

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:

402984291

(SUBMITTED)

Date Received:

05/23/2022

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: Hebron 0780 Well Number: 10-18H
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: (303)330 4847 Fax: ()
Email: doug@fulcrumef.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20180090

WELL LOCATION INFORMATION

Surface Location

QtrQtr: Lot 4 Sec: 18 Twp: 7N Rng: 80W Meridian: 6
Footage at Surface: 276 Feet FSL 305 Feet FWL
Latitude: 40.571183 Longitude: -106.424117
GPS Data: GPS Quality Value: 1.4 Type of GPS Quality Value: PDOP Date of Measurement: 06/10/2016
Ground Elevation: 8208
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: 18 Twp: 7N Rng: 80W Footage at TPZ: 1090 FSL 2767 FWL
Measured Depth of TPZ: 7845 True Vertical Depth of TPZ: 6663 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 18 Twp: 7N Rng: 80W Footage at BPZ: 300 FNL 2310 FEL
Measured Depth of BPZ: 11951 True Vertical Depth of BPZ: 6663 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 18 Twp: 7N Rng: 80W Footage at BHL: 300 FNL 2310 FEL
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: Waived Date of Final Disposition: _____

Comments: Jackson County does not regulate oil & gas.

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.)

All, 18, 7N, 80W

Total Acres in Described Lease: 617 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 4055 Feet
Building Unit: 4055 Feet
Public Road: 4721 Feet
Above Ground Utility: 4846 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.

Railroad: 5280 Feet
Property Line: 276 Feet

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	531-30	617	Sec 18: All

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

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: 300 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: 150 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

DRILLING PROGRAM

Proposed Total Measured Depth: 11951 Feet TVD at Proposed Total Measured Depth 6663 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+1/4	J55	42	0	90	190	90	0
SURF	12+1/4	9+5/8	J55	36	0	2500	629	2500	0
1ST	8+3/4	5+1/2	P110	20	0	11951	1938	11951	0

☐ 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	1645	1645	501-1000	USGS	Site name: SB00708018BCC1 TD@600' TDS@923
Confining Layer	Coalmont Shale	1645	1645	3167	3160			
Confining Layer	Upper Pierre	3167	3160	4532	4400			
Hydrocarbon	Sussex	4532	4400	4997	4800			
Confining Layer	Pierre Lower (Shale)	4997	4800	5173	4950			
Hydrocarbon	Shannon	5173	4950	5223	5000			
Confining Layer	Pierre Lower (Shale)	5223	5000	7845	6348			
Hydrocarbon	Niobrara	7845	6348	11951	6663			Bottom TVD is bottom of the well and not bottom of the formation; The formation is not planned to be exited.

OPERATOR COMMENTS AND SUBMITTAL

Comments his Form 2 is being submitted as a refile of API # 05-057-06578.

There have been no new buildings constructed and no changes to the surrounding land use, Surface & Minerals, cultural distance setbacks, formations, or mineral lease description. The SHL/TPZ/BHL/TMD/TVD do not change, so no revised directional data is required. All previously submitted notices, plats (Doc #401081186), Surface Use Agreements, and letters are also still valid.

The nearest well in unit per anti-collision is unchanged as the Hebron 5-18H (API: 05-057-06502) @ 150'. No well belonging to another operator within 1,500 feet.

PFZ Comment: The upper shallow section of the North Park is not well defined. We used the depth and lithology components to define two separate sections; one being sand (as North Park FM) which is most likely a possible source of groundwater and the second being a shale (as Coalmont FM) which should not be a source of groundwater. The shale should not be a source of groundwater and has not been found to be a source of groundwater in the USGS dataset.

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

Oil and Gas Development Plan Name _____ OGDID #: _____

Location ID: 447512

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

Signed: _____ Print Name: Justin Garrett

Title: Sr. Regulatory Analyst Date: 5/23/2022 Email: regulatory@ascentgeomatics.c

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: _____ Director of COGCC Date: _____
Expiration Date: _____

API NUMBER

05 057 06578 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

	Return to draft. Update PFZ table with Coalmont groundwater details. Submit OWE with all wells within 1500'.
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Best Management Practices

No BMP/COA Type

Description

1	Drilling/Completion Operations	Multi Well Open-Hole Logging - Rule 317.p: Alternative Logging Program: One of the first wells drilled on the pad – Peters 0781 9-13H12 (API 05-057-06584). The first well drilled on this pad has been logged with open-hole Resistivity Log and Gamma Ray Log from the kick-off point into the surface casing. That info is attached to form 5 Doc# 401009756. All proposed wells related to this permit 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 and have those logs attached. The Form 5 for a well without open hole logs shall clearly state "No open-hole logs were run" and shall clearly identify the well (Peters 0781 9-13H12 (API 05-057-06584) in which open-hole logs were run.
2	Drilling/Completion Operations	Blowout Prevention Equipment ("BOPE"): A double ram annular preventer will be used during drilling.

Total: 2 comment(s)

Attachment List

Att Doc Num

Name

403024477	OffsetWellEvaluations Data
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Total Attach: 1 Files

General Comments

User Group

Comment

Comment Date

		Stamp Upon Approval
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Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.

