

## ASX ANNOUNCEMENT

31 January 2022

## Activities Report Quarter Ended 31 December 2021

Blue Star Helium Limited (ASX: BNL) (**Blue Star or the Company**) is pleased to provide an update on activities undertaken during the quarter to 31 December 2021.

### Highlights

- **Blue Star receives Form 2 approval for permit to drill Enterprise 16#1 and well pad construction completed; drilling to commence in February.**
- **Agreement to jointly develop helium leases in an Area of Mutual Interest (AMI) including Blue Star's Serenity prospect, with Colorado based oil and gas entities, Vecta Oil and Gas Ltd and Prospero Oil and Gas LLC.**
- **Water well drilling identifies significant gas columns at Voyager and Enterprise.**
- **Successfully completed A\$15M equity raise at A\$0.056 per share to accelerate exploration activities.**
- **Cash balance at quarter end of A\$15.630 million.**

## OPERATIONS

### Enterprise 16#1 exploration well permitting and pad construction

On 28 October 2021, Blue Star advised that its Form 2A (Oil and Gas Development Plan or **OGDP**) application for the Enterprise 16#1 exploration well was approved by the Colorado Oil and Gas Conservation Commission (**COGCC**). Subsequently, the Company submitted its final Form 2 application seeking approval for a permit to drill at Enterprise 16#1, which received approval on 23 December 2021 (refer ASX release dated 23 December 2021). Approval of the permit to drill at Enterprise 16#1 makes Blue Star the first helium operator in Colorado to receive such approval since changes to the State permitting process were made.

Drilling of Enterprise 16#1 is expected to commence in February. Budgeted dry-hole costs for drilling of the Enterprise 16#1 well remain less than US\$300,000.

### Agreement to jointly develop AMI, including Blue Star's Serenity prospect

On 22 December 2021, the Company announced that it had executed an agreement to jointly develop helium leases in an Area of Mutual Interest (**AMI**) with private entities, Vecta Oil and Gas Ltd (**Vecta**) and Prospero Oil and Gas LLC (**Prospero**), in Las Animas County, Colorado (refer ASX release dated 22 December 2021). The AMI includes Blue Star's Serenity prospect, which is located immediately to the south-east of its Galactica and Pegasus prospects.

The AMI covers 126 square miles and contains combined leased and optioned acreage of 14,551 net acres (see Figure 1). Blue Star is contributing 4,334 net acres to the AMI and Vecta/Prospero are contributing 10,217 net acres, inclusive of lease options. Each party shall have the right, but

not the obligation, to participate in any further leases acquired in the AMI prior to 14 December 2023 in proportion to their respective interests.

Formation of the AMI will see Blue Star take a 50% non-operated interest in all combined acreage within the AMI. Vecta is to be the operator of the AMI and hold a 25% interest, while Prospero will also hold a 25% interest.

Vecta is based in Denver and owns both operated and non-operated properties in Montana, Wyoming, Colorado, Utah, North Dakota, Louisiana and Texas. It currently produces and sells helium in Cheyenne County, Colorado, and San Juan County, Utah.

Prospero is based in Denver and owns non-operated properties in Colorado and Montana. The two businesses are closely tied with the principals of Prospero also being key members of the Vecta team. The parties will share the costs of leasing, permitting and drilling in the AMI in proportion to their respective interests. The parties will assess the historic costs when the agreement becomes unconditional and make true-up payments as necessary. At this stage, this is not expected to require any material true-up payments between the parties.

Vecta currently has Form 2A applications submitted in relation to four helium exploration well locations within the AMI, with the approval hearing scheduled for 16 February 2022.

The first of these wells (Sammons 315310C) is targeted to commence drilling in April (assuming typical final permitting and mobilisation timeframes).

As part of the Participation Agreement, all parties have agreed to participate for their respective working interest shares in the drilling of the Sammons 315310C well. Drilling and evaluation of this well is expected to cost less than US\$150,000, net to Blue Star.

The Participation Agreement has a term of 2 years and will terminate on 14 December 2023. Vecta will be the operator of joint operations in the AMI. The Joint Operating Agreement is in the form of the AAPL Form 610-2015 Model Form Operating Agreement.

