

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:

403252227

Date Received:

01/04/2024

### 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: RNPU B27 FED Well Number: 14C-22-197  
 Name of Operator: CAERUS PICEANCE LLC ECMC Operator Number: 10456  
 Address: 1001 17TH STREET #1600  
 City: DENVER State: CO Zip: 80202  
 Contact Name: Reed Haddock Phone: (720)880-6369 Fax: (303)565-4606  
 Email: rhaddock@caerusoilandgas.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): \_\_\_\_\_

#### 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 \$ 23185

### WELL LOCATION INFORMATION

#### Surface Location

QtrQtr: Lot 3 Sec: 27 Twp: 1S Rng: 97W Meridian: 6

Footage at Surface: 606 Feet FNL 2450 Feet FWL

Latitude: 39.940973 Longitude: -108.269141

GPS Data: GPS Quality Value: 1.9 Type of GPS Quality Value: PDOP Date of Measurement: 09/12/2022

Ground Elevation: 6524

Field Name: PICEANCE CREEK Field Number: 68800

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: 22 Twp: 1S Rng: 97W Footage at TPZ: 1523 FSL 1440 FWL

Measured Depth of TPZ: 7969 True Vertical Depth of TPZ: 7561 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 22 Twp: 1S Rng: 97W Footage at BPZ: 1441 FSL 1382 FWL  
Measured Depth of BPZ: 13600 True Vertical Depth of BPZ: 13191 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 22 Twp: 1S Rng: 97W Footage at BHL: 1441 FSL 1382 FWL  
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: RIO BLANCO 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: Caerus Piceance LLC contacted Rio Blanco County and they have no siting regulations. Rio Blanco County has waived its right to precede the COGCC in siting determination. Contact Edward Smercina, Rio Blanco LGD and NRS at 970-878-9586 for questions.

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 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):

- 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.)

Sec. 22-T1S-97W - Lots 1 - 14, and other lands.

Total Acres in Described Lease: 1952 Described Mineral Lease is:  Fee  State  Federal  Indian

Federal or State Lease # COC061715

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 5280 Feet  
 Building Unit: 5280 Feet  
 Public Road: 3722 Feet  
 Above Ground Utility: 4988 Feet  
 Railroad: 5280 Feet  
 Property Line: 3776 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.)
ILES	ILES	1-229		
WILLIAMS FORK	WMFK	1-229		

Federal or State Unit Name (if appl): Rev N Parachute

Unit Number: COC077039X

### 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: 1441 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: 269 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: 13662 Feet

TVD at Proposed Total Measured Depth 13253 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: 549 Feet  No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is 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? 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? No

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	30	20	A252	54#	0	100	218	100	0
SURF	14+3/4	9+5/8	J55	36#	0	3000	1011	3000	900
1ST	8+3/4	4+1/2	HCP110	13.5#	0	13662	1626	13662	5000
		9+5/8		Stage Tool		900	304	900	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	Unitah	0	0	2600	2498	501-1000	CGS	
Confining Layer	Wasatch	2766	2653	5884	5577			
Hydrocarbon	Wasatch G	5884	5577	6385	6047			The Wasatch G is a nonproductive zone in the referenced area of basin.
Confining Layer	Fort Union	6385	6047	7969	7561			
Hydrocarbon	Ohio Creek	7969	7561	8719	8311	>10000	Produced Water Sample	
Hydrocarbon	Williams Fork	8719	8311	11616	11207	>10000	Produced Water Sample	
Hydrocarbon	Cameo	11616	11207	12166	11757	>10000	Produced Water Sample	
Hydrocarbon	Rollins	12166	11757	12262	11853	>10000	Produced Water Sample	The Rollins is a non-productive zone in the referenced area of basin.
Hydrocarbon	Cozzette	12262	11853	12862	12453	>10000	Produced Water Sample	
Hydrocarbon	Corcoran	12862	12453	13662	13253	>10000	Produced Water Sample	

## OPERATOR COMMENTS AND SUBMITTAL

Comments: Caerus will be providing a reclamation bond to the BLM upon permit approval, and will be providing ECMC an Interim Reclamation Bond per COA on Doc 403206163.

