

## ASX ANNOUNCEMENT

31 October 2022

## Activities Report Quarter Ended 30 September 2022

Blue Star Helium Limited (ASX: BNL) (**Blue Star** or the **Company**) is pleased to provide an update on activities undertaken during the quarter ended 30 September 2022.

### Highlights

- Helium discovery at JXSN#4 (Galactica/Pegasus); concentrations approx 6% helium.
- 2C net unrisks contingent helium resource of 643 MMscf certified for Voyager field.
- Eleven helium wells at Galactica/Pegasus at advanced stages of permitting.
- Two helium wells at Voyager at advanced stages of permitting
- A total of 56 helium well permits in process.
- Appointment of experienced oil and gas and finance executive Scott Fenoglio as Blue Star CFO.
- Well-funded with quarter end cash balance of A\$9.051 million and zero debt.

## OPERATIONS

### Resource estimation

#### Contingent resource certified for Voyager Field

Blue Star engaged independent geological and engineering consultant, Sproule, to prepare the first independent resource assessment for the Voyager prospect. The Voyager prospect is planned for development after the breakthrough success of the BBB#1 exploratory water well which returned a 134 ft gas column in the Lyons formation with a calculated air-free helium concentration of 8.8% (see BNL ASX announcements of 17 November 2021, 21 December 2021 and 5 April 2022).

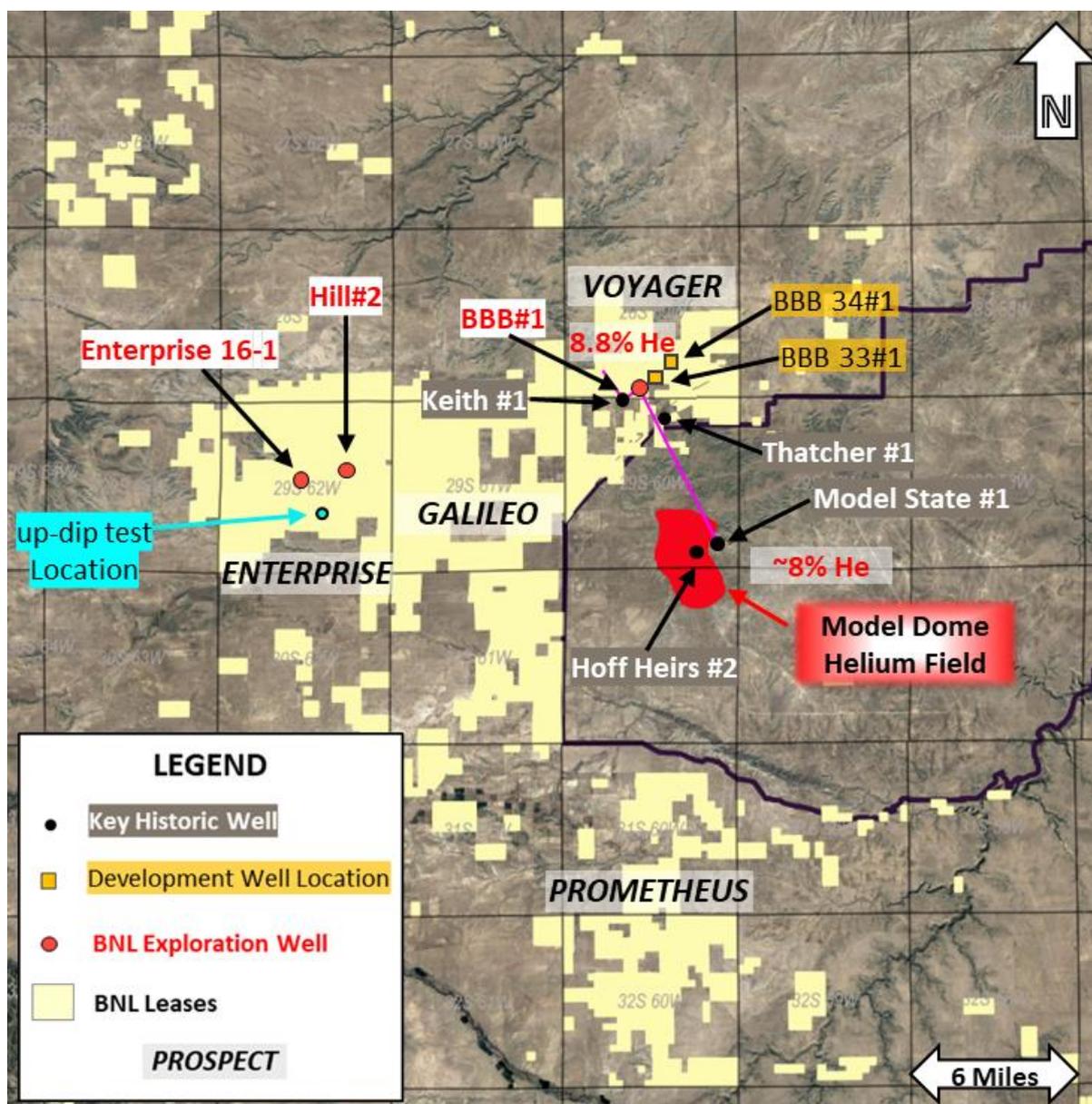
On 27 September 2022, Blue Star announced a maiden contingent helium resource was declared at Voyager. The independent evaluation from Sproule highlights a 2C net unrisks contingent helium resource of 643 MMscf for Voyager.

