

## ASX ANNOUNCEMENT

3 January 2024

### VOYAGER RESOURCES UPDATE

#### Highlights

- 2C net unrisked contingent helium resource of 857 MMscf for Voyager (100% BNL).
- Represents a 33% increase due to acquisition of additional mineral leases.
- Ahead of commissioning of helium production facility during Q1 CY2024 by IACX.

Blue Star Helium Limited (ASX:BNL, OTCQB:BSNLF) (**Blue Star** or the **Company**) is pleased to announce an updated independent assessment of contingent resources at its Voyager project.

A summary of Sproule's updated resource assessments for the Voyager Field can be found in the table below.

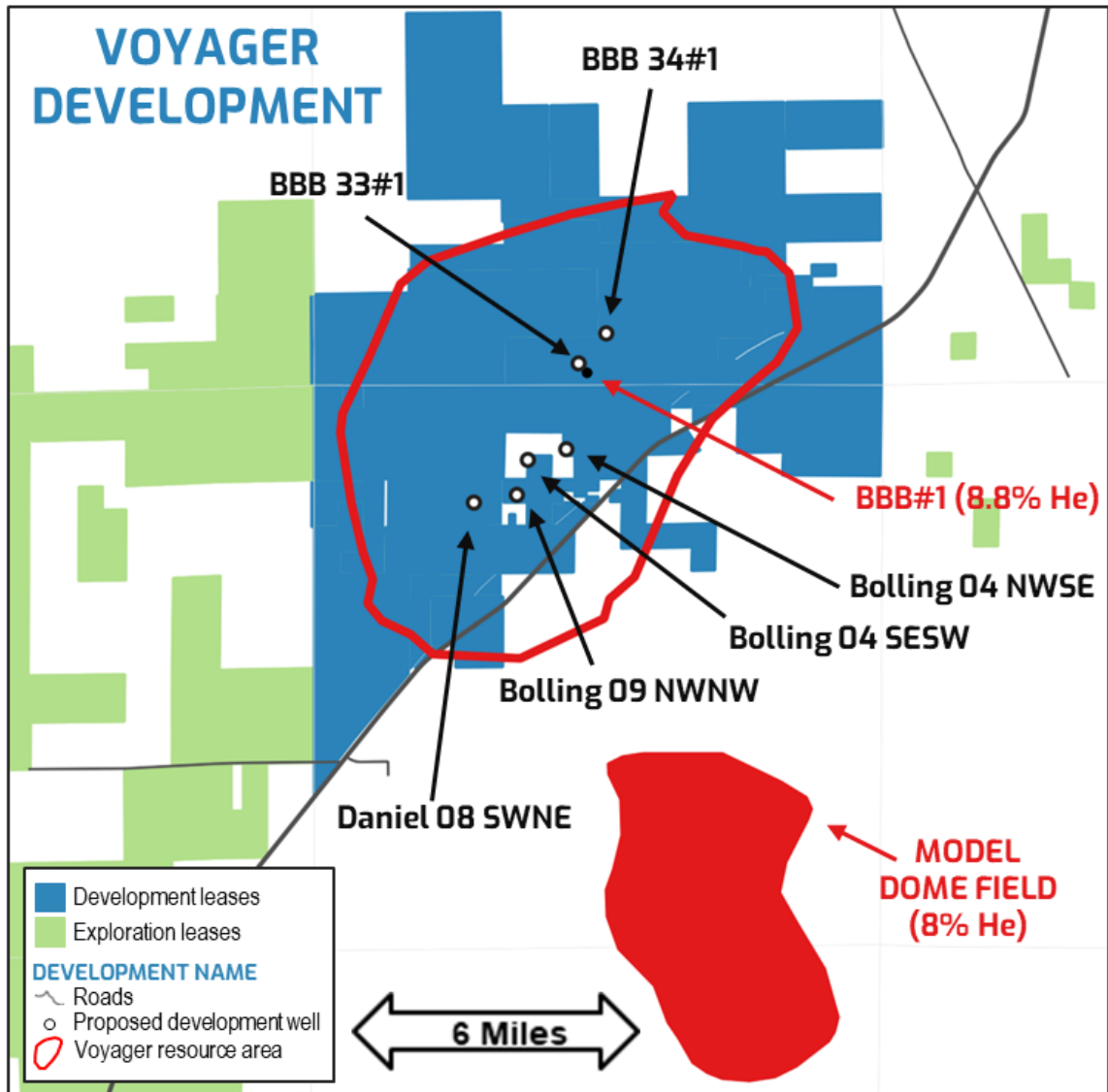
Voyager Field			
	1C	2C	3C
Net Recoverable Helium (MMscf)	388	857	1,570

#### Blue Star Managing Director & CEO, Trent Spry, said,

"This is a timely update to the contingent resources at our Voyager helium development project as we move the project into commercial production. Development well drilling restarts in January 2024 where we plan to convert the contingent resources into reserves and production.

