

ASX ANNOUNCEMENT

27 May 2024

STATE 16 WELL DRILLED TO TD WITH LOGS CONFIRMING GAS GALACTICA PROJECT

Highlights

- State 16 successfully drilled to total depth (TD) with gas confirmed by wireline logs.
- Lyons formation contains approximately 96 feet of high-quality gas filled sandstone.
- The well is flowing naturally and clearing drilling gas (cleaning-up).
- Forward operations: pressure gradient test followed by flow testing, gas sampling and pressure build up test.

Blue Star Helium Limited (ASX:BNL, OTCQB:BSNLF) (**Blue Star** or the **Company**) is pleased to announce that the State 16 SWSE 3054 development well at its Galactica helium project in Las Animas County, Colorado has been successfully drilled to its final total depth (TD). The production section of the hole was drilled with air as planned.

The well encountered the Lyons formation at a depth of 1,111.5 feet and was completed at its planned TD at the base of the upper sand of the Lyons formation at 1,211 feet.

Significantly, no water was encountered during drilling. Wireline logs confirmed this and show approximately 96 feet of high-quality sands in the upper Lyons production section (1,111.5 to 1,211 feet) to be gas saturated.

The well flowed naturally during drilling and has been “cleaning-up” (returning drilling gas and approaching reservoir gas composition and conditions) since drilling operations were completed.

During drilling operations and while flowing at TD the onsite mass spectrometer recorded elevated helium as expected, notwithstanding significant air dilution from drilling operations.

The Company is about to commence pressure and flow testing, including a pressure gradient test, followed by flow testing, sampling and a pressure build-up test over a five-day period. The data will be downloaded, QCed and evaluated by an independent engineering consultant. Samples taken during flow testing will be sent for laboratory analysis of the reservoir gas composition.

Upon successful final testing and analysis, the well will be completed for tie-in to production facilities. Commercial discussions with interested buyers have been ongoing since Q423.

Galactica/Pegasus Discoveries

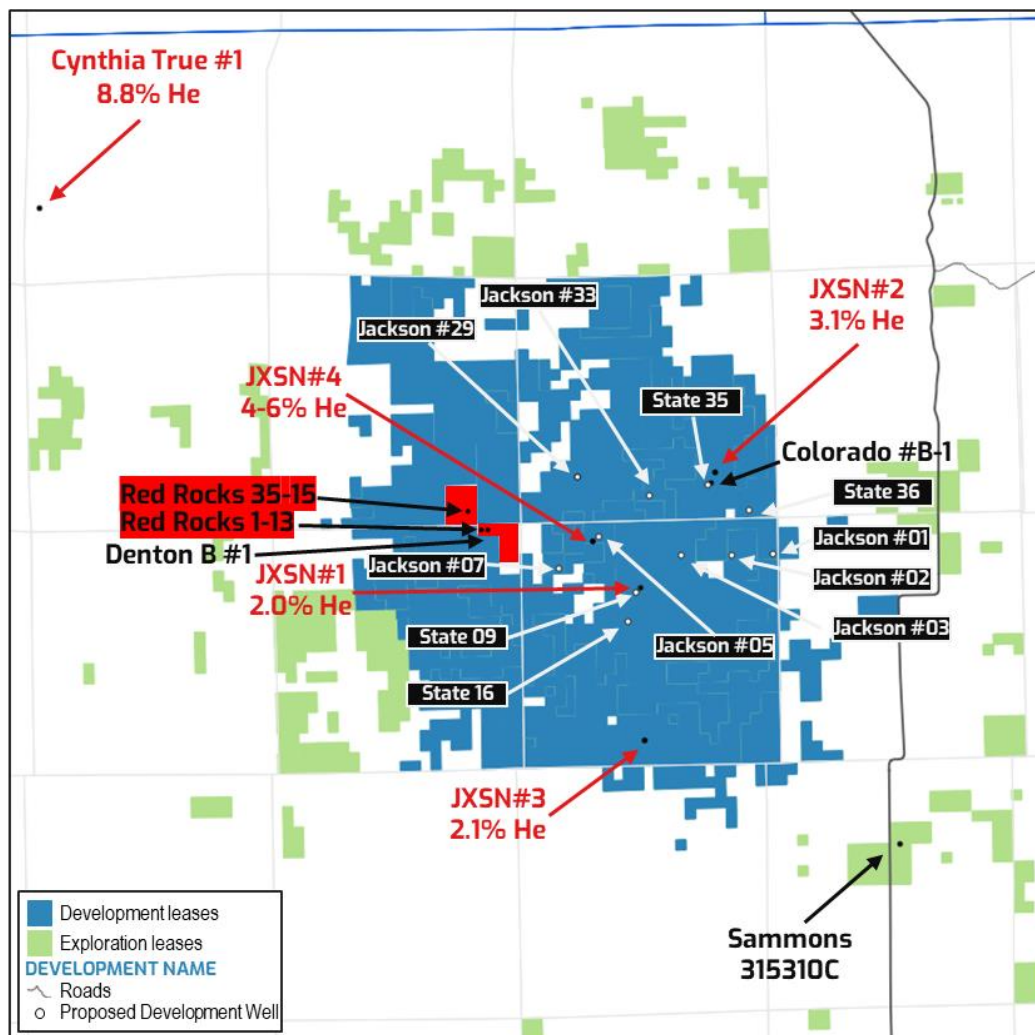
The Galactica project is part of the greater Galactica/Pegasus development, discovered by Blue Star in 2022. The Galactica/Pegasus development is a large-scale project with multiple potential product streams. Four existing Blue Star discoveries at Galactica/Pegasus via exploration wells JXSN#1 to JXSN#4 delivered gas flowing at 125 - 412 mcf/d and high air-corrected concentrations of 2.0 - 6.1% He (see Table 1 and BNL releases dated 7 June 2022, 29 September 2022 and 5 October 2022).