### **Further exploration well permitting**

Blue Star has submitted new location applications (Form 2As) for four further helium exploration wells, State 35 and State 36, located at the Company's Pegasus Prospect and, State 9 and State 16, located at the Company's Galactica Prospect.

Final approved permits to drill (Form 2) for these four prospective wells are targeted for receipt by mid-CY2022.

Blue Star also expects to submit further Form 2A applications during Q1 CY2022 for five prospective helium exploration well locations on the Voyager prospect. The selection of these well locations is heavily informed by the helium bearing gas column identified in the BBB#1 water well (see BNL ASX release dated 17 November 2021).

As a result of recent and planned permitting activity during the current quarter, Blue Star is expecting, at quarter end, to have an interest in 14 wells that are permitted or under permitting (refer ASX release dated 28 January 2022).

The current status of the Company's helium well permitting program is as follows:

| Well Permitting Schedule |                    |          |                    |              |               |          |          |           |
|--------------------------|--------------------|----------|--------------------|--------------|---------------|----------|----------|-----------|
| Prospect                 | Location Selection | Survey   | Permit Preparation | COGCC Review | COGCC Hearing | Form 2   | Issued   | Total     |
| Enterprise               | 2                  | 2        |                    |              |               |          | 1        | 5         |
| Galactica                | 15                 |          |                    | 2            |               |          |          | 17        |
| Galileo                  |                    | 3        |                    |              |               |          |          | 3         |
| Pegasus                  | 10                 |          |                    | 2            |               |          |          | 12        |
| Serenity                 |                    |          |                    |              | 4             |          |          | 4         |
| Voyager                  | 1                  |          | 5                  |              |               |          |          | 6         |
| <b>Total</b>             | <b>28</b>          | <b>5</b> | <b>5</b>           | <b>4</b>     | <b>4</b>      | <b>0</b> | <b>1</b> | <b>47</b> |

### Water well drilling

During the period, the water well drilling campaign that Blue Star agreed to fund for local ranch holders continued (see BNL ASX releases dated 29 July 2021, 10 September 2021, 30 September 2021 and 20 October 2021). The wells are drilled and owned by the ranchers and Blue Star does not have any interest in them. However, the Company does own a mineral lease interest at each of the well locations. Water wells are drilled differently to the method the Company expects to use to drill dedicated helium gas wells. Additionally, water wells cannot be conventionally tested.

#### Hill #2 water well

The Hill#2 water well, which was associated with Blue Star's Enterprise prospect, was completed during October 2021. The company previously reported neutron and density wireline logs run in the well show approximately 26 feet of gas effect at the top of the high-quality Lyons formation, with a free water level interpreted in the well at the base of the gas effect. The resistivity logs across the gas effected part of the Lyons formation suggest a transition zone above the free water level. The composition of the free gas in the Lyons formation could not be determined because of the nature of the water well configuration (see BNL ASX release dated 20 October 2021). This drilling and sampling protocol was revised, and the new protocol used on BBB#1.

The Hill#2 water well was located approximately 1.5 miles to the north-east, and interpreted to be down dip from, Blue Star's planned Enterprise 16#1 helium exploration well (see Figure 1).

With the benefit of additional modern logs acquired at the BBB#1 location over time, which provided the company with valuable information about the invasion of fluids (from water in the well bore) into the Lyons reservoir while and subsequent to drilling, re-evaluation of the logs acquired in the Hill#2 well resulted in the previous transition zone being reinterpreted by the Company's Petrophysicist as a gas column (see BNL ASX release dated 21 December 2021).

The Hill #2 well intersects the top of the Lyons formation at 809 feet depth, with wireline logs interpretation of a gas column in high quality reservoir from the top of the Lyons formation to a depth of 838 feet (29 ft gas column). This is in a location interpreted to be downdip from the Enterprise 16#1 well location, which if the current interpretation is validated should see a thicker gas column again.

