

FORM

2

Rev  
05/22

## State of Colorado

## Oil and Gas Conservation Commission

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

Document Number:

403190842

Date Received:

10/07/2022

## APPLICATION FOR PERMIT TO

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate
Amend ☐TYPE OF WELL OIL ☐ GAS ☐ COALBED ☐ OTHER: HeliumRefill ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: State 16 SWSE

Well Number: 3054

Name of Operator: BNL (ENTERPRISE) INC

COGCC Operator Number: 10763

Address: 2011 FOREST AVENUE

City: DURANGO

State: CO

Zip: 81301

Contact Name: Peter Kondrat

Phone: (970)759-5370

Fax: ( )

Email: pkondrat@bluestarhelium.com

## FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

## COGCC Financial Assurance

☒ The Operator has provided or will provide Financial Assurance to the COGCC for this Well.

Surety ID Number (if applicable): 20210057

## 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: SWSE Sec: 16 Twp: 30S Rng: 54W Meridian: 6

Footage at Surface: 999 Feet FSL 2233 Feet FEL

Latitude: 37.426963 Longitude: -103.465100

GPS Data: GPS Quality Value: 1.7 Type of GPS Quality Value: PDOP

Date of Measurement: 07/04/2021

Ground Elevation: 5506

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: Approved Date of Final Disposition: 09/22/2022

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.)

T30S R54W Section 16: All

Total Acres in Described Lease: 640 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # CO-112989

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 5280 Feet  
Building Unit: 5280 Feet  
Public Road: 5280 Feet  
Above Ground Utility: 5280 Feet  
Railroad: 5280 Feet  
Property Line: 999 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: 999 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: 5280 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: 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 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? No

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	35	9	35	0
SURF	8+3/4	7	J-55	26	0	1139	165	1139	0
OPEN HOLE	6+1/8				1139	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
Hydrocarbon	None	0	0	2500	2500			No Hydrocarbons Expected
Confining Layer	Quaternary Alluvium	0	0	35	35			Boulders, sand, silt, clays
Confining Layer	Mancos/Graneros	35	35	364	364			Shale, sand
Groundwater	Dakota	364	364	496	496	501-1000	Other	Offset well, DWR, Surface Owner, Sand
Groundwater	Purgatoire	496	496	600	600	501-1000	Other	Offset well, DWR, Surface Owner, Sand, Limestone, Shale
Confining Layer	Morrison	600	600	740	740			Shale, limestone, Sand
Confining Layer	Entrada	740	740	800	800			Sand, shale
Confining Layer	Lykins	800	800	1073	1073			Dolomite, shale
Confining Layer	Blaine	1073	1073	1149	1149			Anhydrite, Gypsum, Shale, Lime
Hydrocarbon	Lyons	1149	1149	1393	1393	>10000	Other	Sand with helium, nitrogen, carbon dioxide gases. No hydrocarbons in this formation.
Confining Layer	Fountain	1393	1393	2500	2500			Sand, shale, silt

## OPERATOR COMMENTS AND SUBMITTAL

Comments This well is an exploratory helium well. This well will not be hydraulically stimulated. Hydrocarbons are not anticipated.

To minimize disturbance and loss of topsoil is present minimal cut and fill of the location is planned. Liners will be installed under the rig and major components.

The well will be air or air/foam drilled, with a partially buried steel cuttings tank will be used to capture drill cuttings. Excavation will include the installation of a 5' by 5' galvanized steel culvert as a wellhead cellar.

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

Oil and Gas Development Plan Name State 09 & 16 3054 OGD ID#: 482117

Location ID: 483008

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

Signed: \_\_\_\_\_ Print Name: Andrea Gross

Title: Permit Agent Date: 10/7/2022 Email: agross@upstreampm.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 COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved:  Director of COGCC Date: 12/21/2022

Expiration Date: 12/20/2025

### API NUMBER

05 071 09922 00

## 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

	<p>1) Submit Form 42 electronically to COGCC 2 business days prior to MIRU (spud notice) for the first well activity with a rig on the pad.</p> <p>2) If groundwater flow or hydrocarbon bearing zones are encountered during drilling, cement the production casing to 500' above the zone.</p> <p>3) If dry hole, set minimum 100' plugs across the Lyons and Dakota formation tops. Set 100' plug half in and half out of the surface casing shoe.</p>
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1 COA

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	The well be logged open hole from TD to 7 inch casing with a triple combo log suite. Additionally a GR/CBL/Neutron will run inside 7 inch casing to surface.

Total: 1 comment(s)

## Attachment List

<u>Att Doc Num</u>	<u>Name</u>
2598134	WELLBORE DIAGRAM-PROPOSED
403190842	FORM 2 SUBMITTED
403190970	WELL LOCATION PLAT

Total Attach: 3 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	12/19/2022
Engineer	Corrected number of sacks for surface casing.	10/19/2022
Engineer	No PA wells were found to exist within 1500'.	10/19/2022
Engineer	Offset water well check: There are no existing offset water wells within one mile of this proposed well's surface hole location.	10/19/2022
Engineer	Offset Well Evaluation: There are no existing offset oil and gas wells within 1,500 feet of this wellbore.	10/19/2022
OGLA	The Commission approved OGDG #482117 on September 14, 2022 for the Oil and Gas Location related to this Form 2. OGLA task passed.	10/10/2022

Total: 6 comment(s)