Table 1: Key results from recent Galactica/Pegasus exploratory wells

Key parameters	JXSN#1	JXSN#2	JXSN#3	JXSN#4
Helium concentration (%)	1.98	3.14	2.14	4.20 & 6.06
Gas column in Lyons formation (ft)	217.5	101+	230	233.5
Net pay in Lyons formation (ft)	143.5	101	153.4	133.5
Stabilized initial flow rate (Mcf/d)	412	202	412	125

This data also proved the Company’s previous interpretations of gas on logs at historic wells, Denton B #1 and Colorado #B-1, also located on the greater Galactica/Pegasus structure. The Galactica/Pegasus development is further de-risked by the successful third-party commercialisation of adjoining Red Rocks helium project, via an IACX midstream leased process facility arrangement.

There are currently a range of development and commercialisation pathways under review, including a leased plant and third party operated option. The final development is expected to include a CO₂ production stream, in addition to helium revenues. Engineering and market work continues to refine the development configurations, forecast production and cost estimates.



This ASX Announcement has been authorised for release by the Board of Blue Star Helium Limited.

For further information, please contact:

Trent Spry

Managing Director & CEO

info@bluestarhelium.com

+61 8 9481 0389

About Blue Star Helium:

Blue Star Helium Ltd (ASX:BNL, OTCQB:BSNLF) is an independent helium exploration company, headquartered in Australia, with operations and exploration in North America. Blue Star's strategy is to find and develop new supplies of low cost, high grade helium in North America. For further information please visit the Company's website at www.bluestarhelium.com

About Helium:

Helium is a unique industrial gas that exhibits characteristics both of a bulk, commodity gas and of a high value specialty gas and is considered a "high tech" strategic element. Due to its unique chemical and physical qualities, helium is a vital element in the manufacture of MRIs and semiconductors and is critical for fibre optic cable manufacturing, hard disc manufacture and cooling, space exploration, rocketry, lifting and high-level science. There is no way of manufacturing helium artificially and most of the world's reserves have been derived as a by-product of the extraction of natural hydrocarbon gas.