

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:
402191526
(SUBMITTED)

Date Received:

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: Unplanned Sidetrack

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☒

Well Name: Pyramid Well Number: 5N
Name of Operator: PDC ENERGY INC COGCC Operator Number: 69175
Address: 1775 SHERMAN STREET - STE 3000
City: DENVER State: CO Zip: 80203
Contact Name: Venessa Chase Phone: (303)318-6102 Fax: (303)860-5838
Email: venessa.chase@pdce.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20160047

WELL LOCATION INFORMATION

QtrQtr: SENE Sec: 36 Twp: 5N Rng: 64W Meridian: 6
Latitude: 40.358521 Longitude: -104.490525

Footage at Surface: 1680 Feet FNL/FSL FNL 600 Feet FEL/FWL FEL

Field Name: WATTENBERG Field Number: 90750

Ground Elevation: 4588 County: WELD

GPS Data:

Date of Measurement: 01/20/2018 PDOP Reading: 2.2 Instrument Operator's Name: Jason Dahlman

If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL FNL 2610 FEL/FWL FEL 737 Bottom Hole: FNL/FSL FNL 2610 FEL/FWL FEL 150 FWL
Sec: 36 Twp: 5N Rng: 64W Sec: 35 Twp: 5N Rng: 64W

LOCAL GOVERNMENT INFORMATION

County: WELD Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: County

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this COGCC application? If the local government has waived its right to precede the COGCC in siting determination, indicate by selecting "NO" here and selecting "Waived" below. ☐ 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 local government siting permit type is: _____

The local government siting permit was filed on: _____

The disposition of the application filed with the local government is: _____

Additional explanation of local process:

Unplanned sidetrack for approved well

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Surface Owner is: ☐ is the mineral owner beneath the location.

(check all that apply)

☐ is committed to an Oil and Gas Lease.

☐ has signed the Oil and Gas Lease.

☐ is the applicant.

The Mineral Owner beneath this Oil and Gas Location is: ☐ Fee ☒ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed by this Well: Yes

The right to construct the Oil and Gas Location is granted by: Surface Use Agreement

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

Township 5 North, Range 64 West, 6th P.M., Section 36: SWNW

Total Acres in Described Lease: 40 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 7586.1

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1222 Feet

Building Unit: 1335 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 588 Feet

Above Ground Utility: 360 Feet

Railroad: 5280 Feet

Property Line: 362 Feet

School Facility: 5280 Feet

School Property Line: 5280 Feet

Child Care Center: 5280 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).
- 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, High Occupancy Building Unit, Designated Outside Activity Area, School Facility, and Child Care Center – as defined in 100 Series Rules.

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: ☐ Buffer Zone
☐ Exception Zone
☐ Urban Mitigation Area

- Buffer Zone – as described in Rule 604.a.(2), within 1,000' of a Building Unit
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: _____

SPACING and UNIT INFORMATION

Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 299 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 150 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

If this Form 2 is associated with a Drilling and Spacing Unit application, provide docket number: _____

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	407-2687	1280	S 35, 36: All

DRILLING PROGRAM

Proposed Total Measured Depth: 16822 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: 33 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 Operations Plan)

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

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Recycle/reuse

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

See Comments

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 449950 or Document Number: _____

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
SURF	12+1/4	9+5/8	36	0	1680	780	1680	0
1ST	8+1/2	5+1/2	20	0	16822	2035	16822	0

☒ Conductor Casing is NOT planned

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)

☐ Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of

Rule 604.a.)

- ☐ Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- ☐ Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- ☐ Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- ☒ Rule 318A.a. Exception Location (GWA Windows).
- ☒ Rule 318A.c. Exception Location (GWA Twinning).

RULE 502.b VARIANCE REQUEST

- ☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

OTHER LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 318.c. Exception Location from Rule or Spacing Order Number _____
- ☐ Rule 603.a.(2) Exception Location (Property Line Setback).

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

OPERATOR COMMENTS AND SUBMITTAL

Comments

The surface hole will be drilled with water based mud and the production hole will be drilled with oil based mud. Water based drilling fluid and cuttings will be land applied at PDC spread field with COGCC Facility ID 449950. Oil based drilling fluids will be recycled and reused. If the disposal is required, the oil based drilling fluids will be disposed at a commercial solid waste disposal facility. Oil based mud drill cuttings for the production hole will be disposed at a permitted commercial solid waste disposal facility.

We shut down circulating at a MD depth of 3,062' to pick up our agitator. Unfortunately, we don't think we circulated long enough before picking up the agitator and our BHA got packed off with cuttings. We were able to recover our drill string to a depth of 2,702' but not our drilling BHA below that (360' long fish). This morning PDC's Drilling Superintendent notified me that our jars had stopped firing and we made the decision that it was time to throw in the towel and ask permission to sidetrack. I spoke with you at 6:30 AM this morning to update you of our situation and received verbal permission to sidetrack. We will be setting a 500' cement plug with a bottom depth of 2,700' MD and a top depth of 2,200' MD.

- Well name and API - Pyramid 5N / API 05-123-48812-00
- Explanation of situation and why you need to sidetrack – BHA got packed in with cuttings while picking up agitator
- Total measured depth reached (also have TVD) 3,062' MD/ 3,018' TVD
- Casing sizes set and measured depth 9-5/8" @ 1,680' MD/ 1,669' TVD
- Description of fish-including top and bottom. Drilling BHA and bit, top of fish @ 2,702' and bottom of fish @ 3,062'
- Type of cement you will be using including weight, yield, and sacks. Neat Class G Cement, 15.8 ppg, 1.15 cuft/sk, 205 sks
- Measured depth and TVD of sidetrack point 2,200' MD/ 2,178' TVD (top of 500' cement plug)
- Proposed target formation of sidetrack hole if different than permitted. Same as permit.
- BHL of sidetrack hole. Same as original plan.
- Wellbore diagram: attached

This application is in a Comprehensive Drilling Plan _____ No _____ CDP #: _____

Location ID: 459349

Is this application being submitted with an Oil and Gas Location Assessment application? _____ No _____

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

Signed: _____ Print Name: Venessa Chase

Title: Regulatory Supervisor Date: _____ Email: venessa.chase@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

05 123 48812 01

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	Operator will comply with COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012. The Colorado Oil and Gas Conservation Commission (COGCC) has established this Policy Regarding Bradenhead Monitoring During Hydraulic Fracturing Treatments ("Treatment") in the Greater Wattenberg Area ("GWA") pursuant to COGCC 207.a. ("Policy"). This Policy applies to oil and gas operations in the GWA as defined by the COGCC Rules of Practice and Procedure.
3	Drilling/Completion Operations	ALTERNATIVE 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 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.

Total: 3 comment(s)

Attachment Check List

Att Doc Num

Name

402191576	OffsetWellEvaluations Data
402191628	WELLBORE DIAGRAM
402191735	CORRESPONDENCE

Total Attach: 3 Files

General Comments

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

Total: 0 comment(s)



Public Comments

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

