ASX ANNOUNCEMENT

6 March 2025

SIGNIFICANT INCREASE IN HELIUM CONCENTRATION AT STATE 16 WELL GALACTICA PROJECT

Highlights

- New samples from the State 16 well show a helium concentration of 2.17%, representing a material increase from the previously reported non air-corrected average of 1.65%.
- The new samples also show 36.26% nitrogen and 61.56% carbon dioxide.
- The well head pressure was recorded at 10 psig during sampling, the highest observed at State 16 to date, indicating encouraging reservoir connectivity.
- This increase in helium content could be expected from all historic wells.

Blue Star Helium Limited (ASX:BNL, OTC:BSNLF) (**Blue Star** or the **Company**) is pleased to announce a significant increase in helium concentrations measured at the State 16 SWSE 3054 development well at its Galactica helium project in Las Animas County, Colorado.

Blue Star Managing Director & CEO, Trent Spry, said

"While we await gas analysis from the recent Jackson 31 well, this significant increase in helium concentration at State 16 is a very encouraging development. The higher helium percentage, combined with the increased well head pressure, reinforces our confidence in the potential of this reservoir. We believe these results bode well for our broader portfolio and validate our ongoing development strategy. We look forward to advancing our operations and realizing the full potential of our helium resources by bringing them into production."

State 16 well helium concentrations

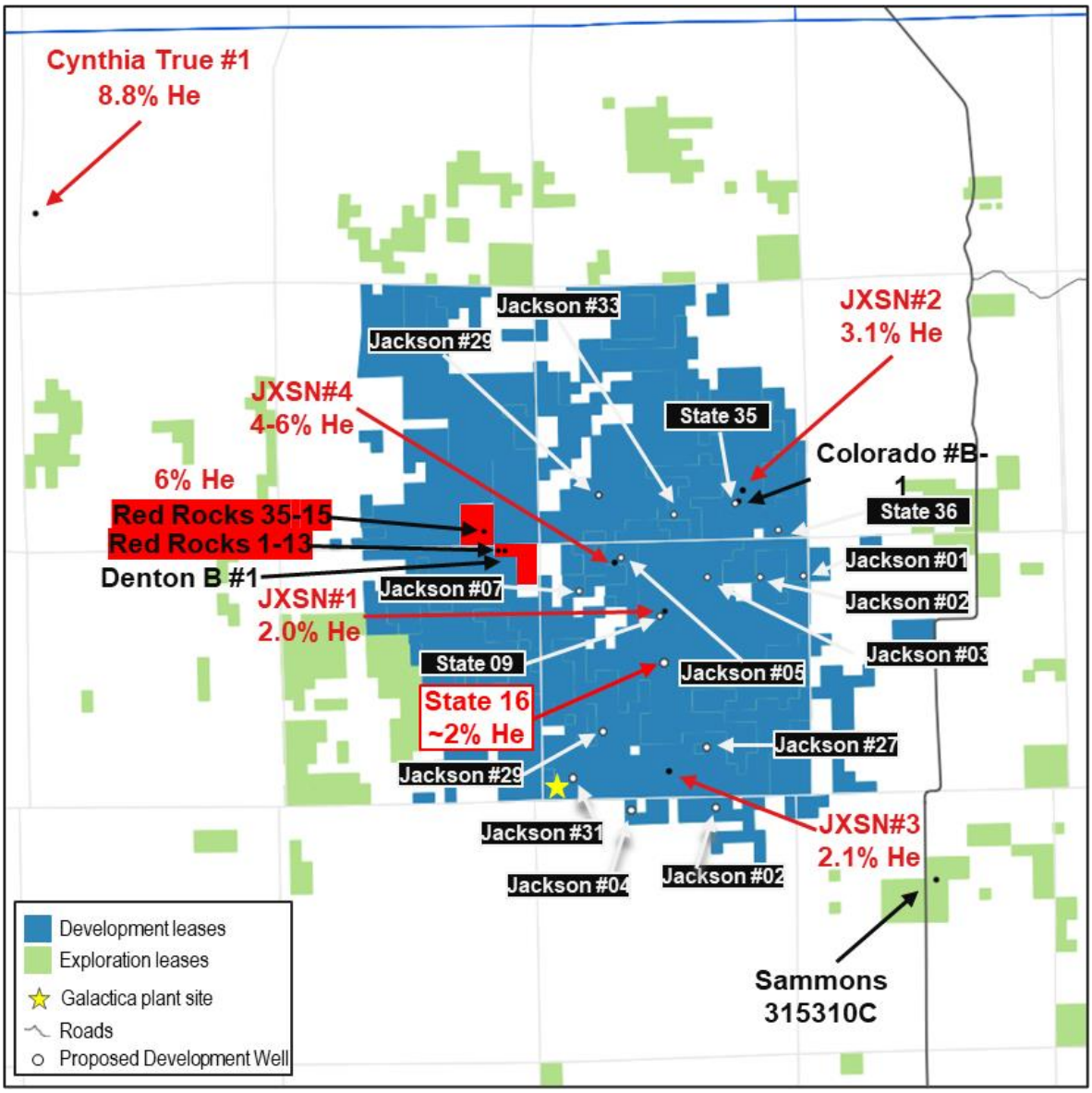
The State 16 well, which is part of our Galactica development, was drilled in May 2024. During the current drilling campaign, the Company took the opportunity to re-sample gas from the well and had the samples analysed by Gas Analysis Service.