"It is an exciting time for Blue Star as we await the results of production drilling ahead of commissioning of our first helium production facility during Q1 CY2024 by IACX.

"Blue Star is looking forward to becoming a new helium producer right in the middle of the largest helium market in the world, the US."



*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](mailto:info@bluestarhelium.com)  
 +61 8 9481 0389

## Appendix 1

1. This resources statement is an estimate of contingent resources in relation to a material oil and gas project that have materially changed from when those estimates were previously reported. The estimates were previously reported in the ASX release *Contingent Resource Certified for Voyager Field* of 27 September 2022 (**Original Statement**).
2. The new data and information giving rise to this report is the change in mineral lease interests described in paragraph 10 below.<sup>1</sup> There are no other changes or additions to the information provided under ASX Listing Rules 5.33.1 to 5.33.5 in the Original Statement.<sup>2</sup>
3. This resources statement:
  - a. is based on, and fairly represents, information and supporting documentation prepared by, or under the supervision of, the qualified petroleum reserves and resources evaluators listed in note 4 of this resources statement<sup>3</sup>. Details of each qualified petroleum reserves and resources evaluator's employment and professional organisation membership are set out in note 4 of this resources statement; and
  - b. as a whole has been approved by Trent Spry, who is a qualified petroleum reserves and resources evaluator and whose employment and professional organisation membership details are set out in note 4 of this resources statement; and
  - c. is issued with the prior written consent of the persons listed in note 4 of this resources statement as to the form and context in which the estimated helium contingent resources and the supporting information are presented.<sup>4</sup>
4. Qualified Petroleum Reserves and Resources Evaluators<sup>5</sup>

Jeffrey B. Aldrich is a Principal Geoscientist in Sproule and is a Certified Petroleum Geologist, #6254, by the AAPG and a Licensed Professional Geoscientist, #394. He is an active member of the AAPG and the SPE. He has over 30 years as a practicing petroleum geologist/geophysicist and over 20 years of experience in oil and gas reserve evaluations. He is an employee of Sproule. He is qualified in accordance with ASX listing rule 5.41.

Mark Stouffer is a registered Senior Petroleum Engineer with over 30 years of experience in reservoir and evaluation engineering in the US and internationally. He is a member of the SPE and a qualified reserves evaluator, as defined in SEC and SPE-PRMS. Mark has managed and participated in several complex reservoir projects in the US Gulf of Mexico, Permian Basin, Green River Vasin, DJ Basin and internationally in Thailand and Hungary. Mark is an employee of Sproule. He is qualified in accordance with ASX listing rule 5.41.

Trent Spry Mr Spry is a qualified geoscientist with over 20 years of oil and gas industry experience and a member of the American Association of Petroleum Geologists and the

---

<sup>1</sup> 5.34.1

<sup>2</sup> 5.34.3

<sup>3</sup> 5.42(a)

<sup>4</sup> 5.42 final paragraph

<sup>5</sup> 5.41 and 5.42(b) and (c)

Petroleum Exploration Society of Australia. He is Managing Director and Chief Executive Officer of Blue Star. He is qualified in accordance with ASX listing rule 5.41.

