

ASX ANNOUNCEMENT

26 April 2024

Activities Report

Quarter Ended 31 March 2024

Blue Star Helium Limited (ASX: BNL, OTCQB: BSNLF) (**Blue Star** or the **Company**) is pleased to provide an update on its activities during the quarter ended 31 March 2024.

Highlights

Galactica/Pegasus

- Maiden helium development well to be drilled, funded from existing cash reserves, targeted for Q2 2024.
- Plan of development advancing with various commercialisation pathways under consideration, including potential additional CO₂ product stream.
- Potential development of Galactica/Pegasus project significantly de-risked by:
 - i. high-concentration helium gas flows from discoveries at Blue Star's JXSN#1, #2, #3 and #4 exploration wells; and
 - ii. third-party commercialisation of the adjoining Red Rocks helium project.

Voyager

- Voyager development wells BBB #33 and Bolling #4 SESW completed with both wells producing similar anomalous low flow and pressure results.
- Both wells returned wireline logs demonstrating a gas-filled reservoir with further well evaluation activities undertaken to investigate anomalous flow and pressure results.
- Test data subsequently confirmed the flow potential of the Lyons reservoir on compression (vacuum).
- Existing development plan no longer expected to be the highest-returning allocation of the Company's capital.
- Other potential commercialisation pathways under consideration for what is a substantial, high concentration, discovered helium resource.

Corporate

- Quarter end cash balance of A\$3.714 million and zero debt.

OPERATIONS

Voyager Project

Field Development

During the period, Blue Star drilled two development wells, BBB #33 and Bolling #4 SESW.

