

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: Las Animas County does not site oil and gas but has an administrative approval process. The permit was submitted 10/23/23.

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): Blanket Surety ID Number (if applicable): 20210056

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 29 South, Range 60 West, 6th PM
Section 04: E2SE, E2NWSE, SESW
Section 09: N2NW, W2NWNE, N2SENE, SWSENE, SWNWNE

Total Acres in Described Lease: 280 Described Mineral Lease is: Fee State Federal Indian
Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 2997 Feet
Building Unit: 2997 Feet
Public Road: 2228 Feet
Above Ground Utility: 2997 Feet
Railroad: 3647 Feet
Property Line: 61 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: 206 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 is located 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? 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	17+1/2	13+3/8	J-55	48	0	35	20	35	0
SURF	12+1/4	9+5/8	J-55	36	0	1224	101	725	0
OPEN HOLE	8+1/2				725	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	5	5			Boulders, sand, silt, clays
Confining Layer	Mancos	5	5	15	15			Shale, sandstones
Groundwater	Dakota	15	15	90	90	501-1000	USGS	Sandstones, shale
Confining Layer	Purgatoire	90	90	108	108			Sandstone, limestone, shale
Confining Layer	Morrison	108	108	286	286			Shale, limestone, sandstone
Confining Layer	Entrada	286	286	464	464			Sandstone, shale
Confining Layer	Lykins	464	464	562	562			Dolomite, shale
Confining Layer	Blaine	562	562	737	737			Anhydrite, gypsum, shale, lime
Hydrocarbon	Lyons	737	737	987	987			Sand with helium, nitrogen, carbon dioxide gases. No hydrocarbons in this formation
Confining Layer	Fountain	987	987	2500	2500			Sand, shale, silt

OPERATOR COMMENTS AND SUBMITTAL

Comments Helium well without any hydrocarbons. Rig availability January 1st 2024.

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

Oil and Gas Development Plan Name Bolling-Daniel OGD OGD ID#: 485113

Location ID: 485654

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: 12/11/2023 Email: pkondrat@bluestarhelium.com

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: _____ Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

Conditions Of Approval

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

<u>COA Type</u>	<u>Description</u>
0 COA	

Best Management Practices

No BMP/COA Type Description

<u>No BMP/COA Type</u>	<u>Description</u>
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Attachment List

Att Doc Num Name

403612368	WELL LOCATION PLAT
403620374	WELLBORE DIAGRAM

Total Attach: 2 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Agency	RTD for following issues. 1. Update the Casing & Cementing plan to reflect a well depth of 2500' for every well. 2. Update the wellbore diagrams to show a depth of 2500'. 3. Update the Potential Flow table lines for Dakota and Purgatoire. Comments section should indicate specifically what the "Other" data source actually was. 4. On the Spacing & Formations tab an Objective Formation needs to be chosen. (Lyons)	12/08/2023

Total: 1 comment(s)

