ASX ANNOUNCEMENT

30 June 2023

VOYAGER GAS PROCESSING AGREEMENT EXECUTED

Highlights

- Agreement executed with experienced US midstream provider, IACX Energy LLC (**IACX**), to provide helium recovery services through delivery and operation of a pressure swing adsorption (**PSA**) helium (**He**) recovery plant at high-grade Voyager project.
- Includes delivery and operation of a helium recovery plant with nameplate raw gas throughput of 2 MMcf/day to produce 98+% purity helium product gas.
- IACX will supply and operate the helium plant in exchange for a monthly payment and Blue Star will not incur any capital costs associated with fabrication of the plant.
- Plant commissioning and first output expected during 4Q CY2023.
- Targeted helium production based on an average of 8% helium in the raw gas is expected to be approx. 38 MMcf net to Blue Star in first full capacity year.
- Forecast total field and plant operating cost is highly attractive at an approximate US$100-120/Mcf of helium product gas (full capacity).
- Voyager production well drilling and testing planned to commence during August 2023.

Blue Star Helium Limited (ASX:BNL, OTCQB:BSNLF) (**Blue Star** or the **Company**) advises of the execution of a Master Services Agreement (**MSA**) for the provision of helium recovery services through the delivery and operation of a helium recovery plant at its maiden helium development, Voyager.

Blue Star Managing Director and CEO, Trent Spry, commented:

"Our selection of a third party operated plant option for the high-grade Voyager discovery has now been cemented with the execution of this agreement with IACX. We are pleased to have partnered with such a well-credentialled and proven midstream helium operator.

"As well as delivering significant de-risking benefits in terms of upfront capital, time and operating profile, adopting this pathway has also eliminated any requirement for Blue Star to commit to price-concession offtake agreements. The result is that we can target the premium pricing available in short-term U.S. contract markets and spot sales, with current pricing estimates understood to be running at US$450 – $3,000/Mcf for 98 to 99.999% purity helium.

"The plant to be supplied at Voyager can be readily expanded via the addition of a modular membrane unit or addition of a second PSA plant to increase helium output in the future, as well as to accommodate additional high-He-concentration raw gas from surrounding discoveries.

"We are excited to be advancing along the development pathway toward targeted first production from Voyager during Q4 CY2023. In parallel, we continue to advance development planning for the Galactica/Pegasus discoveries and mature our extensive exploration portfolio utilising our proven exploration techniques."

IACX Senior Vice President (Commercial), Jeremy Jordan, said:

"We are very pleased to be working with Blue Star given the technical and commercial capabilities and professional approach that they have demonstrated. Our industry-leading, proprietary, PSA-

based helium recovery units can economically extract and purify helium from natural gas to high purity with minimal helium losses, and we look forward to delivering and commissioning Blue Star's first facility later this year. We anticipate having a strong long-term partnership with Blue Star as they continue to develop their portfolio."

Voyager gas processing agreement executed

In-line with its chosen commercialisation strategy at the high-grade Voyager development, Blue Star has executed an MSA with an experienced US midstream provider, IACX Energy LLC (**IACX**), for helium recovery services via the delivery and operation of an initial helium recovery plant (example pictured below) at Voyager.

IACX is a fully integrated helium production, processing and marketing company. Its gas gathering and processing assets are concentrated in central Kansas, eastern New Mexico and the Texas Panhandle; and the company operates a number of standalone facilities across the Midcontinent and Four Corners areas of the US. It currently operates fourteen discrete helium recovery plants in seven states in the US and one Canadian province. One of the existing helium facilities is located in Las Animas County, Colorado neighbouring Blue Star's Galactica/Pegasus prospect.

The MSA shall continue in force until terminated by either party giving 90 days' notice at any time after an initial period of three years.

Blue Star is responsible for providing a secure site, access to the facility and delivering the raw gas to the facility inlet. The MSA includes minimum service levels in relation to plant uptime and capacity subject to the raw gas meeting certain composition specifications.

The process to execute the MSA and associated documents has been thorough and included the appointment of a top tier reserves/resource auditor to evaluate the Voyager resource. The result of this process allowed Blue Star to mortgage the Voyager mineral leases as collateral to secure the payments required under the MSA. The ability to post non-cash collateral is another affirmation of the resource as the Company moves forward with development. The mortgage will be released on expiry of the initial period of the MSA or upon the Company posting an alternative form of security.

The PSA facility has the expected capabilities and outputs (based on the Company's raw gas input assumptions) outlined in Table 1.

Table 1 – Blue Star Projections

Plant metrics	Unit	Value
Nameplate raw gas input	MMcf/d	2.0
Helium recovery	%	90
Helium product purity	% He	98
Plant run time	%	95
Input gas assumptions		
Raw gas He concentration	% He	8.0
Output at full capacity		
Tailgate helium product gas output	MMcf pa	44.4
Net helium product gas output	MMcf pa	37.7

Notes to table above:

1. The tailgate helium product gas output is the helium volume at the facility tailgate after applying the recovery, product purity and plant run time factors and assumes a raw gas input of 2 MMcf/d with an 8% helium concentration. It is calculated in respect of the first 12 months of operation at full capacity after a period of ramp-up to full production.
2. The net helium product gas output is the tailgate helium product gas output net to Blue Star after deduction of royalties.
3. There will be a period of ramp-up to full production. The length of this period is a function of a number of factors including well performance and well count.

IACX will be paid a monthly gas processing fee for its services. Aside from this monthly fee, Blue Star will not incur any capital costs associated with the fabrication of the plant.

