ASX ANNOUNCEMENT

19 March 2025

MA STATE 16 INITIAL TEST RESULTS

LINCOLN COUNTY

Highlights

- Flow Testing has been completed at Ma State 16.
- Strong well performance demonstrated with constrained flow rate of 2,500 Mcfd maintained with very little pressure drawdown.
- Modelled Absolute Open Hole Flow (AOF) of 33,000 Mcfd is in line with the original choked well test of 10,000 Mcfd previously reported and supports the interpretation of strong well performance.
- Gas analysis confirms previously tested helium content around 1.32-1.36% helium which is high for this area and in line with expectations.

Blue Star Helium Limited (ASX:BNL, OTC:BSNLF) (Blue Star or the Company) advises that flow testing and gas sampling operations have concluded at the Ma State 16 well in Lincoln County, Colorado where Blue Star holds a strategic helium acquisition option (see BNL announcement dated 23 December 2024 *Strategic Helium Acquisition Option*).

Blue Star Managing Director and CEO, Trent Spry, said,

"The Great Plains Field test program is off to an exceptional start. The Ma State 16 well has delivered outstanding performance, showcasing one of the strongest Morrow channel results seen in Colorado for some time. This validates Lincoln County's Great Plains Field as a significant, previously overlooked helium resource play area .

"The confirmation of high helium concentrations, alongside robust flow rates and production potential, is highly encouraging. These initial results are critical to our evaluation of this potentially transformative asset.

"The workover rig is currently preparing the next well, Bubba State 3 well for testing.

"We see this opportunity as an ideal fit with our existing portfolio and rich with operational synergies, being located approximately 100 miles from our existing Las Animas helium assets."

Ma State 16 Flow Test Summary

The well has demonstrated strong performance, flow testing at a constrained constant rate 2.5 MMcfd (2,500 Mcfd) for around 12 hours as planned, with only 60 psi drawdown. The reservoir pressure is estimated to be 1,464 psig and permeability is interpreted to be high, approximately 700 mD.

A modelled 8 hour Absolute Open Hole Flow (AOF) of 33 MMcfd (33,000 Mcfd) is in line with the original choked well test of 10 MMcfd (10,000 Mcfd) previously reported and supports the interpretation of strong well performance. Note that production flow rates will be optimized for the development and that the AOF numbers are more a reflection of the reservoir and well connectivity performance.

There is upside potential to increase the wells performance over time through simple operations. As anticipated following 10 years of intermittent low rate production to provide gas for field

operations, the flow test results show evidence of skin, made up of roughly equal components of rate dependent skin and formation damage. The likely cause of skin is perforation plugging due to intermittent flow history and hydrocarbon liquid dropout near wellbore. The skin could likely be reduced significantly with minor treatment to clean out perforations and/or increasing perforation density, which would likely result in significant increase in well performance.

Early observations show no obvious boundaries are indicated within approximately 500' of the well. Further analysis of reservoir parameters, production curves, reservoir boundaries and estimations of recoverable gas are underway. These results will be used to assess commerciality and guide option exercise and development decisions.

Ma State 16 Gas Analysis

Gas analysis of samples taken during flow testing confirms previously tested helium content of 1.32-1.36% helium. These concentrations are high for this area and in line with expectations.

