

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:

403254576

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: 15B-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: 628 Feet FNL 2458 Feet FWL

Latitude: 39.940911 Longitude: -108.269111

GPS Data: GPS Quality Value: 1.6 Type of GPS Quality Value: PDOP Date of Measurement: 09/12/2022

Ground Elevation: 6525

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: 716 FSL 1450 FWL

Measured Depth of TPZ: 7725 True Vertical Depth of TPZ: 7516 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 22 Twp: 1S Rng: 97W Footage at BPZ: 634 FSL 1393 FWL
Measured Depth of BPZ: 13300 True Vertical Depth of BPZ: 13091 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 22 Twp: 1S Rng: 97W Footage at BHL: 634 FSL 1393 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: 3738 Feet
 Above Ground Utility: 5003 Feet
 Railroad: 5280 Feet
 Property Line: 3784 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: 634 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: 13403 Feet

TVD at Proposed Total Measured Depth 13194 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: 1167 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? 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	13403	1587	13403	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	2500	2447	501-1000	CGS	
Confining Layer	Wasatch	2702	2642	5699	5544			
Hydrocarbon	Wasatch G	5699	5544	6181	6011			The Wasatch G is a nonproductive zone in the referenced area of basin.
Confining Layer	Fort Union	6181	6011	7725	7516			
Hydrocarbon	Ohio Creek	7725	7516	8475	8266	>10000	Produced Water Sample	
Hydrocarbon	Williams Fork	8475	8266	11359	11150	>10000	Produced Water Sample	
Hydrocarbon	Cameo	11359	11150	11909	11700	>10000	Produced Water Sample	
Hydrocarbon	Rollins	11909	11700	12003	11794	>10000	Produced Water Sample	The Rollins is a non-productive zone in the referenced area of basin.
Hydrocarbon	Cozzette	12003	11794	12603	12394	>10000	Produced Water Sample	
Hydrocarbon	Corcoran	12603	12394	13403	13194	>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

API NUMBER 05 103 12686 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	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 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>DRILL CUTTINGS: 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>CONTAINMENT: 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>
403254576	APD APPROVED
403254580	OffsetWellEvaluations Data
403254583	OIL & GAS LEASE
403254585	WELL LOCATION PLAT
403254589	DEVIATED DRILLING PLAN
403254590	DIRECTIONAL DATA
403644106	OffsetWellEvaluations Data
403803950	OFFSET WELL EVALUATION
403803959	FORM 2 SUBMITTED
403803961	PUBLIC COMMENT-0

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	04/17/2024
Permit	-Corrected Footage at surface from FSL to FNL -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)