4967	7402	6681			
Subsurface Hazard	Sharon Springs Shale	7402	6681	7469	6727			
Hydrocarbon	Niobrara	7469	6727	18584	6791			

**OPERATOR COMMENTS AND SUBMITTAL**

Comments



The distance to the completed portion of the nearest well on the "Spacing and Formations" tab was measured to the Drake 19NA (Doc #403069176). The distance to the nearest wellbore belonging to another operator on the "Drilling Plan" tab was measured to the Angela C17-25 (05-123-24345). Both distances were measured via the anti-collision report attached in the deviated drilling plan.

The subject well will have a treated interval less than 175' from the treated interval of the below listed wells owned by Noble. Stimulation Setback Consent is attached for those closer than 150'. All distances were measured using the attached anti-collision report.

Mark Alter C16-79HN (05-123-33386), 77', PR  
SH C 17-24D (05-123-34498), 57', P&A  
Angela C17-25 (05-123-24345), 30', P&A  
Ocoma C17-23 (05-123-21728), 85', P&A  
Ryann State C16-24 (05-123-25634), 58', P&A  
Ryann State C16-25 (05-123-25399), 101', PR  
Ryann State C16-23 (05-123-25398), 153', SI

This application is in a Comprehensive Area Plan No CAP #: \_\_\_\_\_  
Oil and Gas Development Plan Name Kenosha OGDID #: 481580  
Location ID: 482390

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

Signed: \_\_\_\_\_ Print Name: Ally Ota

Title: Regulatory Analyst Date: 7/21/2022 Email: alexandria.ota@pdce.com

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: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

API NUMBER

05

### 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.

### Condition of Approval

COA Type

Description

0 COA

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Operator will perform an anti-collision evaluation of all active (producing, shut in, or temporarily abandoned) offset wellbores that have the potential of being within 150 feet of a proposed well prior to drilling operations for the proposed well. Notice shall be given to all offset operators prior to drilling.
2	Drilling/Completion Operations	OPEN HOLE LOGGING EXCEPTION: One of the first wells drilled on the pad will be logged with cased-hole neutron log with 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 in that well and have those logs attached. The Form 5 for each well shall state "Open Hole Logging Exception - 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: 2 comment(s)

## Attachment List

<u>Att Doc Num</u>	<u>Name</u>
403074999	OffsetWellEvaluations Data
403075015	OPEN HOLE LOGGING EXCEPTION
403075017	STIMULATION SETBACK CONSENT
403075018	WELL LOCATION PLAT
403075019	DEVIATED DRILLING PLAN
403075020	DIRECTIONAL DATA

Total Attach: 6 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Submitting per operator request; technical issue prevents the operator from doing so.	07/21/2022
Permit	RETURNED TO DRAFT: This application has been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is returning this form to DRAFT for the applicant to resolve the issues. In compliance with § 24-65.1-108(1), C.R.S., the COGCC is returning this application to the applicant to remedy the deficiencies. The applicant may resubmit this application for COGCC review; upon resubmittal of any application, the COGCC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review. In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for review: 1. Missing Deviated Drilling Plan as required by: Rule 308.b.(5) . Rule 410.a.(1)	07/21/2022
OGLA	The Commission approved OGDG #481580 on 06/08/2022 for the Oil and Gas Location related to this Form 2. OGLA task passed.	06/24/2022

Total: 3 comment(s)

## **Public Comments**

No public comments were received on this application during the comment period.