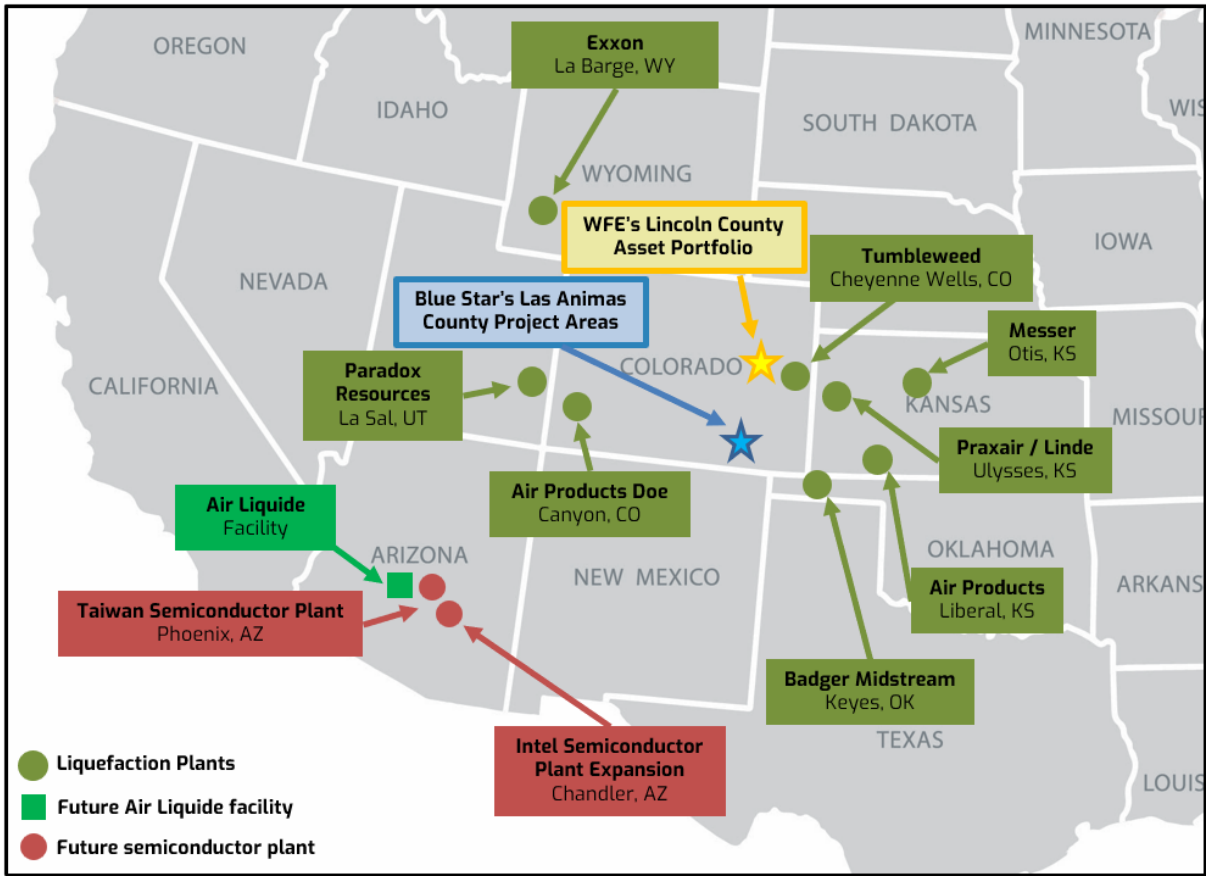
The other raw gas components are 49.48% nitrogen; 33.66% methane; 14% CH_4+; 1.27% CO_2;

Background

Blue Star Helium previously announced its option to acquire a portfolio of helium assets in Colorado (see BNL announcement dated 23 December 2024 *Strategic Helium Acquisition Option*). These assets include existing discovery wells with helium gas recoveries, infrastructure, and a processing site, offering the potential for rapid and cost-effective development. The acquisition also provides access to the Tumbleweed gas gathering system and the Ladder Creek helium processing facility, creating further opportunities for expansion.

The opportunity includes approximately 283 square miles of 3D seismic data which the Company can use to identify additional exploration targets and assess the overall resource potential of the area.

This proposed acquisition aligns with Blue Star's strategy to expand its helium resource base in North America and leverage its technical expertise to become a significant helium producer.



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:

