

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:

403961001

Date Received:

10/23/2024

APPLICATION FOR PERMIT TO

Drill Deepen Re-enter Recomplete and Operate

Amend

TYPE OF WELL OIL GAS COALBED OTHER: HELIUM WELL

Refile

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: JACKSON Well Number: 31 SENW 3054
Name of Operator: BNL (ENTERPRISE) INC ECMC Operator Number: 10763
Address: 2011 FOREST AVENUE
City: DURANGO State: CO Zip: 81301
Contact Name: Peter Kondrat Phone: (970)7595370 Fax: ()
Email: pkondrat@bluestarhelium.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 \$ _____

WELL LOCATION INFORMATION

Surface Location

QtrQtr: SENW Sec: 31 Twp: 30S Rng: 54W Meridian: 6

Footage at Surface: 2017 Feet FNL/FSL 3324 Feet FEL/FWL FEL

Latitude: 37.388810 Longitude: -103.505083

GPS Data: GPS Quality Value: 2.3 Type of GPS Quality Value: PDOP Date of Measurement: 04/01/2022

Ground Elevation: 5583

Field Name: WILDCAT Field Number: 99999

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: _____ Twp: _____ Rng: _____ Footage at TPZ: _____

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

Base of Productive Zone (BPZ)

Sec: _____ Twp: _____ Rng: _____ Footage at BPZ: _____
Measured Depth of BPZ: _____ True Vertical Depth of BPZ: _____ FNL/FSL _____ FEL/FWL _____

Bottom Hole Location (BHL)

Sec: _____ Twp: _____ Rng: _____ Footage at BHL: _____
FNL/FSL _____ FEL/FWL _____

LOCAL GOVERNMENT PERMITTING INFORMATION

County: LAS ANIMAS 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:

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.)

Date: 1/22/2022

Lessor: Everett Jackson, Jr., et ux

Lessee: Las Animas Leasing Inc.

T.30S, R.54W, 6th P.M.

Section 31: ALL

Acres: 733.72

Total Acres in Described Lease: 734 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 3609 Feet

Building Unit: 3686 Feet

Public Road: 3041 Feet

Above Ground Utility: 3686 Feet

Railroad: 5280 Feet

Property Line: 3054 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.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| LYONS | LYNS | | | |

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? No

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: _____ 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: _____ Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: 1959 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

Well in an un-spaced area and the OGDG was approved on a leasehold basis.

DRILLING PROGRAM

Proposed Total Measured Depth: 2500 Feet TVD at Proposed Total Measured Depth 2500 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? No

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? _____

BOP Equipment Type: Annular Preventor Double Ram Rotating Head None

Beneficial 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 | 12+1/4 | 9+5/8 | J-55 | 36# | 0 | 38 | 30 | 38 | 0 |
| SURF | 8+3/4 | 7 | J-55 | 20# | 0 | 1033 | 219 | 1033 | 0 |
| OPEN HOLE | 6+1/8 | | | | 1033 | 2500 | | | |

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 |
|-----------------|-------------------|----------|------------|-------------|---------------|------------|-------------|---|
| Confining Layer | Alluvium | 0 | 0 | 4 | 4 | | | Boulders, sand, silt, clays |
| Groundwater | Dakota | 4 | 4 | 83 | 83 | 501-1000 | USGS | Sandstones, shale |
| Confining Layer | Purgatoire | 83 | 83 | 155 | 155 | | | Sandstone, limestone, shale |
| Confining Layer | Morrison | 155 | 155 | 532 | 532 | | | Shale, limestone, sandstone |
| Confining Layer | Entrada | 532 | 532 | 878 | 878 | | | Sandstone, shale |
| Confining Layer | Day Creek | 788 | 788 | 878 | 878 | | | |
| Confining Layer | Lykins | 878 | 878 | 913 | 913 | | | Dolomite, shale |
| Confining Layer | Blaine | 913 | 913 | 1035 | 1035 | | | Anhydrite, gypsum, shale, lime |
| Hydrocarbon | Lyons | 1035 | 1035 | 1134 | 1134 | | | Sand with helium, nitrogen, carbon dioxide gases. No hydrocarbons in this formation |
| Confining Layer | Fountain | 1134 | 1134 | 2500 | 2500 | | | Sand, shale, silt |

OPERATOR COMMENTS AND SUBMITTAL

Comments BNL is ready to drill with rig available in November.

This application is in a Comprehensive Area Plan No CAP #: _____

Oil and Gas Development Plan Name Galactica-Pegasus OGD I OGD ID#: 487157

Location ID: 488238

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

Signed: _____ Print Name: Peter Kondrat

Title: Chief Operating Officer Date: 10/23/2024 Email: pkondrat@bluestarhelium.com

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: 11/13/2024

Expiration Date: 10/15/2027

API NUMBER
05 071 09943 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 | 1) Submit Form 42 electronically to ECMC 2 business days prior to MIRU (spud notice) for the first well activity with a rig on the pad and provide 2 business day spud notice via Form 42 for all subsequent wells drilled on the pad. 2) Comply with Rule 408.e. (2). Operator will isolate groundwater with fully-cemented surface casing. Verify coverage with a cement bond log. |
| 1 COA | |

Best Management Practices

| <u>No BMP/COA Type</u> | <u>Description</u> |
|----------------------------------|---|
| 1 Drilling/Completion Operations | The well be logged open hole from TD to 9 5/8 inch casing with a triple combo log suite. Additionally, a GR/CBL/Neutron will run inside 9 5/8 inch casing to surface. |

Total: 1 comment(s)

ATTACHMENT LIST

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|--------------------|
| 403961001 | FORM 2 SUBMITTED |
| 403962902 | WELL LOCATION PLAT |
| 403966818 | WELLBORE DIAGRAM |

Total Attach: 3 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|---------------------|
| Permit | Final Review Completed. | 11/13/2024 |
| Permit | Added open hole logging BMP, per operator. | 11/07/2024 |
| OGLA | The Commission approved OGDG #487157 on October 16, 2024 for the Oil and Gas Location related to this Form 2. OGLA task passed. | 10/31/2024 |
| Engineer | No offset well mitigation required. PFZ table should document the whole wellbore. Contacted operator and updated Entrada bottom to 878' since Day Creek belongs to Entrada. | 10/28/2024 |

Total: 4 comment(s)