

FORM

2

Rev  
05/22

## State of Colorado

## Energy &amp; Carbon Management Commission

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

Document Number:

403890311

(SUBMITTED)

Date Received:

08/16/2024

## APPLICATION FOR PERMIT TO

☒ Drill ☐ Deepen ☐ Re-enter ☐ Recomplete and OperateAmend ☐TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: \_\_\_\_\_Refile ☒ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: Pronghorn K-5 FED

Well Number: 32N-20-07

Name of Operator: BONANZA CREEK ENERGY OPERATING COMPANY LLC

ECMC Operator Number: 8960

Address: 555 17TH STREET SUITE 3700

City: DENVER

State: CO

Zip: 80202

Contact Name: Jeff Annable

Phone: (303)3128529

Fax: ( )

Email: DLRockiesPermitting@civiresources.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): 20210054

## 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: Lot 2 Sec: 5 Twp: 5N Rng: 61W Meridian: 6

FNL/FSL

FEL/FWL

Footage at Surface: 291 Feet FNL 2131 Feet FEL

Latitude: 40.436650

Longitude: -104.231330

GPS Data:

GPS Quality Value: 1.3

Type of GPS Quality Value: PDOP

Date of Measurement: 02/22/2019

Ground Elevation: 4659

Field Name: WATTENBERG

Field Number: 90750

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: 32 Twp: 6N Rng: 61W

Footage at TPZ: 475 FSL 1156 FEL

Measured Depth of TPZ: 6494

True Vertical Depth of TPZ: 6083 FNL/FSL FEL/FWL

**Base of Productive Zone (BPZ)**Sec: 29 Twp: 6N Rng: 61WFootage at BPZ: 480 FNL 1121 FELMeasured Depth of BPZ: 16101True Vertical Depth of BPZ: 6083 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 29 Twp: 6N Rng: 61WFootage at BHL: 480 FNL 1121 FELFNL/FSLFEL/FWL**LOCAL GOVERNMENT PERMITTING INFORMATION**County: WELDMunicipality: 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? ☒ 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: Approved Date of Final Disposition: 10/29/2019

Comments: WOGLA19-0181

**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.)

Township 6 North Range 61 West - Section 32: S2

Total Acres in Described Lease: 320 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: 2112 Feet  
Above Ground Utility: 5280 Feet  
Railroad: 5280 Feet  
Property Line: 291 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	407-2718	1280	T6N R61W SEC 29 & 32: ALL

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: 475 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: 574 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: 16101 Feet

TVD at Proposed Total Measured Depth 6083 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 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? 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	26	16	A53B	36.95	0	80	105	80	0
SURF	13+1/2	9+5/8	J-55	36	0	1530	519	1530	0
1ST	8+1/2	5+1/2	P-110	20	0	16101	2353	16101	1530

☐ 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	Laramie-Fox Hills	24	24	208	208	1001-10000	Other	COGCC UPWQ Report
Confining Layer	Pierre Formation	208	208	444	443			
Groundwater	Upper Pierre Aquifer	444	443	1478	1463	1001-10000	Other	COGCC UPWQ Report
Confining Layer	Pierre Formation	1478	1463	3356	3313			
Hydrocarbon	Larimer ("Parkman") Sand	3356	3313	3549	3503			Not Productive in this Area
Confining Layer	Pierre Formation	3549	3503	4117	4063			
Hydrocarbon	Terry ("Sussex") Sand	4117	4063	4219	4163			Not Productive in this Area
Confining Layer	Pierre Formation	4219	4163	4493	4433			
Hydrocarbon	Hygiene ("Shannon") Sand	4493	4433	4544	4483			Not Productive in this Area
Confining Layer	Pierre Formation	4544	4483	6131	5973			
Subsurface Hazard	Sharon Springs Member	6131	5973	6494	6083			Sloughing Shales
Hydrocarbon	Niobrara	6494	6083	16101	6083			

## OPERATOR COMMENTS AND SUBMITTAL



Comments	<p>The distance to the completed portion of the nearest well in the same unit on the "Spacing &amp; Formation" tab is measured to the proposed PRONGHORN K-5 FED 32N-20-06 . This distance was measured in 3-dimensional space.</p> <p>There are no wells belonging to another operator within 1500' of the proposed wellbore.</p> <p>Attached as OTHER, is the anti-collision analysis which factors in three dimensional measurements as well as gyro surveys performed on the offset wellbores. All measurements provided in 3-dimensional space were derived from this analysis.</p>
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This application is in a Comprehensive Area Plan \_\_\_\_\_ No \_\_\_\_\_ CAP #: \_\_\_\_\_

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

Location ID: 438694

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

Signed: \_\_\_\_\_ Print Name: Stephen Miller

Title: Lead, W&L Permitting Date: 8/16/2024 Email: smiller@civiresources.com

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: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

<b>API NUMBER</b>
05 123 51213 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
0 COA	

**Best Management Practices**

No	BMP/COA Type	Description
1	Drilling/Completion Operations	One of the first wells drilled on the pad during the second rig occupation will be logged with open-hole resistivity log with gamma-ray log from the kick-off point into the surface casing for one of the stratigraphically deepest wells on the pad. 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 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	Anti-collision: Operator will perform an anti-collision evaluation of all active (producing, shut in, or temporarily abandoned) offset wellbores that have the potential of being within 150 feet of a proposed well prior to drilling operations for the proposed well. Notice shall be given to all offset operators prior to drilling.`
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Total: 2 comment(s)

**ATTACHMENT LIST**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
403890992	DIRECTIONAL DATA
403890996	OTHER
403890998	DEVIATED DRILLING PLAN
403890999	WELL LOCATION PLAT
403891296	OffsetWellEvaluations Data

Total Attach: 5 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
		Stamp Upon Approval

Total: 0 comment(s)