#### BBB#1 water well

On 17 November 2021, the Company announced that drilling of the BBB#1 water well had been completed by the ranch owner. The water well is located within Blue Star's Voyager prospect and approximately six miles north of the historic Model Dome helium field (see Figure 1) which produced raw gas with an average helium content of 8%. Data collected during the drilling of this water well included continuous gas logging and sampling, mudlogging and geologic sampling, and wireline logs.

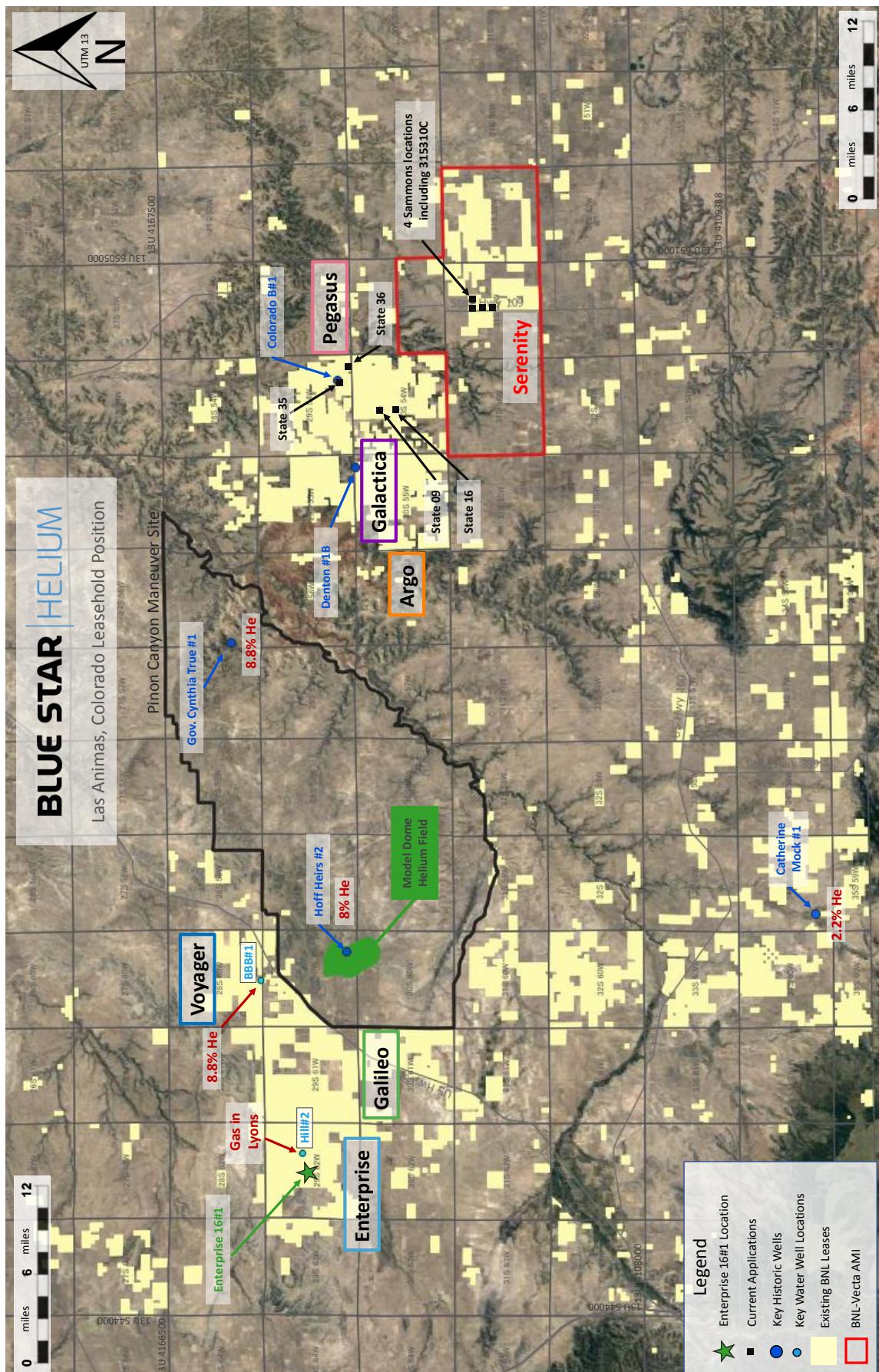
Subsequently, on 21 December 2021, the Company announced that the BBB#1 had been redrilled (offset 40 ft to the south) and geologic and wireline logging completed. Wireline logs from the original hole showed that it was still in the gas column at its total depth (TD) of 922 ft (see BNL ASX release dated 17 November 2021). The redrilled well has penetrated a further approximate 100 ft of gas column to the free water level, yielding a total identified gas column of 134 ft in the Lyons formation – which is approximately 4 times greater than the original BBB#1 hole. Analysis of the log data in the redrilled BBB#1 has confirmed intersection of the top of the Lyons formation at 889 ft depth, with wireline logs confirming a gas column in high quality reservoir from the top of the Lyons formation to a depth of 1'023 ft (134 ft gas column). The well TD'ed at 1,054 ft in the lower Lyons formation. Gas analysis of samples obtained in the original BBB#1 hole resulted in a calculated air-free gas composition from the Lyons formation of 8.8% helium (He), 78.7% nitrogen (N) and 12.5% carbon dioxide (CO<sub>2</sub>) (see BNL ASX release dated 17 November 2021). This composition is very similar to the average historic Model Dome analogue production. It also represents one of the highest in-situ helium concentrations found both in the United States and globally.