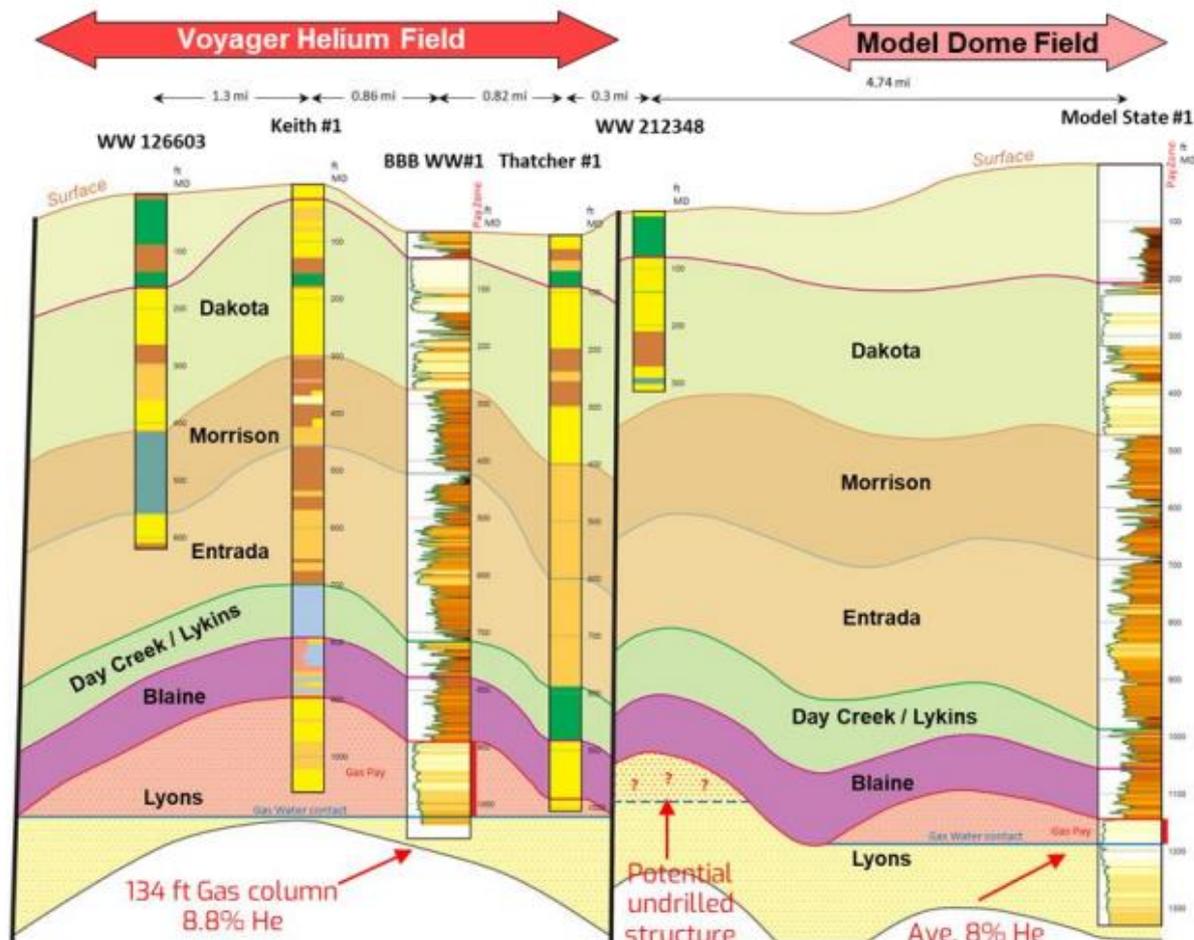
A summary of Sproule's resource estimations for the Voyager field are presented in the table below:

