

ASX ANNOUNCEMENT

29 July 2022

Activities Report Quarter Ended 30 June 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 June 2022.

Highlights

- Three helium discoveries at Galactica/Pegasus (JXSN#1, JXSN#2 and JXSN#3); concentrations up to 3.1% He and flow rates consistent with historic Model Dome field.
- Enterprise 16#1 well workover completed; gas sample analytical results pending.
- Drilling of Sammons 315310C helium well (Serenity prospect) commenced in late July.
- Two further exploratory water wells to be drilled at Galactica/Pegasus this quarter; four helium wells at Galactica/Pegasus pending COGCC approval hearing in August.
- Initial Voyager and updated Galactica/Pegasus resources to be completed Q3.
- Initial Las Animas field plan of development and FEED studies to be completed Q3.
- Rolling permitting and drilling campaign advancing with 56 helium well permits in process and up to 14 helium and exploratory water wells to be drilled during H2 2022.
- Appointment of proven U.S. helium executive, Peter Kondrat, as Blue Star COO.
- Well-funded with quarter end cash balance of A\$10.672 million and zero debt.

OPERATIONS

Drilling activities and analysis

JXSN#1, #2 & #3 exploratory water wells (Galactica/Pegasus prospects, 100% BNL)

Blue Star successfully recovered helium from each of the JXSN#1, JXSN#2 and JXSN#3 exploratory water wells drilled in the Company's Galactica/Pegasus prospects during the quarter (see BNL ASX announcements of 17 May 2022 and 16 June 2022). After consultation with its technical advisors, Blue Star declared a discovery at each of these wells. Helium concentrations of up to 3.14% were reported in larger than expected gas columns in the Lyons formation. Flow rates were consistent with data reported from the historic Model Dome field. The key results from the wells are summarised in Table 1 below.

Table 1: Key results from recent Galactica/Pegasus exploratory water wells

Key parameter	JXSN#1	JXSN#2	JXSN#3
Helium concentration (%)	1.98	3.14	2.14
Gas column in Lyons formation (ft)	217.5	101+	230
Net pay in Lyons formation (ft)	143.5	101	153.5
Stabilized initial flow rate (mcf/d)	412	202	412

Enterprise 16#1 helium well workover (Enterprise prospect, 100% BNL)

In early July, the Enterprise 16-1 well was successfully cased and cemented across the Lyons and perforated between 1,051 feet and 1,054 feet in the top of the gas zone. Swabbing operations were completed.

The well exhibited pressure build-up and flow on several occasions during swabbing operations. Gas samples were taken and sent to the laboratory for compositional analysis, with the results pending.

At the conclusion of operations, the water level in the well stabilised above the perforations. The final completion configuration of the well will be determined after further drilling to the south-east, up-dip from Enterprise 16-1, where re-mapping shows the structural high to lie. Follow-up wells are set to target this structural high where significantly larger gas columns are expected – initially via an exploratory water well and then with further helium wells.

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

Vecta Oil & Gas, the operator of the Sammons Area of Mutual Interest (AMI), notified Blue Star that the Sammons 315310C well is expected to spud on Monday US time.

The Sammons Ranch OGDGP consists of four (4) proposed helium exploration wells located in the AMI agreed between Blue Star (50%, non-operated interest), Prospero Oil and Gas LLC (Prospero) (25%, non-operated interest) and Vecta (25% operating interest) (see BNL ASX announcement of 22 December 2021).

The AMI includes Blue Star's Serenity prospect, located immediately south-east of its Galactica and Pegasus prospects where the Company announced the three significant discoveries (JXSN#1, JXSN#2 and JXSN#3) during the quarter.

September 2022 quarter drilling

Planned Las Animas drilling activities during the current quarter include:

- Sammons 315310C helium well at Serenity (in progress, operated by Vecta).
- Two further exploratory water wells at Galactica/Pegasus. These are set to utilise the rig from the Sammons 315310C well and are located to further test the extent of the gas filled closures ahead of additional helium appraisal and development wells.
- Targeted commencement of program of four State helium wells (9, 16, 35, 36) at Galactica/Pegasus, subject to final permitting.

Well permitting

Galactica/Pegasus prospects (100% BNL)

On 20 July 2022, Blue Star advised that the Colorado Oil and Gas Conservation Commission (COGCC) hearing to approve the applications for the Oil and Gas Development Plans relating to the State 9, State 16, State 35 and State 36 helium wells at Galactica/Pegasus had been deferred by the COGCC from 19 July 2022 to 10 August 2022.

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. These wells follow up Blue Star's recent discoveries in the JXSN#1, JXSN#2 and JXSN#3 wells. Subject to final permitting, Blue Star continues to target drilling of all four of these wells during H2 2022.