AAPG: American Association of Petroleum Geologists

PESA: Petroleum Exploration Society of Australia

SPE: Society of Petroleum Engineers

SPEE: Society of Petroleum Evaluation Engineers

5. The estimates of helium contingent resources contained in this resources statement are as at 1 January 2024.<sup>6</sup>
6. This resources statement has been prepared in accordance with the 2018 Petroleum Resources Management System (**PRMS**) sponsored by the Society of Petroleum Engineers (**SPE**).<sup>7</sup> The SPE published a statement on its website in August 2022 extending the PRMS principles to commercial non-hydrocarbons such as helium, carbon dioxide and hydrogen.
7. This resources statement is subject to risk factors associated with the oil and gas industry. It is believed that the expectations of helium contingent resources reflected in this statement are reasonable, but they may be affected by a range of variables which could cause actual results or trends to differ materially, including but not limited to: price fluctuations, actual demand, currency fluctuations, geotechnical factors, drilling and production results, gas commercialisation, development progress, operating results, engineering estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial markets conditions in various countries, approvals and cost estimates.
8. All references to helium contingent resources in this resources statement are Blue Star's net share after deductions for the volume weighted royalty burden.<sup>8</sup>
9. Helium contingent resources are prepared using probabilistic methods.<sup>9</sup>
10. The Company's rights to develop, produce and sell any helium that may be derived from the prospect has been granted by private mineral owners, the State of Colorado and the United States of America pursuant to mineral leases issued by each of those mineral owners.
  - a. The leases issued by the United States of America via the Bureau of Land Management (**BLM Leases**) are in their standard form (Form 3100-11, October 2008) and provide for an initial term of 10 years and an annual rental payment of US\$1.50/acre payable annually in advance for the first five years and then US\$2/acre. If the Company successfully produces helium or other products from the lease area, a 12.5% royalty will be payable to the US Federal Government and the lease term will be extended indefinitely until production ceases. The leases do not include any minimum work commitments. The Company is the only working interest owner in each of these leases.
  - b. The leases issued by the State of Colorado (**State Leases**) are in their standard form (revised DOL 20190301) for an initial term of five years, with the right to request an extension of one year and an annual rental payment of US\$2.50/acre payable in advance. If the Company successfully produces helium or other

