

Base of Productive Zone (BPZ)

Sec: 22 Twp: 1S Rng: 97W Footage at BPZ: 873 FSL 1362 FEL
Measured Depth of BPZ: 13700 True Vertical Depth of BPZ: 13310 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 22 Twp: 1S Rng: 97W Footage at BHL: 873 FSL 1362 FEL
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 [X] 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 [X] Federal [] Indian

Mineral Owner beneath this Well's Oil and Gas Location: [] Fee [] State [X] 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: 3677 Feet
 Above Ground Utility: 4942 Feet
 Railroad: 5280 Feet
 Property Line: 3750 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: 873 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: 264 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: 13736 Feet

TVD at Proposed Total Measured Depth 13346 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 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	13736	1638	13736	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	2408	501-1000	CGS	
Confining Layer	Wasatch	2737	2631	5886	5595			
Hydrocarbon	Wasatch G	5886	5595	6399	6078			The Wasatch G is a nonproductive zone in the referenced area of basin.
Confining Layer	Fort Union	6399	6078	7996	7606			
Hydrocarbon	Ohio Creek	7996	7606	8746	8356	>10000	Produced Water Sample	
Hydrocarbon	Williams Fork	8746	8356	11711	11321	>10000	Produced Water Sample	
Hydrocarbon	Cameo	11711	11321	12261	11871	>10000	Produced Water Sample	
Hydrocarbon	Rollins	12261	11871	12336	11946	>10000	Produced Water Sample	The Rollins is a non-productive zone in the referenced area of basin.
Hydrocarbon	Cozzette	12336	11946	12936	12546	>10000	Produced Water Sample	
Hydrocarbon	Corcoran	12936	12546	13736	13346	>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 12695 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.

COA Type

Description

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

No BMP/COA Type

Description

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.
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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

Att Doc Num	Name
403256917	FORM 2 SUBMITTED
403256929	OffsetWellEvaluations Data
403256991	DEVIATED DRILLING PLAN
403256992	DIRECTIONAL DATA
403256995	WELL LOCATION PLAT
403256996	OIL & GAS LEASE
403644205	OffsetWellEvaluations Data
403803971	OFFSET WELL EVALUATION

Total Attach: 8 Files

General Comments

User Group	Comment	Comment Date
Permit	Final Review Completed.	04/17/2024
Permit	-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)