The specific locations of these four prospective wells are shown in Figure 1 below.

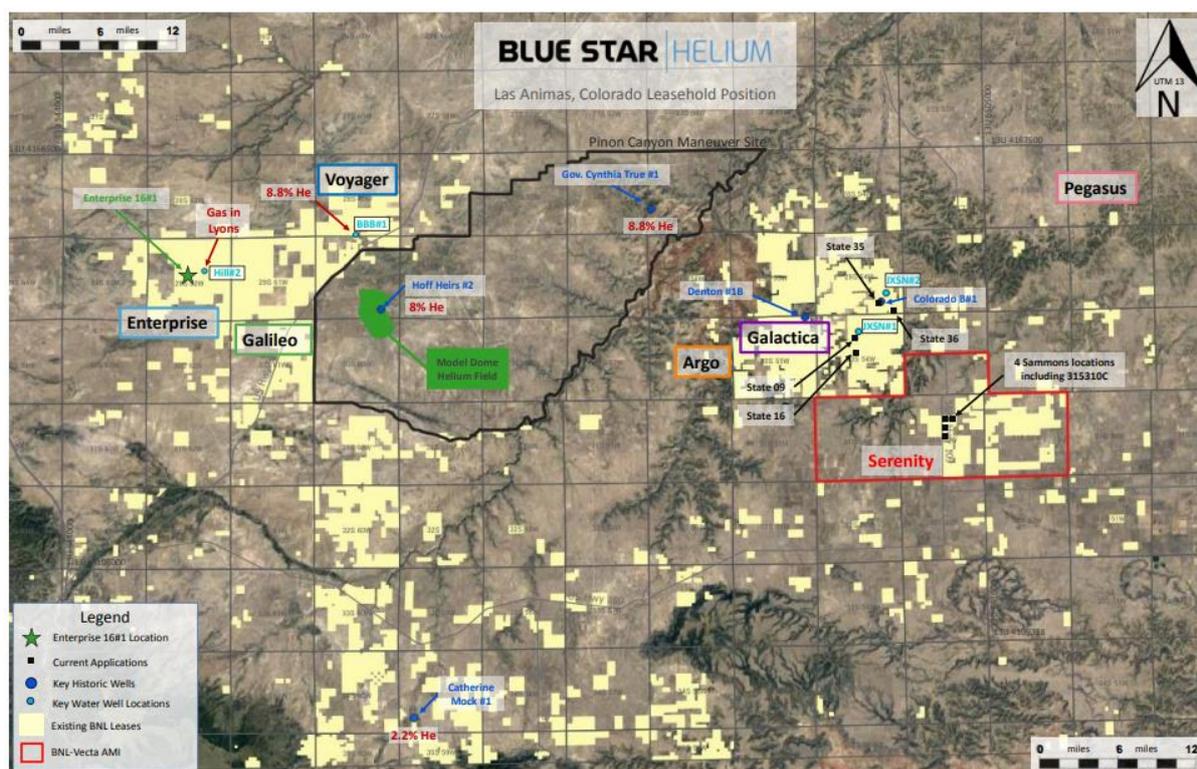


Figure 1: Blue Star's Las Animas Country lease holdings and key well locations

Voyager prospect (100% BNL)

Two helium appraisal and development well locations (Form 2A) within the Voyager prospect, offsetting the BBB#1 helium discovery, were submitted to the COGCC during the quarter. Submission of a further three well location applications is expected to follow shortly.

These five Voyager wells represent the initial planned production wells of the field development plan. Blue Star is also currently finalising the planned location of Phase 2 development wells at Voyager. These well locations are being designed to deliver a substantial degree of flexibility and responsiveness with respect to progressive Phase 1 well outcomes.

Subject to permitting, Blue Star is targeting the drilling of these five wells during H2 2022.

Serenity prospect (50% BNL)

The COGCC approved Vectra's final permit to drill (Form 2) for the Sammons 315310C helium well during the quarter.

Total permitted wells or wells under permitting

As at the date of this report, Blue Star has an interest in 11 helium wells that are permitted or under permitting:

- **Enterprise:** 1 permitted well (Enterprise 16-1, 100% interest), drilled in February.
- **Serenity (AMI):** 4 permitted well locations (50% interest), drilling of Sammons 315310C in progress.
- **Pegasus:** 2 wells under permitting (State 35 and State 36, 100% interest), hearing date.
- **Galactica:** 2 wells under permitting (State 9 and State 16, 100% interest), hearing date.
- **Voyager:** 2 wells under permitting (100% interest), COGCC review with a further three well location applications expected to follow shortly.

