

FORM  
2  
Rev  
08/13

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:  
401019865  
**(SUBMITTED)**

APPLICATION FOR PERMIT TO:

Drill     Deepen     Re-enter     Recomplete and Operate

TYPE OF WELL    OIL     GAS     COALBED     OTHER \_\_\_\_\_  
ZONE TYPE    SINGLE ZONE     MULTIPLE ZONES     COMMINGLE ZONES

Refilling   
Sidetrack

Date Received:  
04/01/2016

Well Name: Schneider    Well Number: 19Q-312  
Name of Operator: PDC ENERGY INC    COGCC Operator Number: 69175  
Address: 1775 SHERMAN STREET - STE 3000  
City: DENVER    State: CO    Zip: 80203  
Contact Name: Kelsi Welch    Phone: (303)831-3974    Fax: ( )  
Email: kelsi.welch@pdce.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20090078

WELL LOCATION INFORMATION

QtrQtr: SWSE    Sec: 19    Twp: 5N    Rng: 64W    Meridian: 6  
Latitude: 40.378440    Longitude: -104.588790

Footage at Surface: 409 feet    FNL/FSL    FSL    1547 feet    FEL/FWL    FEL

Field Name: WATTENBERG    Field Number: 90750

Ground Elevation: 4653    County: WELD

GPS Data:  
Date of Measurement: 01/16/2014    PDOP Reading: 2.8    Instrument Operator's Name: Brian Rottinghaus

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

Footage at Top of Prod Zone: FNL/FSL    FEL/FWL    Bottom Hole: FNL/FSL    FEL/FWL  
473    FSL    1031    FEL    356    FSL    2396    FEL  
Sec: 19    Twp: 5N    Rng: 64W    Sec: 21    Twp: 5N    Rng: 64W

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 19: S2SE, Parcel A as described in Rec #1602486 Book 680 and Book 14 of Maps at Page 35.  
(Rec No 1876400)

Total Acres in Described Lease: 53 Described Mineral Lease is:  Fee  State  Federal  Indian

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

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

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 590 Feet  
Building Unit: 594 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 399 Feet  
Above Ground Utility: 356 Feet  
Railroad: 1077 Feet  
Property Line: 409 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, and Designated Outside Activity Area - 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: 02/26/2014

## 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: 121 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 500 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

## SPACING & FORMATIONS COMMENTS

PSU: Section 19: S2SE; Section 20: S2S2; Section 21: S2SW, SWSE; Section 28: NWNE, N2NW; Section 29: N2N2; Section 30: N2NE in T5n R64W

## 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           |                         | 720                           | GWA                                  |

## DRILLING PROGRAM

Proposed Total Measured Depth: 16469 Feet

Distance from proposed wellbore to nearest existing or permitted wellbore belonging to another operator:

601 Feet (Including plugged wells)

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? No

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: Land application

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Beneficial reuse

Other Disposal Description:

Drill cuttings will be land applied at PDC spread fields with COGCC Facility ID 444255, 159534, 436033, or 434889.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 444255 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             | 875           | 830       | 875     | 0       |
| 1ST         | 8+3/4        | 7              | 26    | 0             | 7261          | 650       | 7261    | 0       |
| 1ST LINER   | 6+1/8        | 4+1/2          | 13.5  | 6055          | 16469         |           |         |         |

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 7" casing string will be cemented to surface. CBL will only be run in the vertical section of the wellbore. Distance to nearest well, Ivan Klein 20-2, measured to via the Anti-Collision Report in the Deviated Drilling plan.

No changes have been made to this well proposal since the most recent sundry was approved 2/6/2016. The OWE has been updated.

Pre-Application Notice Certification attached as other.

The Schneider 19Q-312 will have a treated interval less than 150' from the treated interval of the Ivan Klein 20-2. All wells are owned by PDC Energy, Inc. so no stimulation setback consent is needed.

