

#### **ASX ANNOUNCEMENT**

31 July 2023

# **Activities Report**

#### **Quarter Ended 30 June 2023**

Blue Star Helium Limited (ASX: BNL, OTCQB: BSNLF) (**Blue Star** or the **Company**) is pleased to provide an update on activities undertaken during the quarter ended 30 June 2023.

# **Highlights**

# Voyager

- Master Services Agreement (MSA) 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.
- The agreement includes the delivery and operation of a helium recovery plant with nameplate raw gas throughput of 2 MMcf/day to produce 98+% purity helium product gas.
- Plant delivery, installation, commissioning and first production expected during Q4 CY2023.
- Targeted helium production based on an average of 8% helium in raw Voyager 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).
- The Company has two permitted wells, BBB 33#1 and BBB 34#1, with an additional four development wells awaiting OGDP approval and 14 additional well locations identified for permitting.

#### Galactica/Pegasus

- COGCC has approved a further OGDP for three proposed helium development wells (Jackson #01, Jackson #02 and Jackson #03) to be drilled as offset development wells to the JXSN#1 and JXSN#2 helium discoveries which are expected to be production wells.
- On final approval (Form 2) of this OGDP, Galactica/Pegasus drilling inventory will comprise seven permitted helium development wells, four additional helium development wells awaiting OGDP approval, and 20 additional well locations identified for permitting.
- Development planning is advancing with various commercialisation pathways under consideration, including an initial leased plant and third-party operated option with expansion expected to include a potential CO2 by-product stream.

#### Corporate

Quarter end cash balance of A\$3.8 million and zero debt.

# **OPERATIONS**

# **Voyager Field development**

### Voyager gas processing agreement executed

Blue Star announced on 30 June 2023 that it had executed a MSA with experienced US midstream provider, IACX, for the provision of helium recovery services through the delivery and operation of a helium recovery plant at its maiden helium development at the Voyager prospect.

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 and Pegasus discoveries.



The execution process was 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 required payments. The ability to post non-cash collateral is another affirmation of the potential resource as the Company moves forward with development.

The PSA facility has the expected physical capabilities 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 fee for its services and, aside from this monthly fee, the Company will not be liable for 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.

#### **Helium marketing**

Helium volumes are initially planned to be sold via premium short-term contracts or in the helium spot market. Short term helium sales contracts are currently priced at a significant premium to long term contracts with this price differential 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% He or liquids via third party processing plants as offtake requires.

#### **Development timeline**

IACX expects to install, commission, and deliver first commercial production from 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.

#### Initial development well drilling program

The Company has two permitted wells, BBB 33#1 and BBB 34#1, approved for drilling by COGCC earlier this year (see ASX release of 19 April 2023). The subsequent four wells awaiting approval are described in the second Voyager OGDP (see ASX release of 22 May 2023). All locations are shown on the map below.

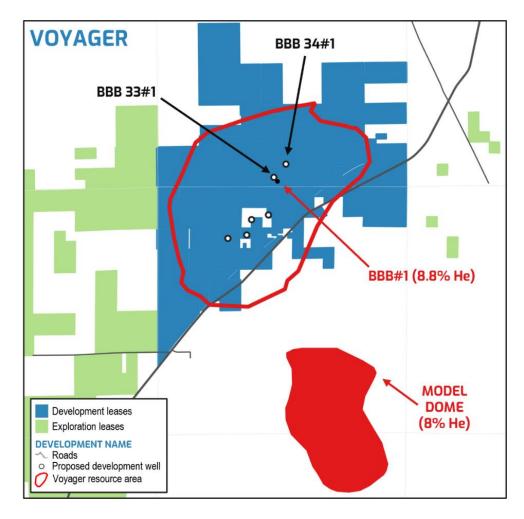


Figure 1: Planned well locations at the Voyager prospect helium development

#### **Galactica/Pegasus Fields development**

#### Galactica/Pegasus development planning

Blue Star had a successful exploration campaign at the Galactica and Pegasus prospects during 2022 with the four wells (JXSN#1 – JXSN#4) drilled across the two prospects resulting in four discoveries with gas bearing columns of up to 230 feet, helium content up to 6% and flow rates as high as 412 Mcf/d (see BNL ASX release of 5 October 2022).

There are currently a range of development pathways under consideration for Galactica/Pegasus, including an initial leased plant and third party operated option. The final development is expected to include a potential CO<sub>2</sub> by-product stream.

The planned Galactica/Pegasus development is a larger-scale and longer-dated project compared to Blue Star's maiden Voyager project, with multiple potential product streams. Well

flow rate, production and ultimate recovery profiles have been completed for Galactica/Pegasus by Sproule.

Further engineering and market work is underway to refine the initial and expanded planned development configuration and forecast helium and potential CO<sub>2</sub> production and cost estimates.

#### Galactica/Pegasus well permitting

During the quarter, the COGCC approved the OGDP relating to three proposed helium development wells – Jackson #01, Jackson #02 and Jackson #03. Blue Star is set to submit the final Form 2s in respect of these wells.

The Jackson #01, Jackson #02, Jackson #03 wells are planned to be drilled as offset development wells to the JXSN#1 and JXSN#2 helium discoveries.

On approval of the Form 2s of this newly approved ODGP, the Company will have seven helium development wells approved for drilling at Galactica/Pegasus. Final permits have previously been received for the drilling of the State 09, 16, 35 and 36 helium development wells (see BNL ASX release of 19 April 2023).

As at the end of the June quarter, Blue Star has a further four-well OGDP for Galactica/Pegasus awaiting approval and a further 20 drilling locations identified for permitting. The location of the development wells (approved and awaiting OGDP approval) at Galactica/Pegasus are shown on Figure 2 below.

