

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:

400605738

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Date Received:

06/13/2014

Well Name: Tarin

Well Number: 32Y-314

Name of Operator: PDC ENERGY INC

COGCC Operator Number: 69175

Address: 1775 SHERMAN STREET - STE 3000

City: DENVER State: CO Zip: 80203

Contact Name: Liz Lindow

Phone: (303)831-3974

Fax: ()

Email: liz.lindow@pdce.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20090078

WELL LOCATION INFORMATION

QtrQtr: SESE Sec: 32 Twp: 4N Rng: 66W Meridian: 6

Latitude: 40.263320

Longitude: -104.793170

Footage at Surface: 883 feet FNL/FSL FSL 355 feet FEL/FWL FEL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4776

County: WELD

GPS Data:

Date of Measurement: 12/19/2013 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 337 FSL 818 FEL 375 FSL 2142 FEL 375
Sec: 32 Twp: 4N Rng: 66W Sec: 31 Twp: 4N Rng: 66W

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: 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 4 North, Range 66 West, 6th P.M. Section 32: S/2SE/4 lying South and East of the Union Pacific Railroad right-of-way

Total Acres in Described Lease: 52 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: 546 Feet

Building Unit: 664 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 351 Feet

Above Ground Utility: 643 Feet

Railroad: 8140 Feet

Property Line: 355 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: 03/14/2014

SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 209 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

SEC. 32: S2S2; SEC. 31: S2SE in T4N R66W; SEC. 5: N2N2; SEC. 6 N2NE in T3N R66W

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		480	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 14277 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 209 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 425112, 429629, 430649, 431183, or 434889.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ 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	7657	650	7657	500
1ST LINER	6+1/8	4+1/2	13.5	6453	14277			

☒ 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 at least 200' above Niobrara, around 500' from surface. CBL will only be run in the vertical section of the wellbore. Distance to nearest well Farr Farms 1 measured to via the Anti-Collision Report in the Deviated Drilling plan. Building Unit owners waived requirements per Rules 305.a., 305.c., 306.e, 604.c.(2).A-W., and the MIRU policy. Letter to Director and Waivers attached.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? _____ Yes


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

Signed: _____ Print Name: Liz Lindow

Title: Regulatory Analyst Date: 6/13/2014 Email: liz.lindow@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: 8/31/2014

Expiration Date: 08/30/2016

API NUMBER

05 123 40094 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

	<p>Operator acknowledges the proximity of the listed non-operated wells: 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 ("OFFSET MITIGATION COMPLETED") for the remediated Tarin Well Pad wells, referencing the API number of the proposed horizontal well(s) stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.</p> <p>HSR-GOLDSMITH 11-31 (API NO-16696)HSR-JENKINS #14-31 (API NO-16697) AGRI PROD 32-7F (API NO-15577)AGRI PROD INC FED 32-8F (API NO-15578) SARATOGA 1 (API NO-08553)TANNER K 33-65HN (API NO-33702)</p>
	Operator shall comply with Buffer Zone Move-In, Rig-Up Notice Policy dated 12-16-2013.
	<p>Operator acknowledges the proximity of the listed wells: 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 ("OFFSET MITIGATION COMPLETED") for the remediated wells, referencing the API number of the proposed horizontal well(s) stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.</p> <p>FARR-FARMS (API NO 123-12165)WOLF 44-31 (API NO 123-14464) BENJAMIN 1 (API NO-20329)NICHOLAS 1 (API NO-20331) NICHOLAS 5 (API NO-25922)BENJAMIN 5 (API NO-26274) FLOYD 1 (API NO-12715)WOLFE 1 (API NO-13677) GLEN 1 (API NO-13678)WOLFE 13-32 (API NO-14422) WOLFE 14-32 (API NO-14484)GLEN 44-32 (API NO-14490) WOLFE 5 (API NO-22826)</p>
	<p>1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.</p> <p>2) Comply with Rule 317.i and provide cement coverage from end of 7" casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log.</p> <p>3) Run and submit Directional Survey from TD to base of surface casing. The operator shall comply with Rule 321, and it shall be the operator's responsibility to ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.</p>

Best Management Practices

No BMP/COA Type

Description

1	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.
---	--------------------------------	--

Total: 1 comment(s)

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

<u>Att Doc Num</u>	<u>Name</u>
400605738	FORM 2 SUBMITTED
400617600	OffsetWellEvaluations Data
400617607	PROPOSED SPACING UNIT
400617608	OPEN HOLE LOGGING EXCEPTION
400617612	30 DAY NOTICE LETTER
400617614	WAIVERS
400617615	EXCEPTION LOC WAIVERS
400617616	EXCEPTION LOC REQUEST
400619999	DEVIATED DRILLING PLAN
400620002	DIRECTIONAL DATA
400623581	WELL LOCATION PLAT

Total Attach: 11 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	8/26/2014 11:59:32 AM
Permit	Received and attached Request letter to waivers. See Waivers. ok to pass.	8/26/2014 10:10:30 AM
Permit	Per operator: the BHL for the Wolfe 5 well is over 500' away from the wellbore since it is a directional well, see the latest plat in the COGCC database. The SHL might be 45' away from the horizontal lateral from a bird's eye view but the horizontal lateral at that point is already over 6000' below the surface and the deepest part of the vertical portion of the Wolfe 5 before it kicks off to its BHL would still be thousands of feet away. Therefore, a 318Am waiver is not needed for this well.	8/26/2014 10:09:29 AM
Permit	ON HOLD: requesting corrected distance to nearest well penetrating the objective formation. (Tarin 32Y-414 is CD at 102').	8/11/2014 11:53:09 AM
Permit	Per operator removed the dup Bradenhead monitoring policy. The 123-22826 Wolfe 5 is not within the 150' setback per operator so no Anti-Collision BMP is needed. "Wolf 5 does not come close to this wellbore underneath the surface. The Tarin 32Y-314 is approximately 7138' deep at the point of the SHL of the Wolf 5, and the BHL for the Wolf 5 continues north away from the wellbore of Tarin 32y-314. The gyros we have done on the existing wells already put this well out of range. Therefore, the closest well is the Farr Farms 1 at 209' per the anti-collision report in the directional plan."	7/16/2014 11:26:13 AM
Permit	ON HOLD: Requesting removal of dup Bradenhead monitoring policy under BMP's. Need to add the Anti-Collision BMP. Need corrected Distance to wellbore penetrating the objective. 123-22826 Wolfe 5 @ 146'.	7/7/2014 2:40:24 PM
Permit	Request for Exception to Open Hole Logging Rule 317.o letter attached.	7/7/2014 2:10:44 PM
Permit	Building Unit owners waived requirements per Rules 305.a., 305.c., 306.e, 604.c. (2).A-W., and the MIRU policy. Letter to Director and Waivers attached.	7/7/2014 2:10:43 PM
Engineer	Offset Wells Evaluated.	6/19/2014 8:18:36 AM
Permit	Passed completeness.	6/16/2014 1:21:02 PM

Total: 10 comment(s)