

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:

403398017

(SUBMITTED)

Date Received:

06/22/2023

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: Edmundson Well Number: 17N  
Name of Operator: PDC ENERGY INC COGCC Operator Number: 69175  
Address: 1099 18TH STREET SUITE 1500  
City: DENVER State: CO Zip: 80202  
Contact Name: Ally Ota Phone: (303)860-5800 Fax: ( )  
Email: regulatory@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: SESE Sec: 30 Twp: 1S Rng: 66W Meridian: 6

FNL/FSL

FEL/FWL

Footage at Surface: 366 Feet FSL 355 Feet FEL

Latitude: 39.929877 Longitude: -104.810196

GPS Data: GPS Quality Value: 1.2 Type of GPS Quality Value: PDOP Date of Measurement: 03/13/2023

Ground Elevation: 5060

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: 32 Twp: 1S Rng: 66W Footage at TPZ: 1484 FSL 150 FWL  
Measured Depth of TPZ: 9190 True Vertical Depth of TPZ: 7590 FNL/FSL FEL/FWL

**Base of Productive Zone (BPZ)**Sec: 33 Twp: 1S Rng: 66WFootage at BPZ: 1478 FSL 150 FELMeasured Depth of BPZ: 19469True Vertical Depth of BPZ: 7535 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 33 Twp: 1S Rng: 66WFootage at BHL: 1478 FSL 150 FEL

FNL/FSL FEL/FWL

**LOCAL GOVERNMENT PERMITTING INFORMATION**County: ADAMSMunicipality: 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: 02/22/2018Comments: **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.)

T1S-R66W Section 33: AllTotal Acres in Described Lease: 640Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ IndianFederal or State Lease #

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1118 Feet  
Building Unit: 1725 Feet  
Public Road: 832 Feet  
Above Ground Utility: 2230 Feet  
Railroad: 2786 Feet  
Property Line: 355 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	407-3469	1280	T1S-R66W Section 32: All Section 33: 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: 150 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: 219 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: 19469 Feet

TVD at Proposed Total Measured Depth 7535 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: 110 Feet ☐ No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is 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? 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? 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	2000	789	2000	0
1ST	8+1/2	5+1/2	P-110	20	0	19469	3017	19469	2400

☒ 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	1070	1070	1270	1270	1001-10000	Other	COGCC UPWQ Study
Confining Layer	Pierre Shale	1270	1270	1672	1672			
Groundwater	UPIR/Pawnee Aquifer	1672	1672	1825	1825	1001-10000	Other	COGCC UPWQ Study
Confining Layer	Pierre Shale	1825	1825	4567	4567			
Hydrocarbon	Parkman	4567	4567	4752	4752			
Confining Layer	Pierre Shale	4752	4752	4925	4925			
Hydrocarbon	Sussex	4925	4925	5110	5110			
Confining Layer	Pierre Shale	5110	5110	6150	6150			
Hydrocarbon	Shannon	6150	6150	6250	6250			
Confining Layer	Pierre Shale	6250	6250	8607	7402			
Subsurface Hazard	Sharon Springs Shale	8607	7402	8720	7467			
Hydrocarbon	Niobrara	8720	7467	19469	7535			

## OPERATOR COMMENTS AND SUBMITTAL

Comments

This Form 2 is being refiled to update footages, spacing, and well name. This location has been built.

The distance to the completed portion of the nearest well on the "Spacing and Formations" tab was measured to the Edmundson 18N (05-001-10119). The distance to the nearest wellbore belonging to another operator on the "Drilling Plan" tab was measured to the plugged and abandoned Freeman 1 (05-001-06964). Both distances were measured via the anti-collision report attached in the deviated drilling plan.



This application is in a Comprehensive Area Plan \_\_\_\_\_ No \_\_\_\_\_ CAP #: \_\_\_\_\_  
Oil and Gas Development Plan Name \_\_\_\_\_ OGDID ID#: \_\_\_\_\_  
Location ID: 453934

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: 6/22/2023 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**

05 001 10111 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**

0 COA

**Best Management Practices**

**No BMP/COA Type**

**Description**

1	Drilling/Completion Operations	ALTERNATIVE PROGRAM: An existing well on the pad (Edmundson LE 33-082HC 05-001-10106) was 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.
2	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.

Total: 2 comment(s)

**Attachment List**

<u>Att Doc Num</u>	<u>Name</u>
403413762	OffsetWellEvaluations Data
403413779	WELL LOCATION PLAT
403413784	DEVIATED DRILLING PLAN
403413789	DIRECTIONAL DATA

Total Attach: 4 Files

**General Comments**

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