**Table 1: Voyager Field Resource Estimates:**

Voyager Field			
	1C	2C	3C
Net Recoverable Helium (MMscf)	299	643	1,228
Notes:			

1. The resource estimates have been prepared using the probabilistic method and presented on an unrisks basis.
2. The resources estimates are presented on a net entitlements basis and represent Blue Star group's net economic interest in the contingent helium volumes after deductions for the volume weighted royalty burden.
3. The Company is not aware of any new information or data that materially affects the information included in the Company's market announcement of 27 September 2022 and all the material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.





The 2C contingent resources are in addition to the Company's previously announced prospective resources across its Las Animas tenure (see BNL announcement 10 June 2021). The Voyager Field's resources have been independently evaluated and certified by Sproule in accordance with all guidelines and definitions outlined by the Society of Petroleum Engineers Petroleum Resources Management System (SPE-PRMS, 2018) (see BNL announcement 27 September 2022).

Since the report was commissioned, Blue Star has continued to acquire leases across Voyager and expects to further consolidate the leasing in the area. The result is an expected increase in net resources as Blue Star progresses the Field from contingent resources to reserves and production.

The plan of development and FEED study for an initial processing facility at the Voyager Field is scheduled for completion in Q4 2022. The Stage 1 helium production facility at Voyager is targeted for commissioning during H2 2023.

During the quarter the Company received a number of engineering studies from multiple firms covering a range of processing concepts that are available owing to the current high price helium market. The Company also initiated permitting work with regulators with the aim of timely development project approval.

## Well drilling activities and results

### Discovery at JXSN#4 exploratory well (Galactica/Pegasus prospects, 100% BNL)

Following strong results from the JXSN#1, JXSN#2, and JXSN#3 wells, the JXSN#4 well was drilled 1.7 miles to the northwest of JXSN#1 to further test the area and continue to delineate its structural and stratigraphic prospectivity.

The well was spudded on 21 September. Drilling was completed in late September to a total depth of 1,043 feet encountering both the upper and lower Lyons sands which both flowed gas to the surface. Well log analysis subsequently confirmed a 233.5 ft gas column with 133.5 ft of net pay with helium concentrations up to approximately 6%. The well was recorded flowing at 124.6 mcf/d during drilling and sampling. Shut in pressures were the same as observed in the previous JXSN wells which flowed between 202 and 412 Mcfd.

JXSN#4 is the fourth consecutive well on the Galactica prospect where high concentrations of helium have been identified in the Lyons formation. The JXSN#4 results will be integrated into the current resource update process for Galactica/Pegasus which is expected to culminate in the declaration of contingent resource for these fields. The key results from the wells are summarised in Table 2 below:

**Table 2: Key results from recent Galactica/Pegasus exploratory wells**

Key Parameter	JXSN#1	JXSN#2	JXSN#3	JXSN#4
Helium concentration (%)	1.98	3.14	2.14	4.20 & 6.06
Gas column in Lyons formation (ft)	217.5	101+	230	233.5
Net pay in Lyons formation (ft)	143.5	101	153.4	133.5
Stabilised initial flow rate (mcf/d)	412	202	412	125

### **Sammons 315310C well (Serenity prospect, 50% BNL)**

The Sammons Ranch OGDG consists of four (4) proposed well locations in the Sammons Area of Mutual Interest (AMI) agreed between Blue Star (50%, non-operated interest), Prospero Oil and Gas LLC (Prospero) (25%, non-operated interest) and Vecta Oil & Gas Ltd (**Vecta**) (25% operating interest) (see BNL ASX announcement of 22 December 2021).

