

FORM  
2  
Rev  
05/22

State of Colorado  
Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

403500009

Date Received:

10/30/2023

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: Horsetail Well Number: 29G-3209  
Name of Operator: FUNDARE RESOURCES OPERATING COMPANY LLC ECMC 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

ECMC Financial Assurance

The Operator has provided or will provide Financial Assurance to the ECMC 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: SWNE Sec: 29 Twp: 10N Rng: 57W Meridian: 6

Footage at Surface: 2329 Feet FNL 2119 Feet FEL

Latitude: 40.810700 Longitude: -103.773011

GPS Data: GPS Quality Value: 1.3 Type of GPS Quality Value: PDOP Date of Measurement: 12/10/2015

Ground Elevation: 4695

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: 29 Twp: 10N Rng: 57W Footage at TPZ: 2561 FNL 150 FWL  
Measured Depth of TPZ: 7138 True Vertical Depth of TPZ: 5946 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 20 Twp: 10N Rng: 57W Footage at BPZ: 300 FNL 150 FWL  
Measured Depth of BPZ: 14713 True Vertical Depth of BPZ: 5946 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 20 Twp: 10N Rng: 57W Footage at BHL: 100 FNL 150 FWL  
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.? 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? [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: Other Date of Final Disposition:

Comments: The location of this refile was permitted with COGCC and built prior to needing a local government, WOGLA permit.

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 R57W  
Section 29 S/2,S/2N/2, NENE, NENW

Total Acres in Described Lease: 560 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: 393 Feet  
Railroad: 5280 Feet  
Property Line: 1370 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	535-1412	960	T10N-R57W, N/2 S29, All S20

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: 370 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: 14913 Feet TVD at Proposed Total Measured Depth 5946 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  None

Beneficial reuse or land application plan submitted? \_\_\_\_\_

Reuse Facility ID: \_\_\_\_\_ or Document Number: \_\_\_\_\_

**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	20	ATSTM	92	0	80	179	80	0
SURF	13+1/2	9+5/8	J55	36	0	2000	885	2000	0
1ST	8+1/2	5+1/2	P110	17	0	14913	2269	14913	

 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	White River	24	24	90	90	501-1000	USGS	
Groundwater	Fox Hills	90	90	435	435	501-1000	USGS	
Confining Layer	Pierre Shale	435	435	825	825			
Groundwater	Upper Pierre Sands	825	825	1534	1475	1001-10000	Other	CO DNR Report Project Number 2141, page 10. Study-wide mean TDS value.
Confining Layer	Pierre Shale	1534	1475	3725	3300			
Hydrocarbon	Parkman Sandstone	3725	3300	3884	3465			
Confining Layer	Pierre Shale	3884	3465	6140	5372			
Hydrocarbon	Lower Sharon Springs	6100	5342	6200	5461			
Confining Layer	Sharon Springs	6140	5372	6204	5427			
Hydrocarbon	Niobrara	6204	5427	14913	5946			

**OPERATOR COMMENTS AND SUBMITTAL**

Comments

The location has been constructed.

This is a refile Form 2 being filed under the existing API #05-123-43324. The TPZ and BHL have been update. No changes have been made to the surface hole location.

Nearest well in the same formation is HORSETAIL 08D-1734, API #05-123-41445.

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

Oil and Gas Development Plan Name \_\_\_\_\_ OGDID ID#: \_\_\_\_\_

Location ID: 435861

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

Signed: \_\_\_\_\_ Print Name: Sydney Smith

Title: Director EHSR Date: 10/30/2023 Email: ssmith@fundareresources.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 ECMC Rules, applicable orders, and SB 19-181 and is hereby approved.

ECMC Approved:  Director of ECMC Date: 5/29/2024

Expiration Date: 05/28/2027

**API NUMBER**  
05 123 43324 00

## CONDITIONS OF APPROVAL, IF ANY LIST

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>
Drilling/Completion Operations	1) Submit Form 42 electronically to ECMC 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 ECMC 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 is observed or if there is continuous flow, Operator must contact ECMC 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 ECMC 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.
Construction	If conductors are preset, operator shall comply with Notice to Operators: Procedures for Preset Conductors (dated September 1, 2016).
Drilling/Completion Operations	Operator will log three (3) additional wells during the second rig occupation with open-hole resistivity log with gamma-ray log from the kick-off point into the surface casing for the stratigraphically deepest wells on each side of the pad for a total of four wells logged.
Construction	Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).
5 COAs	