This application is in a Comprehensive Drilling Plan \_\_\_\_\_ CDP #: \_\_\_\_\_

Location ID: \_\_\_\_\_

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: Kelsi Welch \_\_\_\_\_

Title: Regulatory Analyst Date: 4/1/2016 Email: kelsi.welch@pdce.com

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

COGCC Approved: \_\_\_\_\_ Director of COGCC Date: \_\_\_\_\_

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

API NUMBER

05 123 39542 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

| COA Type | Description |
|----------|-------------|
|          |             |

## Best Management Practices

### No BMP/COA Type

### Description

| No BMP/COA Type | Description   |
|-----------------|---|
| 1 Planning      | 604c.(2).E. Multiwell Pads: This 2A application is for a 4-well pad. No suitable existing locations are in the area. Other locations were reviewed, no suitable locations to the East. Location chosen by geology and operations. |

|    |                      |   |
|----|----------------------|---|
| 2  | Planning             | 604c.(2).V. Development From Existing Well Pads: An existing pad was not available to utilize to develop these wells.   |
| 3  | Planning             | 604c.(2).U. Identification of Plugged and Abandoned Wells: Pursuant to rule 319.a.(5)., once the well has been plugged and abandoned, PDC will identify the location of the wellbore with a permanent monument that will detail the well name and date of plugging.   |
| 4  | Planning             | Prior to drilling operations, Operator will perform an anti-collision scan of existing offset wells that have the potential of being within close proximity of the proposed well. This anti-collision scan will include definitive MWD or gyro surveys of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed wellpath with its respective error of uncertainty. If current surveys do not exist for the offset wells, Operator may have gyro surveys conducted to verify bottomhole location. The proposed well will only be drilled if the anti-collision scan results indicate that there is not a risk for collision, or harm to people or the environment. For the proposed well, upon conclusion of drilling operations, an as-constructed gyro survey will be submitted to COGCC with the Form 5. |
| 5  | Traffic control      | 604c.(2).D. Traffic Plan: If required by the local government, a traffic plan will be coordinated with the local jurisdiction prior to commencement of operations.  |
| 6  | General Housekeeping | 604c.(2).N. Control of Fire Hazards: PDC will ensure that any material that might be deemed a fire hazard will be will remain no less than twenty-five (25) feet from the wellhead(s), tanks and separator(s). PDC installs automation equipment for tank level and pressure monitoring inside the bermed area that complies with API RP 500 classifications and with the current national electrical code as adopted by the State of Colorado.   |
| 7  | General Housekeeping | 604c.(2).P. Removal of Surface Trash: A commercial size trash bin for removing debris will be located on site. This bin will be for use by all parties affiliated with the operation.   |
| 8  | General Housekeeping | 604c.(2).T. Well Site Cleared: The wellsite will be cleared of all non-essential equipment within ninety (90) days after all wells associated with the pad have been plugged and abandoned.   |
| 9  | Construction         | "604.c.(2).W. Site Specific Measures: CR 54 is paved and mitigation will not be required. Lights should be turned downward and away from building units within the 1,000 foot buffer area.<br>"   |
| 10 | Construction         | 604c.(2).K. Pit Level Indicators: PDC uses an Electronic Drilling Recorder (EDR) with pit level monitor(s) and alarm(s) for production rigs. Basic level gages are used on steel pits utilized for the surface rig.   |
| 11 | Construction         | 604c.(2).M. Fencing Requirements: The completed wellsites will be surrounded with a fence and gate. PDC personnel will monitor the wellsites regularly upon completion of the wells. Authorized representatives and/or PDC personnel shall be on-site during drilling and completion operations.  |
| 12 | Construction         | 604c.(2).O. Loadlines: All loadlines shall be bullplugged or capped.  |
| 13 | Construction         | 604c.(2).Q. Guy Line Anchors: Rig guy wires are anchored to the rig's base beam that the rig stands on, temporary and permanent anchors will not be set on this location.   |