Vecta is operator in the AMI. Vecta has advised the Company that the Sammons 315310C well was spudded on 4 August 2022 and was drilled to 1,166 feet intersecting the Lyons formation at 1,155 feet. Initial testing confirmed high gas rates and increasing flow pressure at the well. Further drilling commenced and penetrated the complete upper Lyons sand, representing an 83-foot gas column of high-quality reservoir. The flowing pressure was reportedly increasing, and gas rates were as high as 500 mmcf/d. Casing was set at 1,270 feet in the shale separating the upper and lower Lyons sands. The lower Lyons sand was penetrated at 1,308 feet and 15 feet of sand was drilled. The drilled section was completely gas filled with no water being encountered during drilling. Initial flow testing was conducted with gas rates of 115 mcf/d.

The Company and Vecta are in discussions regarding the future approach to commercialising this project.

## **Well permitting**

### **Galactica/Pegasus prospects (100% BNL)**

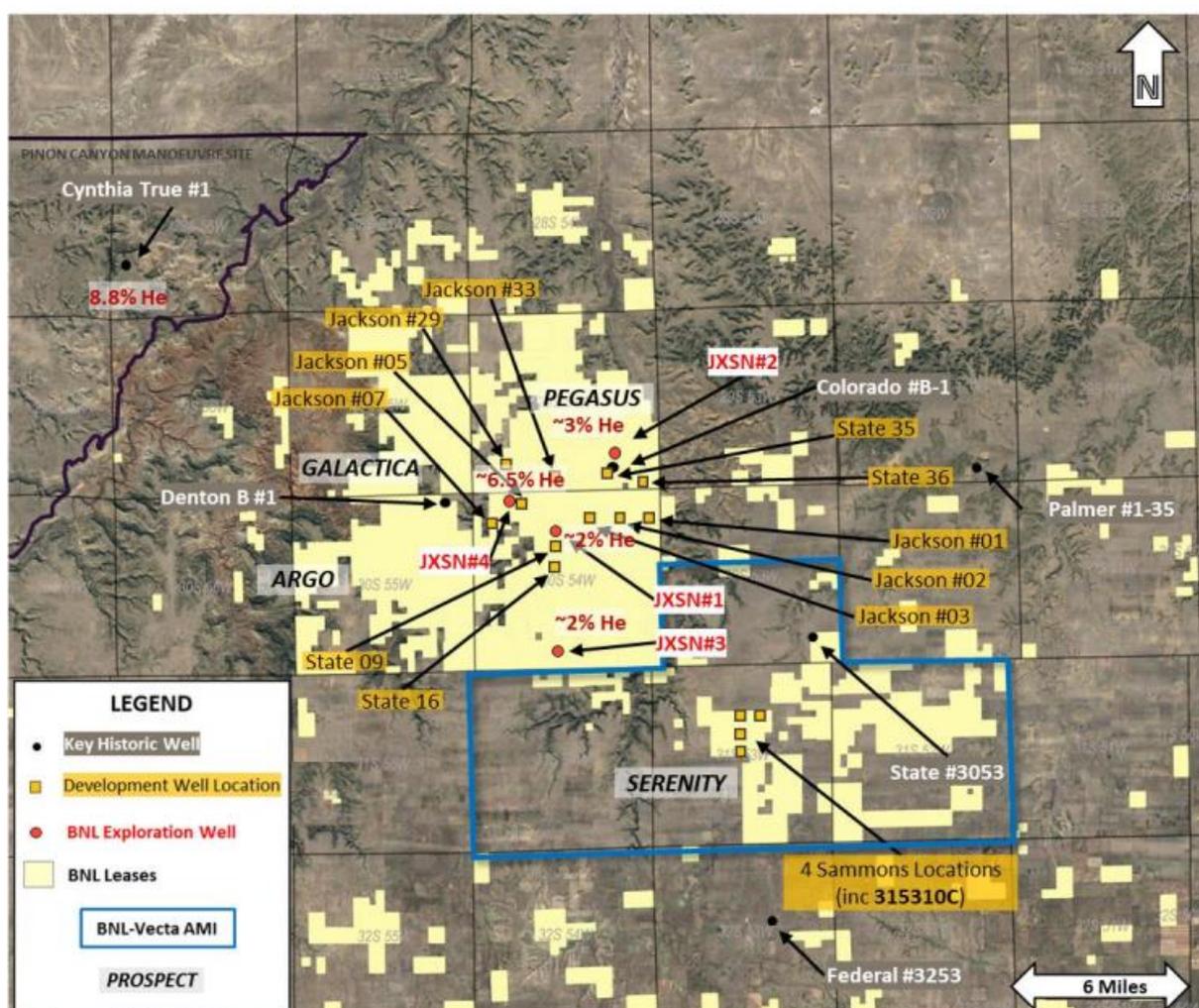
In July 2022, two new Oil and Gas Development Plan applications were filed with the Colorado Oil and Gas Conservation Commission (**COGCC**) in respect of 7 new helium well locations at Galactica/Pegasus. These plans comprise Galactica/Pegasus OGDG II in respect of 3 proposed wells and OGDG III in respect of 4 proposed wells.

