

FORM
2
Rev
05/22

State of Colorado Energy & Carbon Management Commission

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Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

403862263

(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: 11-3-1H

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: 2244 Feet FNL 519 Feet FEL

Latitude: 40.415550 Longitude: -104.966050

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

Ground Elevation: 4981

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: 2 Twp: 5N Rng: 68W Footage at TPZ: 1600 FSL 350 FEL

Measured Depth of TPZ: 8873 True Vertical Depth of TPZ: 7252 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 3 Twp: 5N Rng: 68W Footage at BPZ: 1612 FSL 1700 FWL
Measured Depth of BPZ: 17396 True Vertical Depth of BPZ: 7252 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 3 Twp: 5N Rng: 68W Footage at BHL: 1612 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: 1005 Feet
 Building Unit: 1138 Feet
 Public Road: 519 Feet
 Above Ground Utility: 432 Feet
 Railroad: 2874 Feet
 Property Line: 405 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.) |
|------------------------|----------------|-------------------------|-------------------------------|--|
| CODELL | CODL | 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: 350 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: 1833 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 PROGRAMProposed Total Measured Depth: 17396 Feet TVD at Proposed Total Measured Depth 7252 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: 111 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 | 17396 | 1860 | 17396 | 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 | 1034 | 1034 | 0-500 | DWR | |
| Confining Layer | PIERRE | 1034 | 1034 | 3800 | 3524 | | | |
| Hydrocarbon | PARKMAN | 3800 | 3524 | 4559 | 4119 | | | |
| Hydrocarbon | SUSSEX | 4559 | 4119 | 5131 | 4568 | | | |
| Hydrocarbon | SHANNON | 5131 | 4568 | 8042 | 6852 | | | |
| Confining Layer | SHARON SPRINGS | 8042 | 6852 | 8121 | 6913 | | | |
| Hydrocarbon | NIOBRARA | 8121 | 6913 | 8662 | 7220 | | | |
| Hydrocarbon | FORT HAYS | 8662 | 7220 | 8733 | 7244 | | | |
| Hydrocarbon | CODELL | 8733 | 7244 | 17396 | 7252 | | | 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 SCHMERGE WEST #4-9HZ (05-123-52328) operated by KERR MCGEE OIL & GAS ONSHORE LP, this distance was measured via 2D. 408.u is not attached as the subject wells permitted/treated intervals are not within 150' of each other.

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells was measured to the ENCORE #40N-12HZ (05-069-06480) operated by KERR MCGEE OIL & GAS ONSHORE LP, this distance was measured via anticollision.

| | | |
|---|--------------------------------|--|
| 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. |
|---|--------------------------------|--|

Total: 4 comment(s)

ATTACHMENT LIST

| <u>Att Doc Num</u> | <u>Name</u> |
|---------------------------|----------------------------|
| 403863051 | OTHER |
| 403863054 | DEVIATED DRILLING PLAN |
| 403863056 | WELL LOCATION PLAT |
| 403863058 | DIRECTIONAL DATA |
| 403880105 | OffsetWellEvaluations Data |

Total Attach: 5 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|-----------------------|----------------------------|
| | | Stamp Upon Approval |

Total: 0 comment(s)