

FORM
2
Rev
05/22

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:
402940252
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: Razor Well Number: 29H-2047
Name of Operator: FUNDARE RESOURCES OPERATING COMPANY LLC COGCC Operator Number: 10773
Address: 5251 DTC PKWY STE 950
City: GREENWOOD VILLAGE State: CO Zip: 80111
Contact Name: Sydney Smith Phone: (303)910-4511 Fax: ()
Email: ssmith@fundareresources.com

FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

COGCC Financial Assurance
 The Operator has provided or will provide Financial Assurance to the COGCC for this Well.
Surety ID Number (if applicable): 20210061

Federal Financial Assurance
 In checking this box, the Operator certifies that it has provided or will provide at least this amount of Financial Assurance to the federal government for this Well. (Per Rule702.a.)
Amount of Federal Financial Assurance \$ _____

WELL LOCATION INFORMATION

Surface Location
QtrQtr: SENE Sec: 29 Twp: 10N Rng: 58W Meridian: 6
Footage at Surface: 2287 Feet FNL 888 Feet FEL
Latitude: 40.810356 Longitude: -103.883111
GPS Data: GPS Quality Value: 1.3 Type of GPS Quality Value: PDOP Date of Measurement: 04/18/2014
Ground Elevation: 4766
Field Name: DJ HORIZONTAL NIOBRARA Field Number: 16950
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: 29 Twp: 10N Rng: 58W Footage at TPZ: 2541 FSL 2250 FEL
Measured Depth of TPZ: 6371 True Vertical Depth of TPZ: 5868 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 32 Twp: 10N Rng: 58W Footage at BPZ: 300 FSL 2250 FEL
Measured Depth of BPZ: 13888 True Vertical Depth of BPZ: 5868 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 32 Twp: 10N Rng: 58W Footage at BHL: 100 FSL 2249 FEL
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: WELD 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.? Yes

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? [X] Yes [] No

[X] 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: Approved Date of Final Disposition: 01/21/2022

Comments: An approved WOGLA amendment (1041WOGLA-AMD20-0015) was approved on 1.21.2022 for the subject location.

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

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

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

Surface Owner Protection Bond (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):

- [X] Fee
- [] State
- [X] 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.)

T10N-R58W
Section 32, S/2NE/4, SE/4

Total Acres in Described Lease: 240 Described Mineral Lease is: Fee State Federal Indian
Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 5280 Feet
Building Unit: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 5280 Feet
Railroad: 5280 Feet
Property Line: 345 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	535-553	960	S/2 S29, All S32

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: 100 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: 700 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: 14088 Feet TVD at Proposed Total Measured Depth 5868 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: 309 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	24	16	ASTM	65	0	80	70	80	0
SURF	13+1/2	9+5/8	J55	36	0	1750	750	1750	0
1ST	8+1/2	5+1/2	P110	20	0	14088	2100	14088	

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
Confining Layer	Laramie	0	0	409	409			
Groundwater	Fox Hills	409	409	657	657	501-1000	USGS	
Confining Layer	Pierre Shale	657	657	1066	1062			
Groundwater	Upper Pierre Sands	1066	1062	1410	1395	1001-10000	Other	CO DNR Report Project Number 2141, page 10. Study-wide mean TDS value.
Confining Layer	Pierre Shale	1401	1394	3430	3345			
Hydrocarbon	Parkman Sandstone	3430	3345	3734	3640			
Hydrocarbon	Pierre Shale	3734	3640	5220	5075			
Hydrocarbon	Upper Sharon Springs	5220	5075	5642	5483			
Hydrocarbon	Lower Sharon Springs	5642	5483	5928	5736			
Hydrocarbon	Niobrara	5928	5736	14088	5868			Not intending to exit bottom of the formation

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>
Drilling/Completion Operations	COGCC COA: Operator will ensure the wellbore beyond the unit boundary setback is physically isolated and is not completed. In the Operator Comments on the Form 5A the operator will (1) report the footages from the section lines of the bottom of the completed interval (2) describe how the wellbore beyond the unit boundary setback is physically isolated and (3) certify that none of the wellbore beyond the setback was completed.
Construction	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 and provide 2 business day spud notice via Form 42 for all subsequent wells drilled on the pad. 2) Comply with Rule 408.j. and provide cement coverage from TD to a minimum of 500' above Niobrara. Verify coverage with a cement bond log.
Drilling/Completion Operations	Per COGCC Order 1-232, 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, must contact COGCC engineer prior to stimulation. 2) If a delayed completion, 6 months after rig release and prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer 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	Operator acknowledges the proximity of the listed non-operated wells. Operator assures that this offset list will be remediated per the Offset Well Evaluation and Hydraulic Fracturing Operator Guidance Document using Option 3. Operator will submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well. DEWITT-BRENNAN *32-1 API (123-09004) BRENNAN *2 API (123-19969) NICOLA *1 API (123-20475) Operator acknowledges the proximity of the listed wells. Operator assures that this offset will be remediated per the Offset Well Evaluation and Hydraulic Fracturing Operator Guidance Document using Option 4. Operator will submit a Form 42 ("OTHER – AS SPECIFIED BY PERMIT CONDITION") stating that appropriate mitigation will be completed, during the hydraulic stimulation of this well. This Form 42 shall be filed 48 hours prior to stimulation. A Bradenhead test will be performed on the offset wells listed below within 30 days prior to the beginning of stimulation of this well. Surface and production casing pressures of this offset well list will be actively monitored during stimulation of this well. Operator will assure that the offset well's bradenhead is open and actively monitored during the entire stimulation treatment of this pad– a person will monitor for any evidence of fluid. If there is indication of communication between the stimulation treatment and an offset well, treatment will be stopped and COGCC Engineering notified. BRENNAN *1 API (123-19400)
5 COAs	