---

<sup>6</sup> 5.25.1

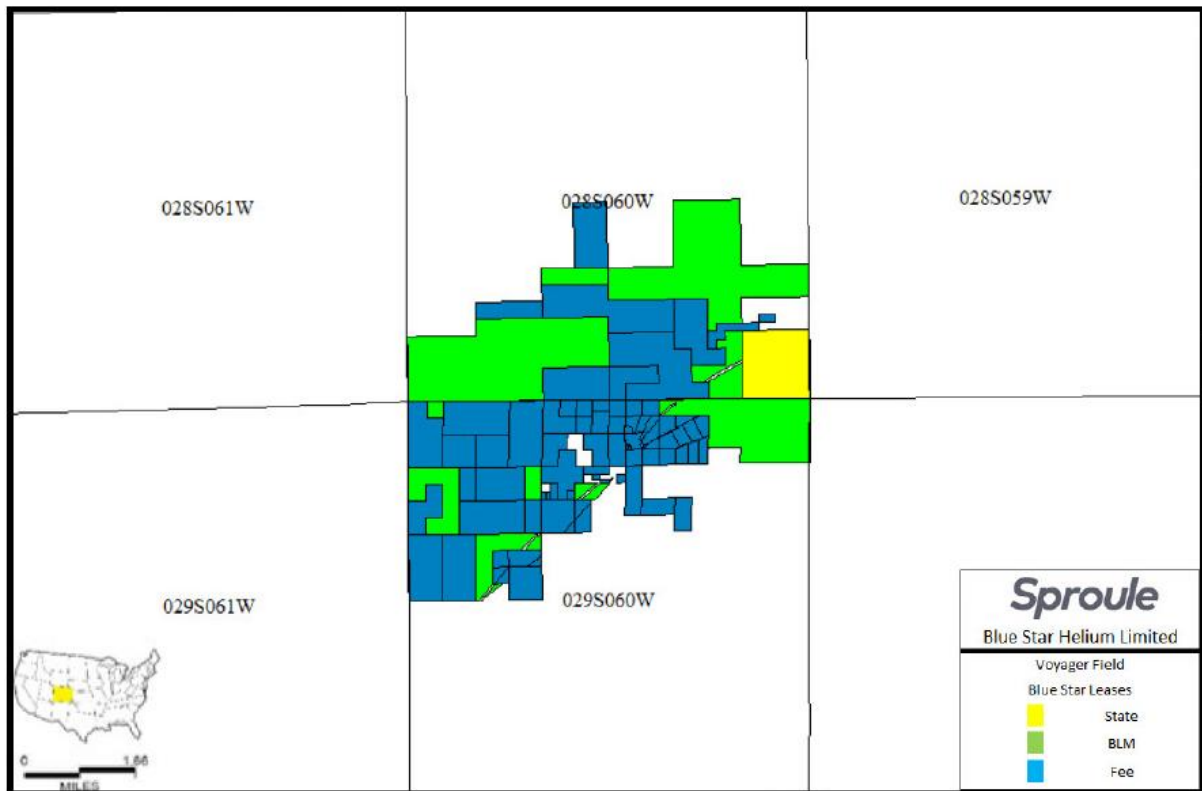
<sup>7</sup> 5.25.2

<sup>8</sup> 5.25.5

<sup>9</sup> 5.25.6

products from the lease area, a 20% royalty will be payable to the State of Colorado and the lease term will be extended indefinitely until production ceases. The leases do not include any minimum work commitments. The Company is the only working interest owner in each of these leases.

- c. The leases issued by the private mineral owners (**Private Leases**) are in the form of Producers 88, Rocky Mountain 1989 (Paid-Up Rev. 1996 w ext.) for an initial term of five years with, in most cases, an option to renew for a further five years. If the Company successfully produces helium or other products from the lease area, a royalty of at least 12.5% will be payable to the lessor and the lease term will be extended indefinitely until production ceases. The leases do not include any minimum work commitments. The Company is the only working interest owner in each of these leases.
- d. A lessor may not own the entire and undivided fee simple estate in the tracts the subject of its lease. Therefore, the Company's net interest in a tract may be less than its gross interest in that tract.
- e. The Private Leases net mineral acres associated with the contingent resources at the Voyager prospect have increased by 1,584.69 from 5,617.014 in the Original Statement to 7,201.7 in this Statement.<sup>10</sup> The mineral leases are depicted below.



- f. The weighted royalty burden in relation to the contingent resources in the Original Statement and in this revised statement is calculated to be as follows:<sup>11</sup>

	1C	2C	3C
Weighted Royalty Burden	12.88%	12.91%	12.92%

<sup>10</sup> 5.34.1

<sup>11</sup> 5.34.1

(Original Statement)			
Weighted Royalty Burden (this Statement)	14.23%	14.40%	14.28%
Change	+1.35	+1.49	+1.36

11. The new data and information has affected the estimates of contingent resources as follows:<sup>12</sup>

Voyager Field			
	1C	2C	3C
Net Recoverable Helium (MMscf) (Original Statement)	299	643	1,228
Net Recoverable Helium (MMscf) (this Statement)	388	857	1570
Change	+89	+214	+342

12. Information on helium contingent resources quoted in this resources statement is rounded to the nearest whole number. Some totals in the tables may not add due to rounding. Items that round to zero are represented by the number 0, while items that are actually zero are represented with a dash "-".

13. Definitions

**MMscf** million cubic feet

14. The references in the footnotes are to paragraphs in the ASX Listing Rules.

<sup>12</sup> 5.34.2

## **About The Voyager Project**

Voyager is Blue Star's maiden development project. The BBB#1 well tested the Voyager prospect in November 2021 and encountered a calculated air-free gas concentration of 8.8% helium in a 134ft gas column interpreted in the Lyons formation (see BNL ASX release of 17 November 2021).

Voyager is located only 6 miles from the historic Model Dome analogue production which produces a similar high helium gas composition, averaging 8% concentration.

A significant independent contingent resource of 2C 643 MMcf helium net to Blue Star has been declared (see BNL ASX release of 27 September 2022). Aside from the information contained in the Company's ASX release dated 11 April 2023 regarding the acquisition of additional mineral leases, the Company is not aware of any new information or data that materially affects the information included in that announcement and all the material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.

It is expected that Voyager will ultimately utilise a 20 well development inventory to maximise the contingent resource.

A midstream solution has been selected for gas processing where IACX will provide gas processing services via an owned and operated helium recovery plant.

Total field and plant operating cost is highly attractive at around US\$100-120/Mcf of helium product gas (full capacity) with targeted helium production of 38 MMcf in first full capacity year (see BNL ASX release of 30 June 2023).

Discussions for distributor and end user relationships are in progress.

## **About Blue Star Helium:**

Blue Star Helium Ltd (ASX:BNL, OTCQB:BSNLF) is an independent helium exploration and production 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](http://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.