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
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	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. <ul style="list-style-type: none"> <li>• Materials and fluids will be stored in a neat and orderly fashion.</li> <li>• Waste will be collected regularly and disposed of at an offsite facility.</li> <li>• Prompt cleanup is required of spills to minimize waste materials entering the stormwater runoff.</li> <li>• Drip pans will be used during fueling and maintenance to contain spills or leaks.</li> <li>• Cleanup of trash and discarded material will be done at the end of the work day.</li> <li>• Cleanup will consist of monitoring the road, location and any other work areas.</li> <li>• Material to be cleaned up includes trash, scrap, and contaminated soil.</li> </ul>

3	Drilling/Completion Operations	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 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 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.
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Total: 3 comment(s)

### ATTACHMENT LIST

<u>Att Doc Num</u>	<u>Name</u>
403500009	FORM 2 SUBMITTED
403506362	DIRECTIONAL DATA
403506363	DEVIATED DRILLING PLAN
403506365	WELL LOCATION PLAT
403506869	OffsetWellEvaluations Data
403807057	OFFSET WELL EVALUATION

Total Attach: 6 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	05/17/2024
Engineer	<ul style="list-style-type: none"> <li>•Surface Casing Check complete</li> <li>•Offset well review complete</li> <li>408.t - No wells</li> <li>408.u - No wells</li> <li>•Engineering review complete</li> </ul>	05/08/2024
Permit	--Form back in process on May 3, 2024 -Received consent from the operator for the following changes: <ol style="list-style-type: none"> <li>1. Adding the refile COA for built locations</li> <li>2. Adding the additional open hole logging COA</li> <li>3. Correcting the spacing order information</li> <li>4. Adding the Financial Assurance COA</li> <li>5. Adding the surety ID</li> <li>6. Confirmed that no salt section will encountered</li> <li>7. Confirming the field name and well type</li> </ol> -Passed Permit Review	05/08/2024

Permit	<p>ON HOLD: This application has been reviewed by CECMC staff and cannot be approved based on the information submitted; therefore, the CECMC is placing this form ON HOLD until additional information is received from the applicant.</p> <p>In compliance with § 24-65.1-108(1), C.R.S., the CECMC is providing this written request for all additional information necessary for the CECMC to respond to this application. The applicant may provide all requested additional information to CECMC via email. Upon receipt of all requested information, the CECMC 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.</p> <p>In addition to all standard required information and attachments, the CECMC hereby confirms the following information is necessary for review:</p> <ol style="list-style-type: none"> <li>1.. The MD and TVD for the formation depths in the Potential Flow table are not correct below the kick off point</li> <li>2.The refile COA for built locations needs to added</li> <li>3.Correcting the spacing information</li> <li>4.Adding the Financial Assurance COA</li> <li>5.Adding the additional open hole logging COA</li> <li>6.Correcting numerous typo and other errors</li> </ol>	12/15/2023
Permit	<p>Confirming/ requesting the following with the operator:</p> <ol style="list-style-type: none"> <li>1.Adding the refile COA for built locations</li> <li>2.Adding the additional open hole logging COA</li> <li>3.Correcting the spacing order information</li> <li>4.Requesting the surety ID</li> <li>5.Confirm if salt section will encountered</li> <li>6. Confirming the field name and well type</li> <li>7.Adding the Financial Assurance COA</li> </ol>	12/06/2023
OGLA	<p>This Location and its associated Form 2A materials was fully evaluated during the review of this APD in accordance with current Rules. See Sundry doc #403525779 in Location #435861 file for additional information. This APD complies with all CECMC Rules and Staff concludes that any potential direct adverse impacts to public health, safety, welfare, the environment, and wildlife resources will be minimized and mitigated by the successful implementation of the proposed BMPs for Location #435861. OGLA task passed.</p>	10/11/2023
Engineer	<p>Return to DRAFT</p> <p>Potential Flow table does not include Laramie-Fox Hills and does not contain the directional component to match the attached survey. Webforms not working to RTD. RTD on 10/20/23. Corrected data submitted by Operator.</p>	09/28/2023
OGLA	<p>Returned to DRAFT:</p> <p>Operator needs to consult with CPW prior to submitting the Form 2 APD.</p>	09/07/2023

Total: 8 comment(s)