Best Management Practices

No	BMP/COA Type	Description
1	Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with oil and gas development throughout the State of Colorado. BMPs will be constructed as necessary to prevent stormwater from leaving the construction site. BMPs used will vary according to the location, and will remain until the pad is reclaimed.
2	Material Handling and Spill Prevention	<p>Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with oil and gas operations throughout the State of Colorado.</p> <ul style="list-style-type: none"> • Materials and fluids will be stored in a neat and orderly fashion. • Waste will be collected regularly and disposed of at an offsite facility. • Prompt cleanup is required of spills to minimize waste materials entering the stormwater runoff. • Drip pans will be used during fueling and maintenance to contain spills or leaks. • Cleanup of trash and discarded material will be done at the end of the work day. • Cleanup will consist of monitoring the road, location and any other work areas. • Material to be cleaned up includes trash, scrap, and contaminated soil.
3	Drilling/Completion Operations	<p>Alternative Logging Program: One of the first wells drilled on the pad will be logged with Open Hole Resistivity Log and Gamma Ray Log from the kick-off point to 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 measuredwhile-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 openhole logs shall clearly state "Alternative Logging Program - No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which openhole logs were run.</p>

Total: 3 comment(s)

Attachment List

Att Doc Num	Name
2168549	WELL LOCATION PLAT
402940252	FORM 2 SUBMITTED
402951074	DIRECTIONAL DATA
402951078	DEVIATED DRILLING PLAN
402951261	SURFACE AGRMT/SURETY
402990632	OffsetWellEvaluations Data
403174066	OFFSET WELL EVALUATION

Total Attach: 7 Files

General Comments

User Group	Comment	Comment Date
Permit	Added SUA from Doc#402940554. Added the Operator provided comment regarding the BHL to the Submit tab. Passed Final Review	09/20/2022

OGLA	Following OGLA review of this Oil and Gas Location it was determined that the proposed wells are located within Rule 1202.d High Priority Habitats for Mule Deer Severe Winter Range and Mule Deer Winter Concentration Area, as well as Rule 1202.c.(1). R. High Priority Habitat for Aquatic Native Species Conservation Waters. Operator consulted with CPW Regional Energy Liaison (Brandon Marette) via email between September 8-12 to develop site specific Best Management Practices (BMPs) that were agreed upon and submitted for the location by the Operator via Form 4 Sundry (Document #403162946) on 9/13/2022. CPW granted a waiver for the well work within the Rule 1202.c.R. High Priority Habitat via email (see attachment to the Form 4) due to the BMPs and other mitigation measures that included moving all chemical storage further than 500 feet from the Ordinary High Water Mark of North Pawnee Creek. The Director granted an exception to Rule 1202.c.(1).R on 9/15/2022. OGLA review complete.	09/16/2022
Permit	Passed Permit Review	09/06/2022
Permit	Received consent from the operator for the following: 1.Adding the refile COA for built locations 2.Uploading a new well location plat 3.Correcting the name of the nearest well in the same formation 4.Adding the beyond the setback comment and COA. 5. Updating the MD and TVD of the BPZ	08/31/2022
Permit	Requesting the following from the operator: 1.Adding the refile COA for built locations 2.A new plat since this one does not have the BHL footages 3.The name of the nearest well in the same formation 4.The MD and TVD for the BPZ, the one listed are for TD 5. Updating the MD and TVD of the BPZ	08/16/2022
Engineer	•Offset well review complete 408.t - No wells 408.u - No wells •Engineering review complete	08/01/2022
Engineer	Removed extra OWE spreadsheets from permit Email Operator for name of nearest non -op well. Received. Changed OBM to yes.	08/01/2022
Permit	IN PROCESS: operators form 9 has been approved.	07/28/2022
Permit	ON HOLD: This application has been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is placing this form ON HOLD until additional information is received from the applicant. In compliance with § 24-65.1-108(1), C.R.S., the COGCC is providing this written request for all additional information necessary for the COGCC to respond to this application. The applicant may provide all requested additional information to COGCC via email. Upon receipt of all requested information, the COGCC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review. If the applicant no longer requires this application be approved, the applicant may request to withdraw the application. In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for review: 1. The location is still under the old operator and the form 9 needs to be approved before the APDs can be process	06/01/2022
Permit	RETURNED TO DRAFT: This application has been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is returning this form to DRAFT for the applicant to resolve the issues. In compliance with § 24-65.1-108(1), C.R.S., the COGCC is returning this application to the applicant to remedy the deficiencies. The applicant may resubmit this application for COGCC review; upon resubmittal of any application, the COGCC will have 60 days in which to approve, deny,	04/29/2022

	<p>or request all additional information necessary to complete the regulatory review.</p> <p>In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for review:</p> <p>1.The APD does not have a form 9 in process, still under the old operator</p>	
Permit	<p>RETURNED TO DRAFT: This application has been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is returning this form to DRAFT for the applicant to resolve the issues. In compliance with § 24-65.1-108(1), C.R.S., the COGCC is returning this application to the applicant to remedy the deficiencies. The applicant may resubmit this application for COGCC review; upon resubmittal of any application, the COGCC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review.</p> <p>In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for review:</p> <p>1.The current wellbore is not compliance with the current spacing order (535-553) and cannot be process 2.The WOGLA number and approval date is missing 3.The check box if this APD is a 1041 is checked no but should be checked yes 4.The Most Recent Surface Casing Pressure Reported is left blank</p>	02/24/2022

Total: 11 comment(s)