The facility is planned to start up on site-generated power before eventually transitioning to grid power. The total field and plant related operating costs (which is inclusive of the monthly gas processing fee, the lease operating expenses to operate the wells, rentals costs for compression and power generation, fuel and other miscellaneous field maintenance expenditures) after deduction of royalties and after applying the capacity, recovery, product purity and plant run time factors set out in Table 1 (and notes) are expected to be between US$100 and US$120 per Mcf of produced He net to Blue Star.

The facility shall remain the property of IACX throughout the term and subsequent to the termination of the MSA.

Voyager helium production wells

The Company has permitted two wells at Voyager for drilling and is currently seeking permits for a further four wells. The first two wells, BBB 33#1 and BBB 34#1, were approved for drilling by COGCC earlier this year (see ASX release of 19 April 2023). The further four wells are described in the second Voyager OGDP (see ASX release of 22 May 2023). All of these locations are shown on the map below.

Production well drilling at Voyager is set to commence during August. Pressure and flow testing will be undertaken on these wells post drilling.

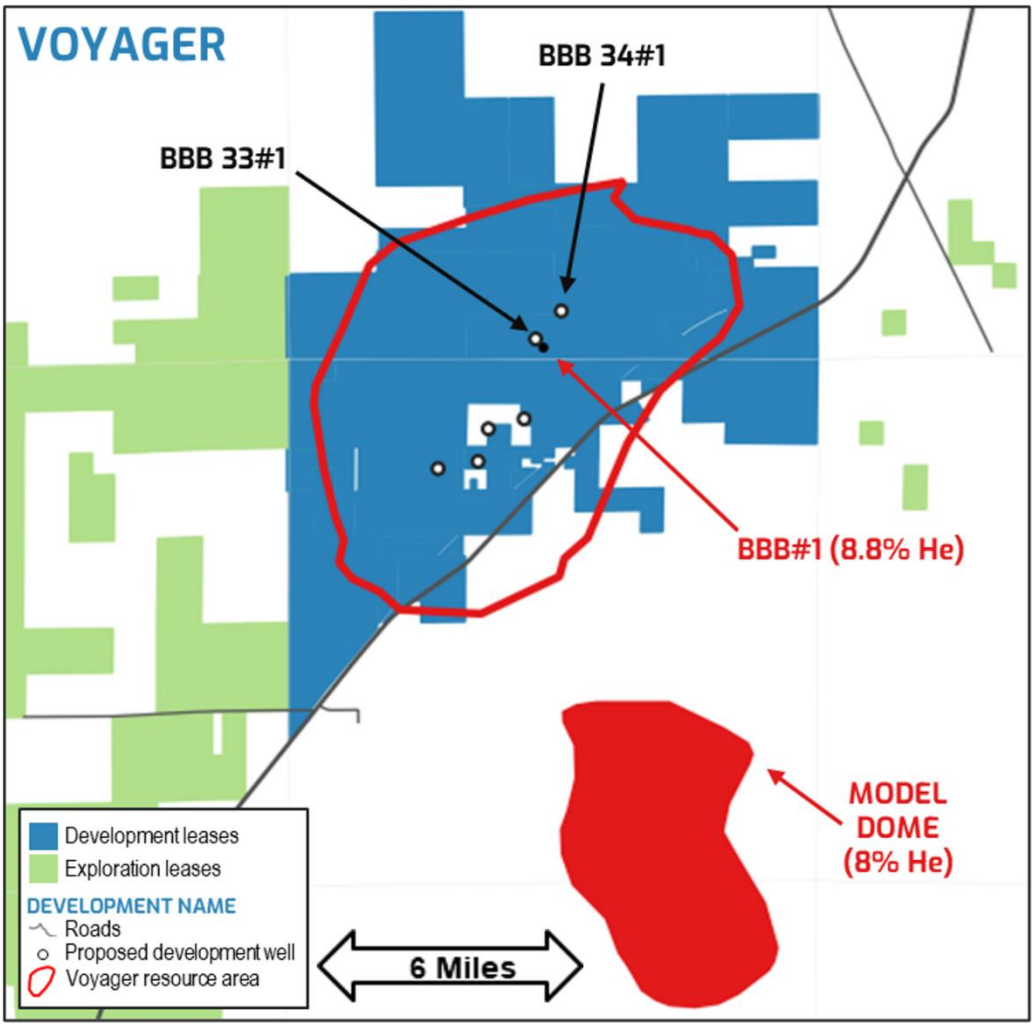

Figure 1: Voyager helium development planned well locations

Helium marketing

Helium volumes are planned, at least initially, to be sold via premium short-term contracts or in the spot market. Short term helium sales contracts are currently priced at a significant premium to long term contracts, and this differential is expected to persist.

Current pricing estimates in the U.S. short-term contract and spot markets are understood to be US$450 – $3,000/Mcf helium (98 to 99.999% purity).

The Company has multiple potential pathways to further purify the gas to 99.999% gas or liquids via third party processing plants as offtake requires.

Development timeline

IACX expects to install and commission the facility during Q4 CY2023, subject to receipt of all necessary permits, surface use and access agreements. Product sales are expected to commence promptly after first production.

Terminology

In this announcement the following abbreviations are used:

Mcf	thousand cubic feet
MMcf	million cubic feet
US$MM	million US dollars

Cautionary Statement

This announcement contains forward-looking statements. Forward-looking statements are subject to known and unknown risks and uncertainties that may cause Blue Star's actual results, performance or achievements, to differ materially from those expressed or implied in any of the forward-looking statements, which are not guarantees of future performance. Actual results may differ materially from those in the statements in this announcement.

Investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date they are made.

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

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About Blue Star Helium:

Blue Star Helium Ltd (ASX:BNL) 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

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.