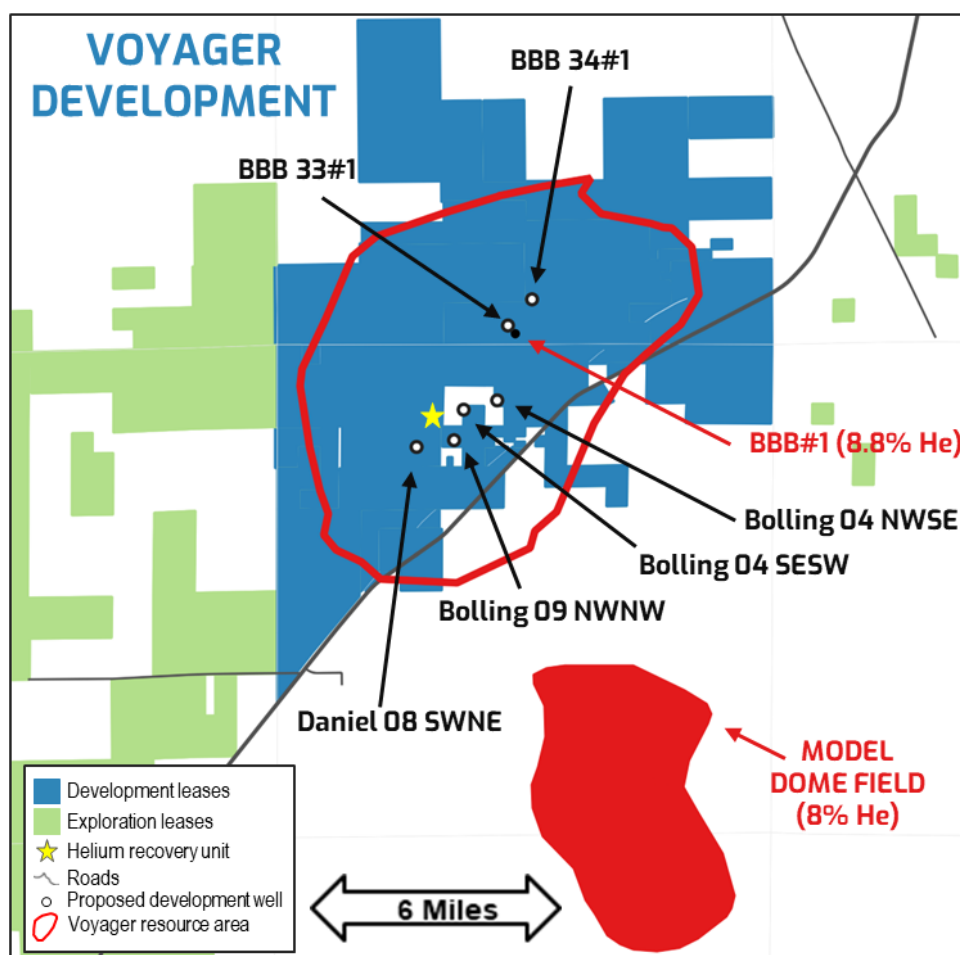


Figure 1: Planned well locations at the Voyager prospect helium development

The BBB #33 well was drilled to 935 feet, approximately 51 feet into the top of the high-quality Lyons formation. Wireline logs confirmed the high quality of the Lyons sand (average porosity of approximately 28%) and that the reservoir was gas filled to TD as expected. No movable water was observed during drilling or on the wireline logs.

Initial evaluation through the drill pipe was undertaken with limited-to-no flow observed from the reservoir. Initially, well pressures showed minimal-to-no pressure at the wellhead. Both these outcomes were considered highly anomalous given the gas saturation seen on the wireline logs in this well and offset well evaluations suggesting reservoir pressure additionally supported by flowing wells at the historic Model Dome field.

The Bolling #4 SESW was completed to 922 feet, approximately 48 feet into the top of the high-quality Lyons formation. Wireline logs once again confirmed the high quality of the Lyons

sand (average porosity of approximately 27%) with the reservoir gas filled to TD. Initial flow and pressure outcomes from Bolling #4 SESW were similar to those returned from BBB#33.

Initial post well evaluation activities subsequently commenced for both the BBB #33 and Bolling #4 SESW wells. At BBB #33, flow of gas to surface was achieved by putting the well on a small vacuum during an 8-hour test. This resulted in gas to surface containing approximately 3.0% helium (plus 92.4% nitrogen and 4.6% carbon dioxide).

At Bolling #4 SESW, a variable vacuum test was conducted over a 24-hour period. Gas to surface flow at Bolling #4 SESW contained approximately 4.1% helium, 83.1% nitrogen and 12.8% carbon dioxide.

The data collected from the testing of both BBB#33 and Bolling #4 wells was subsequently integrated and evaluated by Sproule and Blue Star's independent engineer. These results confirmed the high-quality flow potential of the Lyons reservoir. Positively, initial type curves based on low reservoir pressure encountered in these two wells and consistent with the test data have been estimated.

While post well testing on vacuum has yielded success in terms of flow rates, the anticipated need for compression (vacuum) at the wells earlier in field life (than previously anticipated) had significant implications for forecast production volumes per well as well as operating cost estimates.

Blue Star elected to pause its development of the Voyager project, including the planned mobilisation and installation of the leased IACX helium process plant, in order to conduct a detailed evaluation of these revised project economics under a range of potential adjusted development and operating parameters.

Independent engineering reports after applying the revised geological and operating parameters to the current plan of development still forecast multiple scenarios delivering a profitable all-in project. This plan of development was adopted due to the forecasted capital-lite high-margin project for Blue Star. However, development of Voyager via this route is no longer expected to be the highest-returning project in the available well portfolio and Blue Star will now undertake a full review of potential commercialisation pathways for Voyager. This will include evaluating developments that include connection to grid power as well as a variety of gas processing sizes and solutions.

Remapping of Voyager will also be undertaken with data gathered during the recent drilling being incorporated into future models. Consideration is being given to potential pressure leak points (faults or intrusive dykes) while also considering the top seal potential locally. It is expected that this work may result in additional prospective areas on the greater structure for future drilling consideration.

Galactica/Pegasus Project

Galactica/Pegasus Well Permitting

In January 2024, the ECMC approved the OGDG relating to four proposed helium development wells Jackson 05 SWNE, Jackson 07 NWNE, Jackson 29 SWSW and Jackson 33 SENE) at the Galactica/Pegasus project.