No prospective resources associated with the Voyager prospect have been reported by Blue Star. Any prospective resources at Voyager would be in addition to the Company's stated prospective helium resources of 13.4 BCF associated with the Enterprise, Galileo, Argo, Galactica and Pegasus prospects.

Given the positive results of the acquired data, the Company has selected an initial five offset well locations for appraisal and development drilling.

The BBB#1 water well was not conventionally tested. The Company ran a suite of logs including gamma ray, resistivity (induction), density and neutron logs. Gas analysis of samples obtained while drilling was performed using mass spectrometry. An estimated air-free gas composition from the Lyons formation in BBB#1 of 8.8% helium (He), 78.7% nitrogen (N) and 12.5% carbon dioxide (CO<sub>2</sub>) has been calculated after backing out air. The miniRuedi mass spectrometer was operated by Geochemical Insight. The instrument was calibrated with a certified air standard comprised of 0.000524% He, 0.934% Ar, 0.05% CH<sub>4</sub>, 0.2%.

**Figure 1: Blue Star's Las Animas County lease holdings and prospective well locations**



## **Big Star Project – Texas, USA**

During the quarter, the Stuart and Cline wells were plugged and abandoned.

## **CORPORATE**

Blue Star's cash balance at the end of the 31 December 2021 quarter was approximately A\$15.630 million.

On 29 October 2021 the Company announced that it had received commitments to raise A\$15 million in gross proceeds via an institutional placement of 267,857,143 new ordinary shares to institutional and sophisticated investors at an issue price of A\$0.056 per share.

## **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, Colorado, USA*                    | Circa 253,646 gross (183,160 net) acres      | Circa 271,960 gross (193,908 net) acres | Circa 18,314 gross (10,748 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 as well as payout of the accrued bonus.  |

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

### **For further information, please contact:**

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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](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")

31 December 2021

| <b>Consolidated statement of cash flows</b>               | <b>Current quarter<br/>\$A'000</b> | <b>Year to date (12<br/>months)<br/>\$A'000</b> |
|---|------------------------------------|---|
| <b>1. Cash flows from operating activities</b>            |                                    |   |
| 1.1 Receipts from customers                               | 4                                  | 9   |
| 1.2 Payments for  |                                    |   |
| (a) exploration & evaluation                              | (68)                               | (210)   |
| (b) development   | -                                  | -   |
| (c) production  | (5)                                | (51)  |
| (d) staff costs   | (154)                              | (334)   |
| (e) administration and corporate costs                    | (121)                              | (857)   |
| 1.3 Dividends received (see note 3)                       | -                                  | -   |
| 1.4 Interest received                                     | -                                  | -   |
| 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)             | -                                  | (126)   |
| <b>1.9 Net cash from / (used in) operating activities</b> | <b>(344)</b>                       | <b>(1,569)</b>                                  |
| <b>2. Cash flows from investing activities</b>            |                                    |   |
| 2.1 Payments to acquire or for:                           |                                    |   |
| (a) entities  | -                                  | -   |
| (b) tenements   | (150)                              | (1,322)   |
| (c) property, plant and equipment                         | -                                  | -   |
| (d) exploration & evaluation                              | (717)                              | (1,373)   |
| (e) investments   | -                                  | -   |
| (f) other non-current assets                              | -                                  | -   |

