

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:  
402976196  
Date Received:  
04/25/2022

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: Mutual 0780 Well Number: 6-8H  
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: SWSW Sec: 9 Twp: 7N Rng: 80W Meridian: 6  
Footage at Surface: 489 Feet FSL 194 Feet FWL  
Latitude: 40.586054 Longitude: -106.387311  
GPS Data: GPS Quality Value: 1.3 Type of GPS Quality Value: PDOP Date of Measurement: 02/19/2016  
Ground Elevation: 8118  
Field Name: NORTH PARK HORIZONTAL NIOBRARA Field Number: 60120

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: 8 Twp: 7N Rng: 80W Footage at TPZ: 1189 FSL 1650 FEL  
Measured Depth of TPZ: 8805 True Vertical Depth of TPZ: 7973 FNL/FSL FEL/FWL  
Base of Productive Zone (BPZ)  
Sec: 8 Twp: 7N Rng: 80W Footage at BPZ: 300 FNL 1650 FEL  
Measured Depth of BPZ: 13159 True Vertical Depth of BPZ: 7973 FNL/FSL FEL/FWL  
Bottom Hole Location (BHL)  
Sec: 8 Twp: 7N Rng: 80W Footage at BHL: 300 FNL 1650 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: \_\_\_\_\_ 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.)

Township 7 North, Range 80 West of the 6th PM:

Section 4: Lot 2(41.06), Lot 3(40.80), Lot 4(40.53), SWNE, W/2SE, SESE, SW/4, S/2NW Section 5: Lot 1(40.38), Lot 2(40.35), Lot 3(40.32), S/2NE, SE/4, E/2SW, SENW Section 8: E/2, SW/4, E/2NW, SWNW

Section 9: All

Section 16: All

Section 17: N/2

Township 8 North, Range 80 West of the 6th PM:

Section 32: E/2SE, SWSE, SESW

Section 33: S/2 less ROW

Total Acres in Described Lease: 3664 Described Mineral Lease is:  Fee  State  Federal  Indian

Federal or State Lease # \_\_\_\_\_

### SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 735 Feet  
 Building Unit: 3766 Feet  
 Public Road: 5280 Feet  
 Above Ground Utility: 482 Feet  
 Railroad: 5280 Feet  
 Property Line: 3130 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.)
NIOBRARA	NBRR	531-36	640	Sec. 8: 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: 660 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: 13159 Feet TVD at Proposed Total Measured Depth 7973 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 feetWill a closed-loop drilling system be used? YesIs H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No If yes, attach an H<sub>2</sub>S 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? NoWill salt sections be encountered during drilling? NoWill salt based (>15,000 ppm Cl) drilling fluids be used? NoWill oil based drilling fluids be used? YesBOP Equipment Type:  Annular Preventor  Double Ram  Rotating Head  NoneBeneficial reuse or land application plan submitted? YesReuse Facility ID: \_\_\_\_\_ or Document Number: 401062567**CASING PROGRAM**

<u>Casing Type</u>	<u>Size of Hole</u>	<u>Size of Casing</u>	<u>Grade</u>	<u>Wt/Ft</u>	<u>Csg/Liner Top</u>	<u>Setting Depth</u>	<u>Sacks Cmt</u>	<u>Cmt Btm</u>	<u>Cmt Top</u>
CONDUCTOR	24	16	J55	65	0	90	8	90	0
SURF	12+1/4	9+5/8	J55	36	0	2400	605	2400	0
1ST	8+3/4	5+1/2	P110HC	20	0	13159	2118	13159	2200

 Conductor Casing is NOT planned**POTENTIAL FLOW AND CONFINING FORMATIONS**

<u>Zone Type</u>	<u>Formation /Hazard</u>	<u>Top M.D.</u>	<u>Top T.V.D.</u>	<u>Bottom M.D.</u>	<u>Bottom T.V.D.</u>	<u>TDS (mg/L)</u>	<u>Data Source</u>	<u>Comment</u>
Groundwater	North Park FM	0	0	500	500	1001-10000	USGS	Site Name: SB00708019BCD1 TD@500' TDS@1240 30' Water Depth
Confining Layer	Coalmont FM	500	500	3178	3172			
Confining Layer	Upper Pierre	3178	3172	5000	4945			
Hydrocarbon	Sussex	5000	4945	5450	5383			
Confining Layer	Pierre Lower (Shale)	5450	5383	5500	5430			
Hydrocarbon	Shannon	5500	5430	5550	5479			
Confining Layer	Pierre Lower (Shale)	5550	5479	6992	6879			
Hydrocarbon	Niobrara	6992	6879	13159	7973			Bottom TVD is bottom of the well and not bottom of the formation; The formation was not exited.

**OPERATOR COMMENTS AND SUBMITTAL**

Comments



## 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	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.
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.
3 COAs	

### Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Alternative Logging Program: One of the first wells drilled on the pad will be logged with open-hole resistivity log with gamma-ray log from the kick-off point into the surface casing. All wells on the pad 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 state "Alternative Logging Program - No open-hole logs were run", and shall clearly identify the type of log and the well (by API#) 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

<u>Att Doc Num</u>	<u>Name</u>
402976196	FORM 2 SUBMITTED
403024229	OffsetWellEvaluations Data
403026182	DIRECTIONAL DATA
403094725	OFFSET WELL EVALUATION

Total Attach: 4 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	06/28/2022
Permit	-Corrected plugging bond number to active blanket bond -Corrected field name -Corrected logging BMP -All corrections made with operator concurrence, permit review complete.	06/27/2022
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 175 feet. Offset well review complete 408.t - No wells 408.u - No wells Engineering review complete	05/10/2022
Engineer	Return to draft. Update PFZ table with Coalmont groundwater details. Submit OWE with all wells within 1500'.	04/12/2022
OGLA	This Location (ID #439603) 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.	03/21/2022

Total: 5 comment(s)