Following this approval, Blue Star will be able to submit the final drilling permit applications (Form 2) in respect of these wells. This is the fourth OGDPA to be approved at Galactica/Pegasus.

The Jackson 05 SWNE, Jackson 07 NWNE, Jackson 29 SWSW and Jackson 33 SENE wells offset the discoveries at Blue Star's JXSN#1, JXSN#2 and JXSN#4 exploration wells.

The ECMC has previously given final permits to drill the State 09, 16, 35 and 36 helium development wells (see BNL ASX release of 9 January 2023). The Colorado ECMC has also previously approved the Jackson 01, 02 and 03 locations (see BNL ASX release of 8 June 2023) and, subsequent to the quarter, the Jackson 5, 7, 29 and 33 locations (see BNL ASX release of 11 January 2024).

As such, Blue Star currently has 11 helium development locations approved for drilling at Galactica/Pegasus of which four are finally approved for drilling.

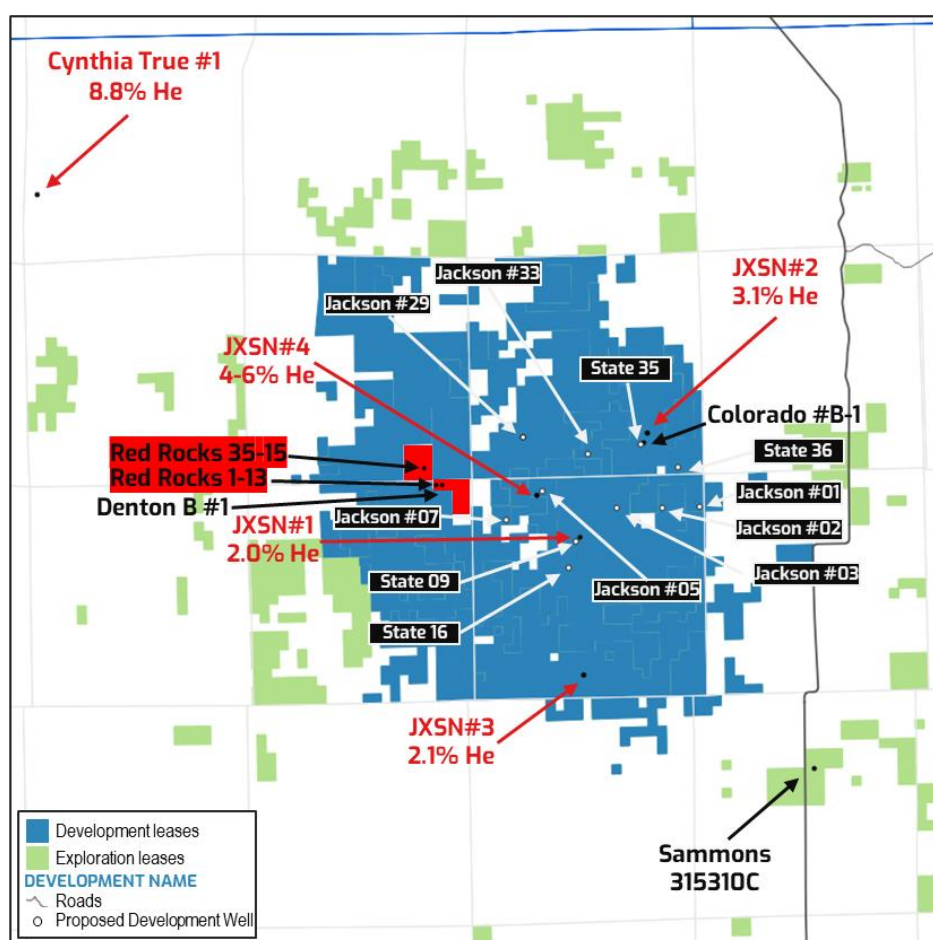


Figure 2: Planned development well locations at the Galactica/Pegasus prospect including the neighbouring Red Rocks Helium Project

Forward Development Strategy

Following the decision to pause any development at Voyager, Blue Star is pursuing the decision to drill a maiden development well, State 16 SWSE 3054, at the Company's Galactica/Pegasus helium project (refer ASX announcement dated 17 April 2024 Las Animas Helium Projects Update). Drilling at Galactica/Pegasus is on track to be undertaken Q2 2024.

