

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:

403862341

**(SUBMITTED)**

Date Received:

08/07/2024

### 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: CE 5-68 Well Number: 11-10-13H  
 Name of Operator: BISON IV OPERATING LLC ECMC Operator Number: 10670  
 Address: 518 17TH STREET SUITE 1800  
 City: DENVER State: CO Zip: 80202  
 Contact Name: Rachel Milne Phone: (720)370-8580 Fax: ( )  
 Email: rmilne@bisonog.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): 20170115

#### 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: SENE Sec: 11 Twp: 5N Rng: 68W Meridian: 6

Footage at Surface: 2316 Feet FNL 488 Feet FEL

Latitude: 40.415350 Longitude: -104.965940

GPS Data: GPS Quality Value: 1.7 Type of GPS Quality Value: PDOP Date of Measurement: 06/10/2022

Ground Elevation: 4979

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: 11 Twp: 5N Rng: 68W Footage at TPZ: 1624 FSL 750 FEL  
Measured Depth of TPZ: 7638 True Vertical Depth of TPZ: 7168 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 11 Twp: 5N Rng: 68W Footage at BPZ: 1622 FSL 1700 FWL  
Measured Depth of BPZ: 15766 True Vertical Depth of BPZ: 7168 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 11 Twp: 5N Rng: 68W Footage at BHL: 1622 FSL 1700 FWL  
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: LARIMER 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.? 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? [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: Approved Date of Final Disposition: 08/25/2023

Comments: Oil and Gas Development Permit PZ#22-00181 Approved 8/25/2023

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 [ ] 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.)

Section 2: T5N, R68W, Tract 1

Total Acres in Described Lease: 38 Described Mineral Lease is: [X] Fee [ ] State [ ] Federal [ ] Indian

Federal or State Lease #

**SAFETY SETBACK INFORMATION**

Distance from Well to nearest:

Building: 1065 Feet  
 Building Unit: 1156 Feet  
 Public Road: 488 Feet  
 Above Ground Utility: 381 Feet  
 Railroad: 2810 Feet  
 Property Line: 333 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	407-3546	1685	T5N, R68W, Section 2: S½; Section 3: E½SW¼, SE¼; Section 10: E½W½, E½; Section 11: 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: 750 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: 438 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: 15766 Feet TVD at Proposed Total Measured Depth 7168 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: 150 Feet  No well belonging to another operator within 1,500 feetWill a closed-loop drilling system be used? YesIs 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? 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  NoneBeneficial reuse or land application plan submitted? No

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	N/A	37	0	80	50	80	0
SURF	13+1/2	9+5/8	J55	36	0	1900	787	1900	0
1ST	8+1/2	5+1/2	HCP110	20	0	15766	1673	15766	1700

 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	UPPER PIERRE	534	534	1037	1034	0-500	DWR	
Confining Layer	PIERRE	1037	1034	3584	3524			
Hydrocarbon	PARKMAN	3584	3524	4193	4119			
Hydrocarbon	SUSSEX	4193	4119	4652	4568			
Hydrocarbon	SHANNON	4652	4568	6997	6852			
Confining Layer	SHARON SPRINGS	6997	6852	7069	6913			
Hydrocarbon	NIOBRARA	7069	6913	15766	7168			Bottom TVD is bottom of the well and not bottom of the formation; the formation is not planned to be exited.

**OPERATOR COMMENTS AND SUBMITTAL**

Comments

Distance from completed zone of this wellbore to nearest completed zone of an offset well within the same unit permitted or completed in the same formation is to the proposed CE 5-68 11-10-12H operated by BISON IV OPERATING LLC, this distance was measured via 2D.

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells was measured to the MIRACLE #9C-11HZ (05-069-06471) operated by KERR MCGEE OIL & GAS ONSHORE LP, this distance was measured via anticollision.

This application is in a Comprehensive Area Plan No CAP #: \_\_\_\_\_Oil and Gas Development Plan Name CE OGDID#: 483259Location ID: 485676

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

Signed: \_\_\_\_\_ Print Name: Alison Parker

Title: Regulatory Analyst Date: 8/7/2024 Email: aparker@bisonog.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: \_\_\_\_\_

API NUMBER

05

### **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	
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### **Best Management Practices**

**No BMP/COA Type**                      **Description**

1	Drilling/Completion Operations	Blowout Prevention Equipment ("BOPE"): A double ram annular preventer will be used during drilling.
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.
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 open-hole 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 open-hole logs were run.

4	Drilling/Completion Operations	When a skid is performed, if a previous well on that pad has completed a full BOPE test within the past 21 days, then the only required BOPE tests are for the BOPE connections that were broken during skid. The purpose of this is to prevent the wear and tear on the choke line and kill line valves. The annular and double rams will be tested as per usual, and all broken connections will also be tested (annular to 70% of rated pressure, all other values and connections will be tested to full rated pressure). Under no circumstances will 21 days be exceeded without completing a full BOPE Test to all connections including all choke and kill line valves. Daily function test/activation of pipe rams are still required in addition to a preventer operator test on each trip.
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Total: 4 comment(s)

**ATTACHMENT LIST**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
403873366	WELL LOCATION PLAT
403873368	OTHER
403873369	DEVIATED DRILLING PLAN
403873370	DIRECTIONAL DATA
403879703	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)