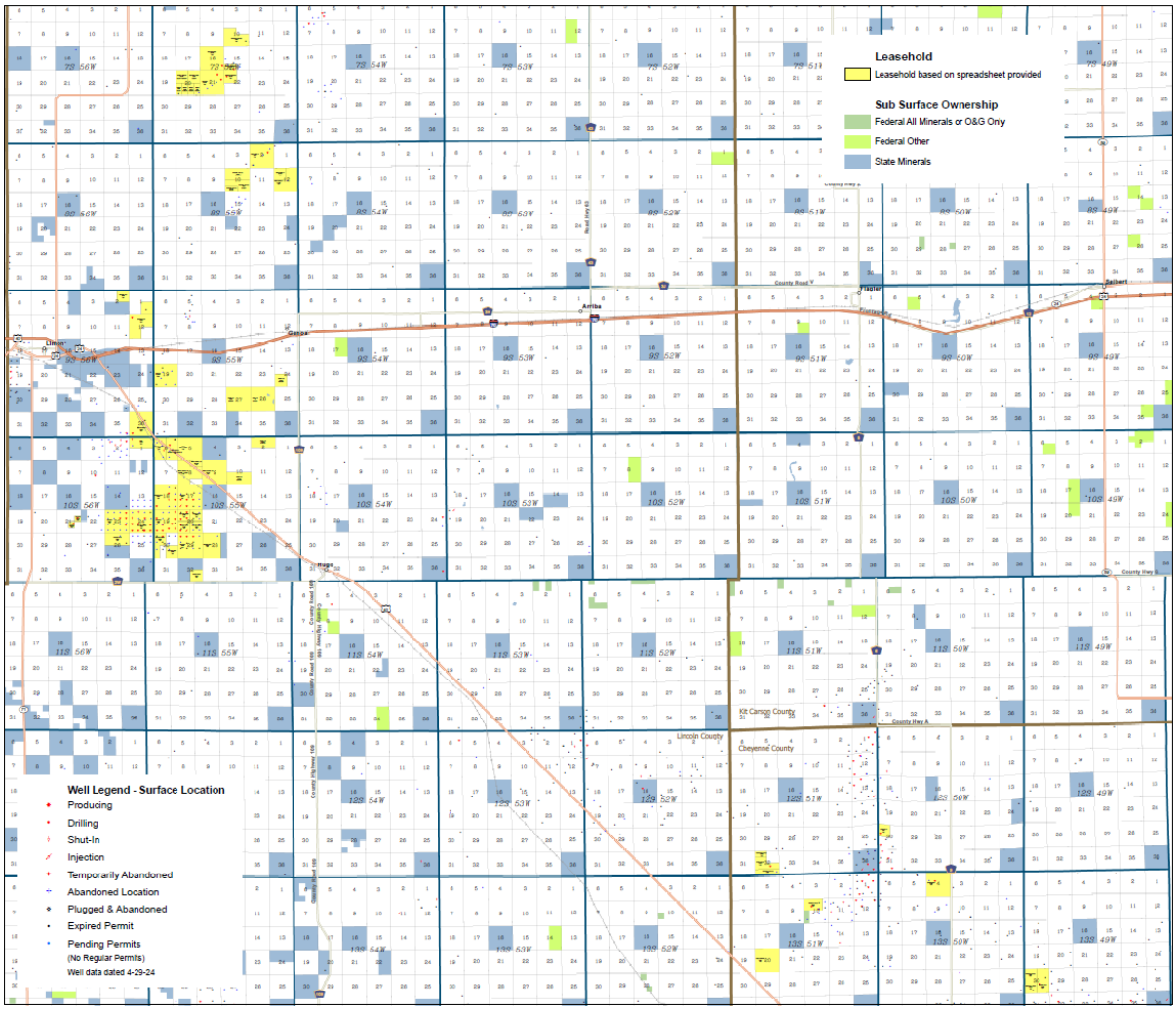
Blue Star Helium Ltd (ASX:BNL, OTC:BSNLF) is an independent helium exploration company focused on finding and developing new sources of low-cost, high-grade helium in North America. For further information please visit the Company's website at www.bluestarhelium.com

About Helium:

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

Schedule

WFE leases and wells



Key well information

Current Testing

5.30	Summary:	Response:
(a)	Name & type of well	Ma State #16
(b)	Location of well and permit details	NENW Sec. 24-10S-56W State Board of Land Commissioners lease number 9370.7
(c)	Working interest in well	Wiepking-Fullerton Energy LLC: 100% Blue Star group companies: nil
(d)	Net pay	8 ft
(e)	Geological rock type drilled	Sandstone
(f)	Depth of zones tested	7753-7761 ft

(g)	Test types	Wellhead flow after perforation
(h)	Hydrocarbon phases recovered	Gas (mostly methane and nitrogen)
(i)	Other recovery	Helium approximately 1.32%
(j)	Choke size etc	20/64” Choke
(k)	Pressures etc	Final shut in pressures (1293 psi casing and 1106 psi tubing) Estimated reservoir pressure 1,464 psig measured at 7,725’
(l)	No. of fracture stimulation stages	Nil
(m)	Other volumes	~1.1 mmscf flowed during duration of test
(n)	Other information	Flow testing and sampling Flow through a heated choke “MacPac” a 2” turbine meter run for gas using a Cal Scan “Hawk”. Samples caught at the top of the separator through a needle valve on top of the Pac. Gas flow calculation type (AGA8-92) based on gas mole fraction % based on previous gas analysis from well. Programmed Atmospheric Station Pressure12.0600 psi. Gas Analysis 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. Helium approximately 1.32%. Other raw gas components are 49.48% nitrogen; 33.66% methane; 14% CH4+; 1.27% CO2

Historic Testing

5.30	Summary:	Response:
(a)	Name & type of well	Ma State #16
(b)	Location of well and permit details	NENW Sec. 24-10S-56W State Board of Land Commissioners lease number 9370.7

(c)	Working interest in well	Wiepking-Fullerton Energy LLC: 100% Blue Star group companies: nil
(d)	Net pay	8 ft
(e)	Geological rock type drilled	Sandstone
(f)	Depth of zones tested	7753-7761 ft
(g)	Test types	Wellhead flow after perforation
(h)	Hydrocarbon phases recovered	Gas (mostly methane and nitrogen)
(i)	Other recovery	Helium between 1.23-1.36%
(j)	Choke size etc	2” Choke
(k)	Pressures etc	1498 – 634 psi(a) BHP
(l)	No. of fracture stimulation stages	Nil
(m)	Other volumes	IP up to 10,000 Mcfd reported by Wiepking-Fullerton Energy LLC
(n)	Other information	Completed Sept. 16, 2014 by Wiepking-Fullerton Energy LLC