| <b>Consolidated statement of cash flows</b>   | <b>Current quarter<br/>\$A'000</b> | <b>Year to date (12<br/>months)<br/>\$A'000</b> |
|---|------------------------------------|---|
| 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)   | -                                  | -   |
| <b>2.6 Net cash from / (used in) investing activities</b>                                   | <b>(867)</b>                       | <b>(2,695)</b>                                  |
| <b>3. Cash flows from financing activities</b>  |                                    |   |
| 3.1 Proceeds from issues of equity securities (excluding convertible debt securities)       | 15,000                             | 15,000  |
| 3.2 Proceeds from issue of convertible debt securities                                      | -                                  | -   |
| 3.3 Proceeds from exercise of options   | 693                                | 1,023   |
| 3.4 Transaction costs related to issues of equity securities or convertible debt securities | (1,027)                            | (1,032)   |
| 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 Net cash from / (used in) financing activities</b>                                  | <b>14,666</b>                      | <b>14,991</b>                                   |
| <b>4. Net increase / (decrease) in cash and cash equivalents for the period</b>             |                                    |   |
| 4.1 Cash and cash equivalents at beginning of period  | 2,208                              | 4,909   |
| 4.2 Net cash from / (used in) operating activities (item 1.9 above)                         | (344)                              | (1,569)   |
| 4.3 Net cash from / (used in) investing activities (item 2.6 above)                         | (867)                              | (2,695)   |
| 4.4 Net cash from / (used in) financing activities (item 3.10 above)                        | 14,666                             | 14,991  |

| <b>Consolidated statement of cash flows</b>           | <b>Current quarter<br/>\$A'000</b> | <b>Year to date (12 months)<br/>\$A'000</b> |
|---|------------------------------------|---|
| 4.5 Effect of movement in exchange rates on cash held | (33)                               | (6)   |
| <b>4.6 Cash and cash equivalents at end of period</b> | <b>15,630</b>                      | <b>15,630</b>                               |

| <b>5. Reconciliation of cash and cash equivalents</b><br>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<br/>\$A'000</b> | <b>Previous quarter<br/>\$A'000</b> |
|--|------------------------------------|-------------------------------------|
| 5.1 Bank balances  | 15,630                             | 2,208                               |
| 5.2 Call deposits  | -                                  | -                                   |
| 5.3 Bank overdrafts  | -                                  | -                                   |
| 5.4 Other (provide details)  | -                                  | -                                   |
| <b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>   | <b>15,630</b>                      | <b>2,208</b>                        |

| <b>6. Payments to related parties of the entity and their associates</b>                    | <b>Current quarter<br/>\$A'000</b> |
|---|------------------------------------|
| 6.1 Aggregate amount of payments to related parties and their associates included in item 1 | 154                                |
| 6.2 Aggregate amount of payments to related parties and their associates included in item 2 | 101                                |

*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.*

| <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)   | -   | -  |
| <b>7.4 Total financing facilities</b>  | <b>-</b>  | <b>-</b>                                   |
| <b>7.5 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. |  |
|  | N/A   |  |

| <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)   | (344)          |
| 8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))  | (717)          |
| 8.3 Total relevant outgoings (item 8.1 + item 8.2)  | (1,061)        |
| 8.4 Cash and cash equivalents at quarter end (item 4.6)   | 15,630         |
| 8.5 Unused finance facilities available at quarter end (item 7.5)   | -              |
| <b>8.6 Total available funding (item 8.4 + item 8.5)</b>  | <b>15,630</b>  |
| <b>8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>   | <b>14.7</b>    |
| <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: 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 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 January 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.