This application is in a Comprehensive Area Plan \_\_\_\_\_ CAP #: \_\_\_\_\_

Oil and Gas Development Plan Name RNPU PHASE 1 OGDP ID#: 485279

Location ID: 485795

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

Signed: \_\_\_\_\_ Print Name: Reed Haddock

Title: Regulatory Lead Date: 1/4/2024 Email: rhaddock@caerusoilandgas.co

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: 5/27/2024

Expiration Date: 12/19/2026

<b>API NUMBER</b> 05 103 12690 00
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**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	Operator will log three (3) additional wells during the first rig occupation with open-hole resistivity log with gamma-ray log from TD into the surface casing for the stratigraphically deepest wells for each quarter of the pad for a total of four wells logged.
Planning	Pursuant to Rule 702.b.(2), the approval of this Application for Permit to Drill constitutes a "change in circumstance" to the approved Financial Assurance Plan. The Operator must file a revised Form 3, Financial Assurance Plan, within 10 days of this approval.
Drilling/Completion Operations	1) Operator shall comply with the most current revision of the Northwest Colorado Notification Policy. See attached notice.  2) Operator shall provide cement coverage from the production casing shoe (4+1/2" FIRST STRING) to a minimum of 200' above all Mesa Verde Group (and Ohio Creek Formation, if present) oil, gas, and water-bearing sandstone and coalbed formations. Verify production casing cement coverage with cement bond log.  3) During stimulation, operator shall monitor the bradenhead, casing, and tubing pressure of the proposed well and all offset wells under Operator's control which penetrate the stimulated formation and have a treated interval separation of 300 feet or less. Operator shall notify COGCC Engineering staff if bradenhead pressures increase by more than 200 psig.
3 COAs	

**Best Management Practices**

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	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 TD 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 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 will state, "Alternative Logging Program - No open-hole logs were run" and will clearly identify the type of log and the well (by API#) in which open-hole logs were run.

2	Drilling/Completion Operations	<p>Closed loop system will be used.</p> <p><b>DRILL CUTTINGS:</b> The moisture content of all drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts. All cuttings generated during drilling will be placed in a bermed portion of the well pad prior to onsite beneficial reuse.</p> <p>Drill cuttings will be put through shakers to minimize moisture and analyzed for Table 915-1 constituents. Cuttings that meet 915-1 levels will be backfilled into the cuttings management area along the northwestern portion of the pad.</p> <p><b>CONTAINMENT:</b> During drilling activities, Caerus utilizes a portable containment liner under the substructure of the drilling rig during drilling activities to protect shallow groundwater from any potential spills surrounding the rig during drilling. A liquid release would simply be vacuumed up from the liner. When drilling activity is completed, the liner is removed and transferred to the next drilling location. For permanent containment at the oil and gas location Caerus will ensure 150% secondary containment of volume in the single largest tank on the oil and gas location in compliance with Rule 603.o. During completions, Caerus may utilize 15-20 temporary tanks to hold frac fluid and flowback water. Tanks would be housed in a compacted earthen bermed area and secondary containment.</p>
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Total: 2 comment(s)

### ATTACHMENT LIST

<u>Att Doc Num</u>	<u>Name</u>
403252227	FORM 2 SUBMITTED
403252246	OffsetWellEvaluations Data
403252250	WELL LOCATION PLAT
403252252	OIL & GAS LEASE
403252253	DEVIATED DRILLING PLAN
403252254	DIRECTIONAL DATA
403644040	OffsetWellEvaluations Data
403803954	OFFSET WELL EVALUATION

Total Attach: 8 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	04/17/2024
Permit	-Added planning and drilling/completions operations BMP's -Surety ID Number corrected from 20190097 to 20230011 -Amount of Federal financial assurance (\$23,185.00) added	03/27/2024
Engineer	<p>Well is located in the Piceance Creek Field. Updated field name accordingly</p> <p>Offset water well check: There are no permitted domestic water wells within one mile of this proposed surface hole location.</p> <p>Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of this wellbore meet standards. No mitigation required. There is one plugged well within 1500 ft. of the Western wells on the pad. Plugging information was found on DOC# 329190. Operators offset well evaluation state, "Operator will not stimulate stages within 500' of the existing well."</p> <p>There is no offset Wasatch G production within 1 mile</p>	01/31/2024
OGLA	The Commission approved OGDG #485279 on December 20, 2023 for the Oil and Gas Location related to this Form 2. OGLA task passed.	01/05/2024

Total: 4 comment(s)