In addition, preliminary survey work is underway for an additional 11 potential drilling locations across the portfolio as part of the Company's rolling permitting strategy. Table 2 below depicts the respective status of these permits and their locations.

Table 2: Current permitting schedule for Blue Star's Las Animas acreage

Well Permitting Schedule								
Prospect	Location Selection ¹	Survey ²	Permit Preparation	COGCC Review	COGCC Hearing	Form 2	Issued	Total
Enterprise	1	2	1				1	5
Galactica	4	8	3		2			17
Galileo			3					3
Pegasus		1	6	3	2			12
Serenity						3	1	4
Voyager	10		3	2				15
Total	15	11	16	5	4	3	2	56

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.

Resource estimation

Maiden Voyager resource

During the quarter, Blue Star engaged independent geological and engineering consultant, Sproule, to prepare the first independent resource assessment for the Voyager prospect. Blue Star's current Las Animas P50 net unrisked prospective helium resource of 13.4 Bcf does not include an estimate for the Voyager prospect (see BNL announcements of 16 November 2020 and 10 June 2021).

The Voyager prospect has been selected 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). The maiden Voyager resource assessment is expected to be completed during the September quarter.

Updated Galactica/Pegasus resource

Sproule was also retained during the quarter to update the Galactica/Pegasus resource estimate following the discoveries declared at JXSN#1, JXSN#2 and JXSN#3. This updated resource is also scheduled to be completed during the September quarter and expected to result in the declaration of at least contingent resources for Galactica/Pegasus.

Field development

During the quarter, Blue Star appointed consulting engineers, SIGIT, to prepare a plan of development for its Las Animas helium acreage. The plan of development is set to include:

- 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/Serenity prospects (eastern acreage).

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

CORPORATE

Balance sheet

Blue Star's cash balance at 30 June 2022 was approximately A\$10.762 million. The Company has zero debt, excluding typical trade creditor balances.

COO appointment

During the quarter, Blue Star appointed Mr Peter Kondrat as Chief Operating Officer (**COO**) of its US helium business.

Peter is a seasoned helium executive and industry professional with over 25 years' experience in the development of oil, natural gas and helium from conventional and unconventional reservoirs. This includes proven expertise in the identification, economic analysis and exploitation of new and additional helium from drilling, workover, recompletion, prospect development and deeper play testing.

Most recently, Peter was President and COO of US helium exploration and production business, Tacitus LLC (**Tacitus**). Under Peter's direction, Tacitus built a significant helium business in the Tocito Dome Field, New Mexico. This included leading Tacitus from operating at a loss to substantial positive cash flow, driven by the company's success in originating new helium discovery wells with high concentration and flow rates. Tacitus was ultimately sold to the Navajo Transitional Energy Company in October 2021 for an undisclosed consideration.

Peter will lead Blue Star's on-the-ground efforts in the US from his base in Colorado. He will be responsible for deployment of all aspects of the Company's exploration, development and production activities in Las Animas, Colorado. The timing of Peter's appointment corresponds with Blue Star's recent helium discovery successes at Voyager and Galactica/Pegasus, and its planned transition into development drilling and production operations while continuing to grow its resource base.

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			
Helium Project, Las Animas, Colorado, USA*	Circa 295,371 gross (212,807 net) acres	Circa 298,381 gross (215,631 net) acres	Circa 3010 gross (2824 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
info@bluestarhelium.com
 +61 8 9481 0389

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 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 June 2022

Consolidated 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	3	6
1.2 Payments for		
(a) exploration & evaluation	-	(327)
(b) development	-	-
(c) production	(3)	(5)
(d) staff costs	(133)	(166)
(e) administration and corporate costs	(201)	(450)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	1	1
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)
1.9 Net cash from / (used in) operating activities	(333)	(942)

2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	(412)	(737)
(c) property, plant and equipment	-	(3)
(d) exploration & evaluation	(2,230)	(3,293)
(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 (6 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 (provide details if material)	36	36
2.6	Net cash from / (used in) investing activities	(2,606)	(3,997)
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	-	(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)	-	-
3.10	Net cash from / (used in) financing activities	-	(6)
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	13,603	15,632
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(333)	(942)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(2,606)	(3,997)
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

Consolidated 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	98	75
4.6	Cash and cash equivalents at end of period	10,762	10,762

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	10,762	13,603
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)	10,762	13,603

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	133
6.2	Aggregate amount of payments to related parties and their associates included in item 2	56

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.

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

7. Financing facilities	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
<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 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.	<div style="border: 1px solid black; padding: 5px; min-height: 100px;"> <p>N/A</p> </div>	

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(333)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(2,230)
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(2,563)
8.4 Cash and cash equivalents at quarter end (item 4.6)	10,762
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	4.2
<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: 29 July 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.