The following month on 14 September, the COGCC approved the two Oil and Gas Development Plans relating to the State 9, State 16, State 35 and State 36 helium wells at Galactica/Pegasus.

The State 9, State 16, State 35 and State 36 helium wells are four of a total of 29 helium exploration well locations at Galactica/Pegasus currently in the permitting pipeline, eleven of which are in advanced stages of permitting. These wells follow Blue Star's consecutive discoveries of helium at the four JSXN wells. Blue Star has submitted final permits to drill (Form 2) in respect of these four development wells.

On 28 September 2022, the COGCC accepted the "Galactica-Pegasus OGD II" as complete and passed it to the final review and hearing phase. The wells in this OGD II offset the discoveries in the JSXN#1 and JSXN#2 wells. The acceptance of this OGD II was completed within 65 days of its submission, a favourable outcome in comparison to the five Las Animas OGDs that have been previously submitted by Blue Star and other operators, which were accepted by the COGCC on an average of 121 days. Subsequently, the COGCC has announced that it will hear the Galactica-Pegasus OGD II application on 28 December 2022.

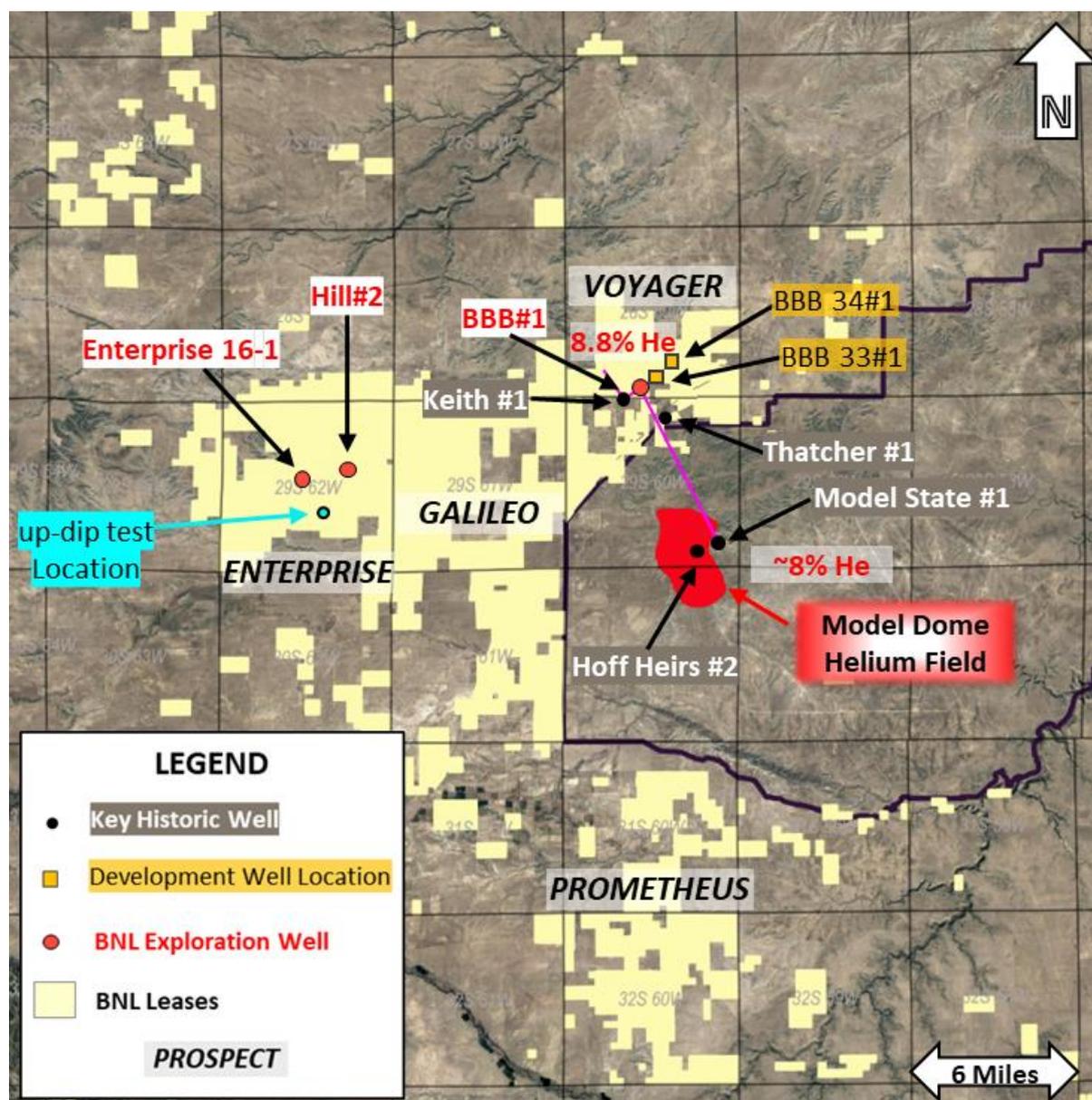
The eleven currently proposed development wells at Galactica/Pegasus are shown on the map below:



### Voyager prospect (100% BNL)

On 18 October 2022, the COGCC passed the BBB 2860 OGD as complete and moved it to the final review and hearing phase. This OGD relates to two wells: BBB 33 and BBB 34 that offset the BBB#1 discovery well (8.8% helium) on Voyager.

The two planned development wells currently in process at Voyager are shown on the map below:



