

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:

403069274

(SUBMITTED)

Date Received:

06/22/2022

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: George

Well Number: 04N

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: SWNE Sec: 21 Twp: 4N Rng: 64W Meridian: 6

FNL/FSL

FEL/FWL

Footage at Surface: 1805 Feet FNL 2366 Feet FEL

Latitude: 40.300210

Longitude: -104.554780

GPS Data:

GPS Quality Value: 1.7

Type of GPS Quality Value: PDOP

Date of Measurement: 05/05/2021

Ground Elevation: 4718

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: 21 Twp: 4N Rng: 64W

Footage at TPZ: 854 FNL 200 FEL

Measured Depth of TPZ: 7824

True Vertical Depth of TPZ: 6762

FNL/FSL

FEL/FWL

**Base of Productive Zone (BPZ)**Sec: 20 Twp: 4N Rng: 64WFootage at BPZ: 852 FNL 200 FWLMeasured Depth of BPZ: 17989True Vertical Depth of BPZ: 6851 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 20 Twp: 4N Rng: 64WFootage at BHL: 852 FNL 200 FWL

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: 03/17/2022Comments: 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 ☐ 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.)

See attached lease mapTotal Acres in Described Lease: 316Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease #

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 2285 Feet  
Building Unit: 2409 Feet  
Public Road: 1793 Feet  
Above Ground Utility: 1792 Feet  
Railroad: 5280 Feet  
Property Line: 440 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: 160 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: 17989 Feet

TVD at Proposed Total Measured Depth 6851 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: 64 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             | 1600          | 920       | 1600    | 0       |
| 1ST         | 8+1/2        | 5+1/2          | P-110 | 20    | 0             | 17989         | 2035      | 17989   | 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  | 430      | 430        | 800         | 800           | 1001-10000 | Other       | COGCC UPWQ Study |
| Confining Layer   | Pierre Shale         | 855      | 855        | 900         | 900           |            |             |                  |
| Groundwater       | UPIR/Pawnee Aquifer  | 900      | 900        | 1418        | 1418          | 1001-10000 | Other       | COGCC UPWQ Study |
| Confining Layer   | Pierre Shale         | 1418     | 1418       | 3585        | 3585          |            |             |                  |
| Hydrocarbon       | Parkman              | 3585     | 3585       | 3885        | 3885          |            |             |                  |
| Confining Layer   | Pierre Shale         | 3885     | 3885       | 3981        | 3981          |            |             |                  |
| Hydrocarbon       | Sussex               | 3981     | 3981       | 4353        | 4353          |            |             |                  |
| Confining Layer   | Pierre Shale         | 4353     | 4353       | 4800        | 4800          |            |             |                  |
| Hydrocarbon       | Shannon              | 4800     | 4800       | 4875        | 4875          |            |             |                  |
| Confining Layer   | Pierre Shale         | 4875     | 4875       | 7417        | 6553          |            |             |                  |
| Subsurface Hazard | Sharon Springs Shale | 7417     | 6553       | 7483        | 6600          |            |             |                  |
| Hydrocarbon       | Niobrara             | 7483     | 6600       | 17989       | 6851          |            |             |                  |

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## 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

## Best Management Practices

### No BMP/COA Type

### Description

|   |                                |   |
|---|--------------------------------|---|
| 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

### Att Doc Num

### Name

|           |                             |
|-----------|-----------------------------|
| 403077404 | OffsetWellEvaluations Data  |
| 403077413 | STIMULATION SETBACK CONSENT |
| 403077414 | LEASE MAP                   |
| 403077415 | OPEN HOLE LOGGING EXCEPTION |
| 403077416 | WELL LOCATION PLAT          |
| 403077417 | DEVIATED DRILLING PLAN      |
| 403077419 | DIRECTIONAL DATA            |

Total Attach: 7 Files

## General Comments

### User Group

### Comment

### Comment Date

|  |  |                     |
|--|--|---------------------|
|  |  | Stamp Upon Approval |
|--|--|---------------------|

Total: 0 comment(s)

## Public Comments

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

