

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.

Parcel No. 1:

Section 29: That part of the NW/4 described as follows, to-wit: Commencing at the Northwest corner of said NW/4 and running thence South on the West line of said section 1860.00 feet; thence running East 2430.00 feet; thence running North 1860.00 feet to the North line of said Section 29; thence running West along the North line of said section 2430.00 feet to the place of beginning

Parcel No. 2:

Section 29: That portion described as follows, to-wit: Beginning at a point on the West line of Section 29, 1860.00 feet South of the Northwest corner of said Section; thence East 2430.00 feet; thence South 56°40' East 800.00 feet; thence South 37° West 310.00 feet; thence South 43°30' West 395.00 feet; thence South 12°30' West 291.00 feet; thence South 25°30' West 355.00 feet; thence South 4°15' West 365.00 feet; thence South 36° West 277.00 feet; thence South 2° East 220.00 feet; thence South 31°30' West 141.00 feet; thence South 73°30' West 479.00 feet; thence South 59°30' West 277.00 feet; thence 21°15' West 441.00 feet; thence South 47°15' West 225.00 feet to a point on the South line of said section 1206.00 feet east of the Southwest corner of said Section 29; thence West on the South line of said Section 1206.00 feet to the Southwest corner; thence North on West line of the point of beginning.

Containing 260.00 acres, more or less

Weld County, Colorado

Please see attached mineral lease.

Total Acres in Described Lease: 260 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:	<u>2130</u> Feet
Building Unit:	<u>2475</u> Feet
High Occupancy Building Unit:	<u>5280</u> Feet
Designated Outside Activity Area:	<u>5280</u> Feet
Public Road:	<u>2483</u> Feet
Above Ground Utility:	<u>271</u> Feet
Railroad:	<u>5280</u> Feet
Property Line:	<u>279</u> 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: _____

SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 183 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. 29: N2SE, S2NE; SENW, NESW SEC. 28: N2S2 and S2N2 in T4N 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		560	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 15036 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 183 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	7660	650	7660	500
1ST LINER	6+1/8	4+1/2	13.5	6455	15036			

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).
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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 McLeod 29-41 measured to via the Anti-Collision Report in the Deviated Drilling plan.

PDC requests an exception to rule 317.o.: PDC will run a cased hole log.

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: Shaye Marshall

Title: Regulatory Analyst Date: 7/30/2014 Email: shayelyn.marshall@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: *Matthew Lee* Director of COGCC Date: 10/3/2014

Expiration Date: 10/02/2016

API NUMBER
05 123 40340 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.

<u>COA Type</u>	<u>Description</u>
	<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>
	<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>LORENZ 34-28 (API NO 123-14732)LORENZ 44-28 (API NO 23123-14444) RANDALL 11-28 (API NO 123-14495)DANNY B 12-28 (API NO 123-14496)</p>

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	<p>Wellbore Fracturing Stimulation</p> <p>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.</p>

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

Att Doc Num	Name
2451007	PROPOSED SPACING UNIT
400643674	FORM 2 SUBMITTED
400648178	WELL LOCATION PLAT
400648179	DEVIATED DRILLING PLAN
400648184	EXCEPTION LOC WAIVERS
400648212	EXCEPTION LOC REQUEST
400648224	30 DAY NOTICE LETTER
400648226	DIRECTIONAL DATA
400648253	OPEN HOLE LOGGING EXCEPTION
400648675	OFFSET WELL EVALUATION
400650920	MINERAL LEASE MAP
400653115	SURFACE AGRMT/SURETY

Total Attach: 12 Files

General Comments

User Group	Comment	Comment Date
Permit	Final Review Completed. No LGD or public comment received.	10/3/2014 9:49:36 AM
Permit	Recieved orrected 30 Day Certification letter & PSU.	10/3/2014 8:59:03 AM
Permit	ON HOLD: Requesting corrected 30 Day Certification letter & PSU.	10/2/2014 4:14:10 PM
Permit	Request for Exception to Open Hole Logging Rule 317.p letter attached. Operator requests approval of a Rule 318A.a exception location: Wellhead is to be located outside of a GWA drilling window. Request and Waiver attached. Operator requests approval of a Rule 318A.c exception location: Wellhead is to be located more than 50' from an existing well location. Request and waiver attached. Changed lease description at operators request. Added lease description informaiton at operators request.	10/1/2014 12:41:03 PM
Permit	Operator confirmed proximity to wells completed in the Niobrara: the McLeod 8 and The Wiedeman 29O-243. Operator confirmed no objections to PSU from BLM.	9/10/2014 10:11:59 AM
Engineer	Offset Wells Evaluated.	8/4/2014 10:40:24 AM
Permit	Passed completeness.	7/31/2014 10:34:11 AM

Total: 7 comment(s)