In our ASX announcement dated June 4, 2024, we reported lab analysis of representative reservoir samples taken during flow testing which contained an average helium percentage of 1.65% and up to 1.90% when air-corrected. The reservoir gas compositions were approximately 1.65% helium, 28.05% nitrogen and 70.29% carbon dioxide from the lab analysis and 1.90% helium, 28.54% nitrogen and 69.56% carbon dioxide when air-corrected.

The latest samples, taken from the well head, demonstrate a significant rise in helium concentration to 2.17% (not air-corrected). This increase is attributed to the reservoir's natural equilibration process near the well bore. This increase in helium content could be expected from all historic wells.

The recorded well head pressure of 10 psig is a positive indicator of reservoir connectivity and long term flow potential.

The well is currently completed for tie-in to production facilities.



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, OTC:BSNLF) is an independent helium exploration company with operations and exploration in North America. Blue Star's strategy is to find and develop new supplies of low-cost, high-grade helium.

About Helium:

Helium is a unique industrial gas with applications in various high-tech industries, including MRI and semiconductor manufacturing, fibre optics, and space exploration. Helium is primarily sourced as a by-product of natural gas extraction.

Appendix 1

LR 5.30	Rule Requirement	Company Statement
(a)	Name and type of well	State 16 SWSE 3054 helium well
(b)	Location of well and details of lease	Location: Section 16 SWSE Township 30 South Range 54 West (see map on previous page). Lease: Oil and Gas Lease No.112989 between the State of Colorado and Blue Star's wholly owned subsidiary, Las Animas Leasing Inc (**LAL**). The lease has an effective date of 21 November 2019, the total area of the leases is 640 gross acres (640 net acres), the term is 5 years from the effective date and so long thereafter as gas is produced in paying quantities, the rental is payable annually at a rate of $2.50 per acre per year, the royalty is 20% and LAL's working interest in the lease is 100%.
(c)	Working Interest	100%
(d)	Net pay (if gross pay reported)	Production hole section from 1,111.5 to 1,211 feet, containing approximately 96 feet of high-quality gas filled sandstone
(e)	Geological rock type of formation	Lyons sandstone
(f)	Depth of zones tested	1,111.5 to 1,211 feet
(g)	Types of tests and duration	Flow tests comprising a 12 hour natural flow period followed by a 12 hour flow period under vacuum compression after which a 48 hour pressure build up was performed.
(h)	Hydrocarbon phases recovered	Nil
(i)	Any other recovery	Helium, Carbon Dioxide, Nitrogen
(j)	Choke size, flow rates and volumes measured	Natural flow at up to 208 Mcfd through a 1" orifice plate. Vacuum flow at up to 313 Mcfd through a 1.375" orifice plate.
(k)	Pressures associated with flow and duration of test	See announcement text and paragraph (n) below.
(l)	Number of fracture stimulation stages	Nil
(m)	Material volumes of non-hydrocarbon gases	See paragraph (j) above.
(n)	Any other material information	Gas Sample Analysis While flowing gas samples were taken from a 2" nipple directly after the flow meter. The sample analysis was caried out by Gas Analysis Service, Farmington NM using a single thermal conductivity detector (TCD) for gas compositional analysis for the determination of C1-C6+ hydrocarbons, helium, nitrogen and CO2 adopted from Gas Processors Association standard 2261-00. Concentrations of the compounds are measured using thermal conductivity detectors using ultra-high purity hydrogen as a carrier gas. A number of secondary samples were also sent to Dolan Integration Group of 11025 Dover Street, Suite 800, Westminster, Colorado, for cross calibration.

		Gas compositional analysis methodology for the determination of C1-C6+ hydrocarbons and permanent gases (nitrogen, oxygen, argon, carbon dioxide, helium and hydrogen) are adopted from Gas Processors Association standard 2261-00. Concentrations of the compounds are measured using an Agilent 7890 gas chromatograph equipped with dual thermal conductivity detectors (TCD), each of which uses either ultra-high purity hydrogen or nitrogen as a carrier gas. The laboratory reports un-normalized concentrations in parts per million (ppm). The laboratory runs multiple mixed calibration gases with each sample, so it has multi-point calibration curves for each compound reported. Flow Testing Flow tests were conducted with a ABB XFC 6413 Total Flow Meter using AGA 1992 calculation method . Flow rate calculations used an assumed gas gravity of 1.3 (37.661 molecular weight) based on offset wells and a pressure base of 14.7 psia. Natural flow tests were conducted over a 12 hour period flowing through a 1" orifice plate to atmospheric pressure. Vacuum flow tests were conducted over a 12 hour period flowing through a 1.375" orifice plate to atmospheric pressure. In this announcement, Mcfd means thousand standard cubic feet per day.

The information in this Appendix 1 applies to the procedures and results referred to in the original State 16 well results announcement of 4 June 2024 and to this announcement subject to the comments in the following paragraphs.

The new samples were taken from a 2" nipple directly from the wellhead. The sample analysis was caried out by Gas Analysis Service, Farmington NM using a single thermal conductivity detector (TCD) for gas compositional analysis for the determination of C1-C6+ hydrocarbons, helium, nitrogen and CO2 adopted from Gas Processors Association standard 2261-00. Concentrations of the compounds are measured using thermal conductivity detectors using ultra-high purity hydrogen as a carrier gas.

Blue Star is advancing the Galactica project in joint venture with Helium One Global Ltd where under the Farmin Agreement Helium One earns a 50% interest in the Galactica / Pegasus project.