

FORM
2
Rev
12/20

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:
402778864
Date Received:
03/23/2022

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Amend

TYPE OF WELL OIL GAS COALBED OTHER: _____

Refile

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: PRU Alcorn 0880 Well Number: 1-10
Name of Operator: D90 ENERGY LLC COGCC Operator Number: 10706
Address: 952 ECHO LANE SUITE 480
City: HOUSTON State: TX Zip: 77024
Contact Name: Doug Sandridge Phone: (713)227 0391 Fax: ()
Email: doug@fulcrumef.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20210083

WELL LOCATION INFORMATION

Surface Location

QtrQtr: NWNE Sec: 10 Twp: 8N Rng: 80W Meridian: 6
Footage at Surface: 625 Feet FNL/FSL 2104 Feet FEL/FWL
Latitude: 40.685589 Longitude: -106.357169
GPS Data: GPS Quality Value: 1.4 Type of GPS Quality Value: PDOP Date of Measurement: 09/14/2017
Ground Elevation: 8122
Field Name: WILDCAT Field Number: 99999

Well Plan: is Directional Horizontal (highly deviated) Vertical

If Well plan is Directional or Horizontal attach Deviated Drilling Plan and Directional Data.

Subsurface Locations

Top of Productive Zone (TPZ)
Sec: _____ Twp: _____ Rng: _____ Footage at TPZ: _____
Measured Depth of TPZ: _____ True Vertical Depth of TPZ: _____ FNL/FSL FEL/FWL
Base of Productive Zone (BPZ)
Sec: _____ Twp: _____ Rng: _____ Footage at BPZ: _____
Measured Depth of BPZ: _____ True Vertical Depth of BPZ: _____ FNL/FSL FEL/FWL
Bottom Hole Location (BHL)
Sec: _____ Twp: _____ Rng: _____ Footage at BHL: _____
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: JACKSON Municipality: N/A

Is the Surface Location of this Well in an area designated as one of State interest and subject to the requirements of § 24-65.1-108 C.R.S.? No

Per § 34-60-106(1)(f)(I)(A) C.R.S., the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas Location.

SB 19-181 provides that when "applying for a permit to drill," operators must include proof that they sought a local government siting permit and the disposition of that permit application, or that the local government does not have siting regulations. § 34-60-106(1)(f)(I)(A) C.R.S.

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this Location? 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 disposition of the application filed with the Relevant Local Government is: Date of Final Disposition:

Comments:

SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS LOCATION

Surface Owner of the land at this Well's Oil and Gas Location: Fee State Federal Indian

Mineral Owner beneath this Well's Oil and Gas Location: Fee State Federal Indian

Surface Owner Protection Financial Assurance (if applicable): Surety ID Number (if applicable):

MINERALS DEVELOPED BY WELL

The ownership of all the minerals that will be developed by this Well is (check all that apply):

- Fee State Federal Indian N/A

LEASE INFORMATION

Using standard QtrQtr, Section, Township, Range format describe one entire mineral lease as follows:

* If this Well is within a unit, describe a lease that will be developed by the Well. * If this Well is not subject to a unit, describe the lease that will be produced by the Well. (Attach a Lease Map or Lease Description or Lease if necessary.)

T8N-R80W, 6th P.M., Sec 10: NWNE

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

Federal or State Lease #

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1580 Feet Building Unit: 1719 Feet Public Road: 879 Feet Above Ground Utility: 595 Feet Railroad: 5280 Feet

INSTRUCTIONS: - Specify all distances per Rule 308.b.(1). - 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 - as defined in 100 Series Rules.

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
CHUGWATER	CGTR			
DAKOTA	DKTA			
ENTRADA	ENRD			
FRONTIER	FRTR			
LAKOTA	LKTA			
MORRISON	MRSN			
MOWRY	MWRY			
NIOBRARA	NBRR	531-47	24573	
SHANNON	SNSD			

SUNDANCE	SNDC			
SUSSEX	SUSX			

Federal or State Unit Name (if appl): Peterson Ridge

Unit Number: COC075018X

SUBSURFACE MINERAL SETBACKS

Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? Yes

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: 5280 Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: 5280 Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: _____ Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: _____ Feet

Exception Location

If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers. _____

SPACING & FORMATIONS COMMENTS

Order 531-47 applies to all lands within the federal Petersen Ridge Unit as to unit setbacks for the Niobrara only. All other formations will be subject to Rule 401.a and 401.d.(3).

DRILLING PROGRAM

Proposed Total Measured Depth: 9300 Feet TVD at Proposed Total Measured Depth 9300 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: _____ 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 Plan unless a plan was already submitted with the Form 2A per Rule 304.c.(10).