#### Total permitted wells or wells under permitting

As at the date of this report, Blue Star has an interest in 18 helium wells that are permitted or under consideration by COGCC. In addition, preliminary survey work and permit preparation is underway for an additional 38 potential drilling locations across the portfolio. Table 3 below depicts the respective status of these permits and their locations.

**Table 3: Current permitting schedule for Blue Star's Las Animas acreage**

Well Permitting Schedule								
Prospect	Location Selection <sup>1</sup>	Survey <sup>2</sup>	Permit Preparation	COGCC Review	COGCC Hearing	Form 2	Issued	Total
Enterprise	1	2	1				1	5
Galactica	4	3	5	3		2		17
Galileo			3					3
Pegasus			6	1	3	2		12
Serenity						3	1	4

Voyager	10		3		2			15
<b>Total</b>	<b>15</b>	<b>5</b>	<b>18</b>	<b>4</b>	<b>5</b>	<b>7</b>	<b>2</b>	<b>56</b>
Notes: 1. Preliminary feasibility survey studies have been undertaken on each of these locations. 2. Detailed survey plat packages being prepared for inclusion in initial applications to COGCC.								

## Field Development

Blue Star's consulting engineers, SIGIT, are preparing a plan of development for its Las Animas helium acreage. The plan of development includes:

- Plant asset optimisation including an assessment of power options;
- Gathering system design; and
- Front-End Engineering and Design (FEED) for the processing plant including an evaluation of technology providers and other long lead suppliers, scheduling and total installed cost for the facilities.

The scope of work includes FEED for an initial processing facility at the Voyager prospect (including consideration of a joint development with the nearby Enterprise prospect) and a second processing facility at the Galactica/Pegasus prospects.