|    |                                |  |
|----|--------------------------------|--|
| 14 | Construction                   | 604c.(2).R. Tank Specifications: Condensate storage tanks will be designed, constructed and maintained in accordance with National Fire Protection Association (NFPA) Code 30 (2008 version). PDC will maintain written records to verify proper design, construction and maintenance. All records will be available for inspection by the Director.   |
| 15 | Noise mitigation               | 604c.(2).A. Noise: WELL PAD: PDC has conducted baseline noise surveys for all drilling rigs that are being contracted and has also conducted a baseline noise survey for hydraulic fracture stimulation operations on a representative horizontal well. A review was conducted to identify potential receptors within 1000 feet of the proposed Schneider 19Q-HZ Pad site. There are five building units of concern. The five building units are located as follows: NW of the proposed pad at a distance of approximately 505 feet, SW of the proposed pad at a distance of approximately 664 feet, 893 feet and 965 feet, and W of the proposed pad at a distance of approximately 838 feet. As a result, sound mitigation will be installed directly west and south of the proposed pad located in the SWSE Section 19 – T5N – R64W prior to drilling and completion operations. Methods of noise mitigation shall include but not be limited to hay bales, noise walls, or customized semi-trailers. PRODUCTION FACILITIES: It is not anticipated that noise mitigation will be necessary at the proposed tank battery location. After construction is completed, equipment installed and production begins, noise levels will be assessed to determine if mitigation measures will be required to be compliant with Rule 802. |
| 16 | Emissions mitigation           | 604c.(2).C. Green Completions: Flowlines, 48" HLPs, sand traps all capable of supporting green completions as described in rule 805 shall be installed at any Oil and Gas location at which commercial quantities of gas and or oil are reasonable expected to be produced based on existing wells. All green flow back equipment will be able to handle more than 1.5 times the amount of any know volumes in the surrounding field. First sign of salable gas will be put into production equipment and turned down line.  |
| 17 | Drilling/Completion Operations | 604c.(2).I. BOPE Testing for Drilling Operations: PDC's contractors will supply a double ram-5000' PSI rated BOPE (Blinds and pipes) and always function test BOPE's prior to placement on the well head and inspect and replace all seals and ram block rubbers. After installation of the BOPE, PDCE conducts a pressure test on the BOPE at a low pressure of (200-400 psi) and a high pressure test to the maximum amount of the BOPE rating with a third party tester, all tests are digitally recorded.  |
| 18 | Drilling/Completion Operations | 604c.(2).J. BOPE for Well Servicing Operations: All valves will also be tested to maximum rating by a third party prior to being delivered to location. Whenever snubbing operations are being used the snubbing stack will be pressure tested at the same time the BOPE is being tested which consist of a single pipe ram and a annular bag.   |
| 19 | Drilling/Completion Operations | 604c.(2).L. Drill Stem Tests: PDC does not conduct drill stem tests, but will seek prior approval from the director if a drill stem test will be preformed.  |
| 20 | 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.   |
| 21 | Drilling/Completion Operations | One of the first wells drilled on the pad will be logged with Cased hole Pulsed Neutron Log with Gamma Ray Log from 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 clearly state "No open-hole logs were run" and shall reference the Rule 317.p Exception granted for the well.  |

|    |              |  |
|----|--------------|--|
| 22 | Dust control | 805.b(1)-(c) Odors and Dust: Oil and gas facilities and equipment will operate in a manner that odors and dust do not constitute a nuisance or hazard to public welfare. Odors: Oil and gas operations will be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII. Dust; PDC will employ practices for control of fugitive dust caused by operations include but not limited to the use of speed restrictions, regular road maintenance, restriction of construction activity during high-wind days, and silica dust controls when handling sand used in hydraulic fracturing operations. When necessary, PDC coordinates dust mitigation with the county on gravel roads, places road base where allowed by surface owner around tanks and wellheads to minimize dust, and will water the roads and locations when dry. In addition, automation is used on all new wells to minimize truck traffic. |
|----|--------------|--|

Total: 22 comment(s)

**Applicable Policies and Notices to Operators**

|  |
|--|
| Policy   |
| Notice Concerning Operating Requirements for Wildlife Protection.<br><a href="http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf">http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf</a> |

**Attachment Check List**

| <u>Att Doc Num</u> | <u>Name</u>                 |
|--------------------|-----------------------------|
| 401019865          | FORM 2 SUBMITTED            |
| 401019891          | OffsetWellEvaluations Data  |
| 401019915          | PROPOSED SPACING UNIT       |
| 401019917          | OTHER                       |
| 401020350          | OPEN HOLE LOGGING EXCEPTION |
| 401020351          | SURFACE AGRMT/SURETY        |

Total Attach: 6 Files

**General Comments**

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|----------------|---------------------|
|                   |                |                     |

Total: 0 comment(s)