

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:

400868472

APPLICATION FOR PERMIT TO:

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

Date Received:

07/15/2015

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____Refilling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: Becker Ranch

Well Number: 5J-303

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)860-5800

Fax: ()

Email: Kelsi.Welch@pdce.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20090078

WELL LOCATION INFORMATION

QtrQtr: NWNW Sec: 5 Twp: 3N Rng: 64W Meridian: 6

Latitude: 40.261170

Longitude: -104.580920

Footage at Surface: 223 feet FNL/FSL FNL 928 feet FEL/FWL FWL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4819

County: WELD

GPS Data:

Date of Measurement: 07/17/2013 PDOP Reading: 6.0 Instrument Operator's Name: Adam Kelly

If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.
 Footage at Top of Prod Zone: FNL/FSL FNL/FWL Bottom Hole: FNL/FSL FEL/FWL
 787 FNL 1014 FWL 500 FSL 1115 FWL
 Sec: 5 Twp: 3N Rng: 64W Sec: 5 Twp: 3N Rng: 64W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ IndianThe 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: oil and gas lease

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 3 North, Range 64 West, 6th P.M.
Section 5: Lot 2 (80.5 ac) ada NWNW, NENW and S2NW containing 160.5 acres, more or less

Total Acres in Described Lease: 161 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: 708 Feet
Building Unit: 708 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 208 Feet
Above Ground Utility: 262 Feet
Railroad: 5280 Feet
Property Line: 223 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: 12/11/2013

SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 319 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

W2 of Section 5 in T3N 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		320	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 11506 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 15 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 429629, 430649, 431183, 434889, or 436033.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 429629 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	13+3/4	9+5/8	36	0	875	830	875	0
1ST	8+3/4	7	26	0	7244	650	7244	0
1ST LINER	6+1/8	4+1/2	13.5	6039	11506			

☒ 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 the surface, around 500' from surface. CBL will only be run in the vertical section of the wellbore. Distance to nearest well Becker Ranch 5J-103 measured to via the Anti-Collision Report in the Deviated Drilling plan.

The Becker Ranch 5J-303 will replace the Becker Ranch 5J-103 API# 05-123-39072.

Becker Ranch 5J-103 API# 05-123-39072

i. Explanation of the situation that has resulted in a lost hole and the need to plug the lost hole

a. Reached a depth of 8,444'. When tripping in after changing the BHA PDC ran into issues not being able to get back to TD only making it to 8,000'. We changed the BHA two times to attempt to continue drilling with no improvement on wellbore stability. PDC is unable to move forward with drilling the well. Upon tripping out of the hole it was noticed fish was left in hole at 8,000'.

ii. Total measured depth reached in the lost hole

a. 8444'

iii. Casing set – size(s) and measured depth(s)

a. Surface Casing 9-5/8" 36#/ft J-55 set at 925'

b. Intermediate Casing 7" 26#/ft HCP-110 set at 7149'

iv. Description of fish in the hole (if any) – including top and bottom measured depths

a. Roller cone drill bit, bit sub at 8,000'.

v. Description of proposed plugs: setting measured depths, heights, and cement volumes

Type of cement to be used for all plugs, including slurry weight (ppg) and yield (cf/sk)

a. Bridge plug at 6700' +/-

b. Cement plug 1 set at 6700': 50 sx (15.8ppg yield 1.51 cuft/sx)

c. Cement plug 2 set at 5000': 220 sx (15.8ppg yield 1.15 cuft/sx)

d. Cement plug 3 set from 1025' to 825': 45 sx (14.8ppg yield 1.33 cuft/sx)

e. Cement plug 4 set at 450': 25 sx (14.8ppg yield 1.33 cuft/sx)

f. Cement plug 5 set at surface: 10 sx (14.8ppg yield 1.33 cuft/sx)

vi. Proposed objective formation(s) for replacement well – new or same as lost hole

a. Formation, same as last well Niobrara

vii. BHL target for replacement well – new or same as lost hole (NOTE: a change in the BHL must be reviewed and approved by COGCC Permitting prior to completing the replacement well. Drilling a well to an unapproved BHL could result in an NOAV, plugging the well, or both)

a. BHL, same as last well

Diana Burns provided verbal approval for a request to plug lost hole, skid rig, and drill replacement well on 07/15/2015. See attached email correspondence for details.

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: 7/15/2015 Email: Kelsi.Welch@pdce.com

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

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: 7/16/2015

Expiration Date: 07/15/2017

API NUMBER

05 123 41901 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

	Operator acknowledges the proximity of: The Becker 5-2 (API NO 123-13742), the Becker 5-7 (API NO 123-13764), the Becker 5-8 (API NO 123-13839), the Becker 5-3 (API NO 123-17299), the Becker 5-11 (API NO 123-17300), the Becker 5-13 (API NO 123-17302), the Becker 5-14 (API NO 123-18180), and the Dechant 7-11 (API NO 123-15476). Operator agrees to: provide mitigation option 1 or 2 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OTHER – AS SPECIFIED BY PERMIT CONDITION") stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.
	Operator acknowledges the proximity of the non-operated wells: The McKenney 6-2 (API NO 123-11907), the McKenney 6-3 (API NO 123-14815), the McKenney 6-14 (API NO 123-15780), the UPRR OCOMA II C31-16 (API NO 123-13603), the Howell 1 (API NO 123-07827), and the McGuirk-Howell C 32-14 (API NO 123-15882). Operator assures that these offsets will be remediated per the DJ Basin Horizontal Offset Policy (options 1 or 2) or operator will address this well with mitigation option 4. Operator will submit a Form 42 ("OTHER – AS SPECIFIED BY PERMIT CONDITION") stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.
	The Becker Ranch 5J-303 will replace the Becker Ranch 5J-103 API# 05-123-39072 and the BMPs from the approved drilling permit for API 123-39072 will also apply to this replacement well.
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 2) Comply with Rule 317.j and provide cement coverage from end of 7" casing to a minimum of 200' above Niobrara and from 200' below the Sussex to 200' above Sussex. Verify coverage with cement bond log. 3) Comply with Rule 321. Run and submit Directional Survey from TD to base of surface casing. Ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.

Best Management Practices

No BMP/COA Type

Description

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Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.

Attachment Check List

Att Doc Num

Name

400868472	FORM 2 SUBMITTED
400868511	WELL LOCATION PLAT
400868514	DEVIATED DRILLING PLAN
400868515	DIRECTIONAL DATA
400868517	CORRESPONDENCE

Total Attach: 5 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	7/16/2015 10:40:50 AM
Engineer	Offset wells evaluated.	7/16/2015 9:52:26 AM
Permit	Permitting Review Complete.	7/16/2015 9:47:08 AM
Permit	Replacement well - Rig Skid. Changed BHL to match WLP. Passed Completeness.	7/16/2015 8:29:21 AM

Total: 4 comment(s)