The third-party owned Red Rocks helium project adjoins Blue Star's Galactica prospect (see map below). Red Rocks recently commenced production from two wells, into an IACX-operated helium recovery plant, and is selling helium gas into the market.

Development and operation of Red Rocks further supports both the viability of Blue Star's Galactica helium resource and its chosen development pathway at Voyager. The Company

plans to provide a resource update in due course after integration of the Red Rocks discovery wells and production data, as it becomes publicly available.

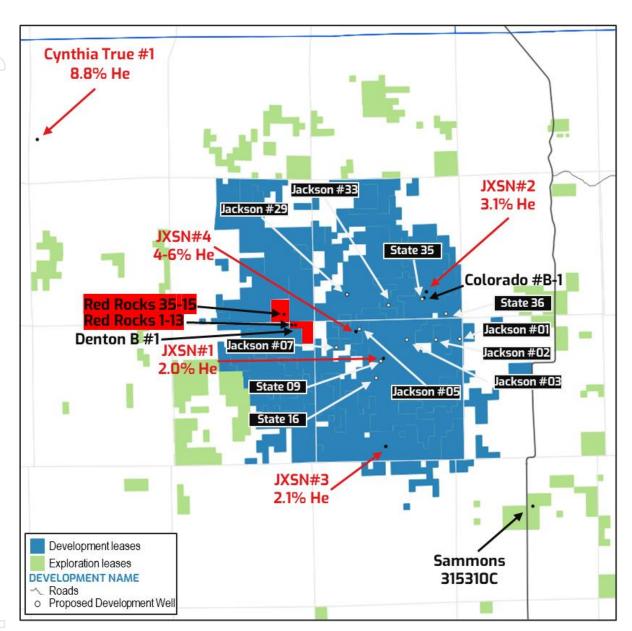


Figure 2: Planned development well locations at the Galactica/Pegasus prospect including the Red Rocks Helium Project

# **CORPORATE**

#### **Balance sheet**

Blue Star's cash balance at 30 June 2023 was approximately A\$3.8 million. The Company has zero debt, excluding typical trade creditor balances.

# **Annual General Meeting (AGM)**

On 26 May 2023, Blue Star held its 2023 AGM in Sydney. All resolutions put to the meeting were passed.

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# **TENEMENT TABLE**

Tenements held at the end of the quarter and changes thereof.	Acreage held at the beginning of the Quarter	Acreage held at the end of the Quarter	Acreage acquired (disposed/lapsed)
Project Name			
Held By Production Acreage, Big	-	-	-
Star Project, USA			
Helium Project, Las Animas,	Circa 310,298 gross	Circa 311,250 gross	Circa 952 gross
Colorado, USA*	(225,721 net) acres	(225,920 net) acres	(199 net) acres

# **5B COMMENTARY**

# **Description of Selected Items in Appendix 5B**

Appendix 5B	Reference	Commentary	
1.2 (a)	Expensed exploration and evaluation costs	Expenditures associated with the P&A of a legacy oil well in Texas.	
1.2 (c)	Payments for production	Expenditures associated with the Company's Big Star Project in Texas USA.	
2.1 (b)	Payments to acquire tenements	Costs associated with the acquisition of helium leases in Colorado, USA including land manager fees.	
2.1 (d)	Capitalised exploration and evaluation costs	Capitalised expenditures associated with exploration and evaluation of the Company's helium acreage in Colorado USA. Includes drilling preparation, permitting, subsurface evaluation and field costs.	
6.1 and 6.2	Payments to Related Parties	Includes directors' fees and superannuation paid to directors.	

The Board has authorised the release of this announcement to ASX.

# For further information, please contact:

Trent Spry

Managing Director & CEO

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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 provide its shareholders with exposure to multiple high-value helium projects 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 manufacturing 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 byproduct of the extraction of natural hydrocarbon gas.









# **Appendix 5B**

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Blue Star Helium Limited

ABN Quarter ended ("current quarter")

75 009 230 835 30 June 2023

Cons	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	2	4
1.2	Payments for		
	(a) exploration & evaluation	(101)	(129)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(368)	(803)
	(e) administration and corporate costs	(450)	(820)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	14	31
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(903)	(1,717)

2.	Ca	sh flows from investing activities		
2.1	Pa	yments to acquire or for:		
	(a)	entities	-	-
	(b)	tenements / leases	(466)	(705)
	(c)	property, plant and equipment	(3)	(3)
	(d)	exploration & evaluation	(197)	(585)
	(e)	investments	-	-
	(f)	other non-current assets	-	-

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements / leases	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (return of bonds)	-	-
2.6	Net cash from / (used in) investing activities	(666)	(1,293)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	-	-

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	5,398	6,824
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(903)	(1,717)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(666)	(1,293)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	(4)	11
4.6	Cash and cash equivalents at end of period	3,825	3,825

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	3,825	5,398
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	3,825	5,398

Payments to related parties of the entity and their associates	Current quarter \$A'000
Aggregate amount of payments to related parties and their associates included in item 1	159
Aggregate amount of payments to related parties and their associates included in item 2	-
	Aggregate amount of payments to related parties and their associates included in item 1  Aggregate amount of payments to related parties and their

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

7.	Financing facilities  Note: the term "facility' includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at quarter end		
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
	N/A		

\$A'000
(903)
(197)
(1,100)
3,825
-
3,825
3.5

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: N/A

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: N/A

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: N/A

Note: where item 8.7 is less than 2 guarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

#### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: <u>31 July 2023</u>

Authorised by: The Board

(Name of body or officer authorising release – see note 4)

#### Notes

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.