The Company has broadened the original scope of processing concepts and during the quarter the Company received a number of engineering studies from multiple firms covering a range of processing concepts that are available owing to the current high price helium market. The Company also initiated permitting work for regulators with the aim of timely development project approval.

Completion of the plan of development is expected during the December quarter.

## CORPORATE

### Balance sheet

Blue Star's cash balance at 30 September 2022 was approximately A\$9.051 million. The Company has zero debt, excluding typical trade creditor balances.

### Appointment of CFO

During the quarter, Blue Star appointed Mr Scott Fenoglio as Chief Financial Officer (**CFO**).

Based in Denver, Colorado, Scott is a seasoned executive and industry professional with over 20 years' experience in the oil & gas and financial services industries. He is also a Chartered Financial Analyst (CFA Charterholder). Most recently, Scott held the position of CFO at Ossidiana Energy, a Colorado-based E&P business focused on the DJ Basin in Wyoming. He has also held senior finance executive roles at Colorado-based Bonanza Creek Energy Inc. and Noble Energy Inc.

Scott's appointment corresponds with the development planning of Blue Star's recent helium discovery successes at Voyager, Galactica/Pegasus. Scott will be crucial in providing key inputs into the assessment of the various development scenarios being evaluated by the Company. These include the evaluation of various facility options, suppliers, and offtake strategies. Scott will also be a core part of analysing the economic benefits of these various scenarios in the critically undersupplied helium market and communicating them with Blue Star's key stakeholders.

## 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)
<b>Project Name</b>			
Held By Production Acreage, Big Star Project, USA	-	-	-
Helium Project, Las Animas, Colorado, USA*	Circa 298,381 gross (215,631 net) acres	Circa 298,958 gross (216,254 net) acres	Circa 577 gross (623 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 paid to directors.

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

### For further information, please contact:

Trent Spry  
 Managing Director & CEO  
[info@bluestarhelium.com](mailto:info@bluestarhelium.com)

**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](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 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 by-product 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

75 009 230 835

Quarter ended ("current quarter")

30 September 2022

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	4	10
1.2 Payments for		
(a) exploration & evaluation	(4)	(331)
(b) development	-	-
(c) production	(16)	(21)
(d) staff costs	(81)	(246)
(e) administration and corporate costs	(353)	(804)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	5	6
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (legal fees for dispute resolution)	-	(1)
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(445)</b>	<b>(1,387)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	(367)	(1,104)
(c) property, plant and equipment	(1)	(4)
(d) exploration & evaluation	(1,025)	(4,318)
(e) investments	-	-
(f) other non-current assets	-	-

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

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(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)	37	73
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(1,356)</b>	<b>(5,353)</b>
<b>3.</b>	<b>Cash flows from financing activities</b>		
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	-	(6)
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)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>-</b>	<b>(6)</b>
<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	10,762	15,632
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(445)	(1,387)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1,356)	(5,353)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	(6)

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

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (9 months) \$A'000</b>
4.5	Effect of movement in exchange rates on cash held	90	165
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>9,051</b>	<b>9,051</b>

<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1	Bank balances	9,051	10,762
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>9,051</b>	<b>10,762</b>

<b>6.</b>	<b>Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1	Aggregate amount of payments to related parties and their associates included in item 1	56
6.2	Aggregate amount of payments to related parties and their associates included in item 2	53
<i>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.</i>		

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

<b>7. Financing facilities</b>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
<i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i>		
<i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
7.4 <b>Total financing facilities</b>	-	-
7.5 <b>Unused financing facilities available at quarter end</b>		-
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.	<div style="border: 1px solid black; padding: 5px; min-height: 100px;"> <p>N/A</p> </div>	

<b>8. Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1 Net cash from / (used in) operating activities (item 1.9)	(445)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(1,025)
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(1,470)
8.4 Cash and cash equivalents at quarter end (item 4.6)	9,051
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	9,051
8.7 <b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	6.2
<i>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.</i>	
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?	
<p>Answer: N/A</p>	
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?	
<p>Answer: N/A</p>	

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

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 quarters, 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: 31 October 2022

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.