The Galactica/Pegasus development, discovered by Blue Star in 2022, is a larger-scale project with multiple potential product streams. Four existing Blue Star discoveries at Galactica/Pegasus via exploration wells JXSN#1 to JXSN#4 delivered gas flowing at 125 - 412 mcf/d and high air-corrected concentrations of 2.0 - 6.1% He (see Table 1 for details).

These wells also proved the Company's previous interpretations of gas on logs at historic wells, Denton B #1 and Colorado #B-1, also located on the Galactica/Pegasus structure. Potential development of the Galactica/Pegasus project is further significantly de-risked by the successful third-party commercialisation of adjoining Red Rocks helium project, via an IACX midstream leased process facility arrangement.

There are currently a range of development pathways under consideration, including a leased plant and third party operated option. The final development is expected to include a CO₂ extraction route and by-product stream. Engineering and market work continues to refine the initial planned development configuration and forecast production and cost estimates.

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

Key parameters	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
Stabilized initial flow rate (Mcf/d)	412	202	412	125

CORPORATE

Balance sheet

Blue Star's cash balance at 31 March 2024 was approximately A\$3.714 million. The Company has zero debt, excluding typical trade creditor balances.

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 312,042 gross (224,103 net) acres	Circa 325,214 gross (235,522 net) acres	Circa 13,172 gross (11,419 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

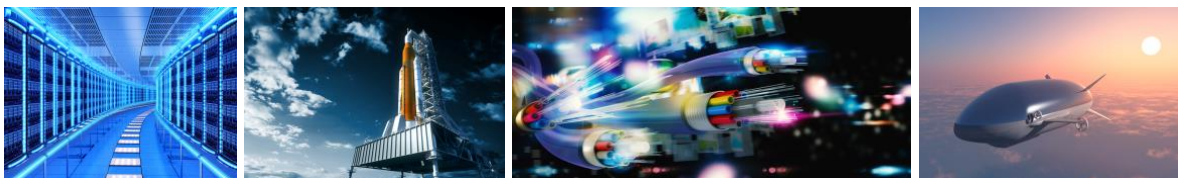
info@bluestarhelium.com

About Blue Star Helium:

Blue Star Helium Ltd (ASX:BNL) is an independent helium exploration 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")

31 March 2024

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	2	2
1.2	Payments for		
	(a) exploration & evaluation	(1)	(1)
	(b) development	-	-
	(c) production	(21)	(21)
	(d) staff costs	(401)	(401)
	(e) administration and corporate costs	(168)	(168)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	16	16
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	(573)	(573)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements / leases	(41)	(41)
	(c) property, plant and equipment	(194)	(194)
	(d) exploration & evaluation	(2,313)	(2,313)
	(e) investments	-	-
	(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 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	(2,548)	(2,548)

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	6,869	6,869
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(573)	(573)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(2,548)	(2,548)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-

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 (3 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	(34)	(34)
4.6	Cash and cash equivalents at end of period	3,714	3,714

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	3,714	6,869
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)	3,714	6,869

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	112
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<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

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.		
	N/A		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(573)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(2,313)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(2,886)
8.4	Cash and cash equivalents at quarter end (item 4.6)	3,714
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	3,714
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	1.3
<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?	
	Answer: The Company does not expect to incur the current level of net operating cash flows again in the coming quarters. The first quarter of 2024 saw significant work on a plant location and the drilling of two Helium wells. It is anticipated that the capital program will be lower in the coming quarters.	
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: The Board regularly evaluates market appetite for equity financing and believes that the Company will be able to continue to access funding as required.	

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: Yes, with a reduced capital spend profile and continued access to funding, the Company expects to be able to meet its business objectives.

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: 26 April 2024

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.