Will there be hydraulic fracture treatment at a depth less than 2,000 feet in this well? No

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

Beneficial reuse or land application plan submitted? _____

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	26	16	J55	42	0	90	190	90	0
SURF	12+1/4	9+5/8	J55	36	0	2400	773	2400	0
1ST	8+3/4	5+1/2	HCP110	20	0	9300	1482	9300	2200

Conductor Casing is NOT planned

POTENTIAL FLOW AND CONFINING FORMATIONS

Zone Type	Formation /Hazard	Top M.D.	Top T.V.D.	Bottom M.D.	Bottom T.V.D.	TDS (mg/L)	Data Source	Comment
Groundwater	Coalmont Sand	0	0	1585	1585	0-500	Groundwater Atlas	ON-010 Average Coalmont TDS of 400. No nearby USGS wells.
Confining Layer	Coalmont Shale	1585	1585	3586	3586			
Confining Layer	Upper Pierre	3586	3586	5332	5332			
Hydrocarbon	Sussex	5332	5332	5532	5532			
Confining Layer	Pierre Lower (Shale)	5532	5532	5815	5815			
Hydrocarbon	Shannon	5815	5815	5915	5915			
Confining Layer	Pierre Lower (Shale)	5915	5915	7370	7370			
Hydrocarbon	Niobrara	7370	7370	7870	7870			
Confining Layer	Carlisle	7870	7870	8120	8120			
Hydrocarbon	Frontier	8120	8120	8470	8470			
Confining Layer	Mowry	8470	8470	8600	8600			
Hydrocarbon	Dakota	8600	8600	8670	8670			
Hydrocarbon	Lakota	8670	8670	8740	8740			
Confining Layer	Morrison	8740	8740	9143	9143			
Confining Layer	Entrada	9143	9143	9300	9300			
Confining Layer	Chugwater	9300	9300	9300	9300			

OPERATOR COMMENTS AND SUBMITTAL

Comments

This is a refile APD for an expired APD with no changes to location or total depth.
 This is a wildcat well more than two miles from a completed well in any of the proposed objective formations.
 There is no well belonging to another operator within 1500'.
 The well location plat remains unchanged: Doc# 401923994

This proposed well will be located on a built location with an approved Form 2A expiring 4/15/2022.

This application is in a Comprehensive Area Plan No CAP #: _____

OGDP ID#: _____ OGD Name: _____ Expiration Date: _____

Location ID: 463987 Location Name: PRU Alcorn 0880 S10 Pad

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

Signed: _____ Print Name: Ann Feldman

Title: Regulatory Manager Date: 3/23/2022 Email: regulatory@ascentgeomatics.c

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, applicable orders, and SB 19-101 and is hereby approved.

COGCC Approved:  Director of COGCC Date: 4/14/2022

Expiration Date: 04/13/2025

API NUMBER
05 057 06623 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.

Condition of Approval

<u>COA Type</u>	<u>Description</u>
Interim Reclamation	Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).
Drilling/Completion Operations	Bradenhead tests shall be performed according to the following schedule and Form 17 submitted within 10 days of each test: 1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi is observed or if there is continuous flow, Operator must contact COGCC engineering for approval prior to stimulation. 2) If a delayed completion, a second test is required between 6-9 months after rig release and must be conducted prior to stimulation. If any pressure greater than 200 psi is observed or if there is continuous flow, Operator must contact COGCC engineering for approval prior to stimulation. 3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance.
Drilling/Completion Operations	1) Submit Form 42 electronically to COGCC 2 business days prior to MIRU (spud notice) for the first well activity with a rig on the pad. 2) The Coalmont Formation is considered a potential freshwater resource in the North Park Basin (CGS Ground Water Atlas of Colorado, 2003). Operator shall provide cement coverage from the production casing shoe (5 1/2" First String) to a minimum of 200' above the surface casing shoe to provide full isolation of the Coalmont Formation. Verify production casing cement coverage with a cement bond log.
3 COAs	

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	This well will be logged with open-hole resistivity log with gamma ray log run from TD into the surface casing. A cement bond log with gamma ray will be run on production casing, or on intermediate casing if a production liner is run. The Form 5, Completion Report, will list all logs run and have those logs attached.

Total: 1 comment(s)

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402778864	FORM 2 SUBMITTED

Total Attach: 1 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	This Location (ID #463987) and its associated Form 2A materials were fully reviewed during the OGLA review of this APD in accordance with current Rules. This APD complies with all COGCC Rules and is adequately protective of public health, safety, welfare, the environment, and wildlife resources.	04/04/2022
Permit	Final Review Completed.	03/30/2022
Permit	-Corrected Plugging Bond number to active blanket bond -Corrected lease description from section 5 to 10 where the well is located and added State minerals to be developed, as Fee, Fed, and State minerals are within the Peterson Ridge Fed Unit. -All changes made with operator concurrence, permit review complete.	03/30/2022
Engineer	Surface Casing Check complete Offset water well check: COGCC evaluated offset water wells within one mile of this proposed well's surface hole location. This information was used in addition to locally available geophysical logs and hydrogeologic information to evaluate the adequacy of the operator's proposed surface casing setting depth. The deepest water well within two miles is 185 feet. Offset well review complete 408.t - No wells 408.u - No wells Engineering review complete	03/29/2022

Total: 4 comment(s)