

## Bryah Secures \$140,000 Drilling Grant

### HIGHLIGHTS:

- Bryah Resources is a successful applicant in Round 25 of West Australian Government's Exploration Incentive Scheme (EIS) co-funded drilling grant program.
- WA Government to fund up to \$140,000 of a two-hole, 1,400m Reverse Circulation/Diamond tail drilling program to test the Windalah copper-gold deep target.
- Bryah was one of 47 successful applicants announced on 28<sup>th</sup> April 2022, from a list of 107 applicants in this highly competitive round of the EIS program.
- 1,260m of diamond drilling was recently completed at Windalah<sup>1</sup>, testing shallower and lateral target areas, providing valuable data to assist ongoing targeting work.
- Bryah Resources was also a successful applicant in Round 24 of the EIS grant<sup>2</sup>, with \$130,000 received to undertake co-funded RC drilling at the Olympus copper-gold prospect which will commence in early May 2022.

Bryah Resources Limited (ASX: BYH, "Bryah" or "the Company") is pleased to advise of its successful application in Round 25 of the Western Australian Government's Exploration Incentive Scheme (EIS). As a result, the Company will receive grant funding of up to \$140,000 from the Department of Mines, Industry Regulation and Safety (DMIRS) as a contribution towards direct drilling costs at the Windalah copper-gold prospect located within the Company's Bryah Basin Project, located in Central Western Australia (Figure 2).

Commenting on the announcement by DMIRS, Bryah CEO Ashley Jones said:

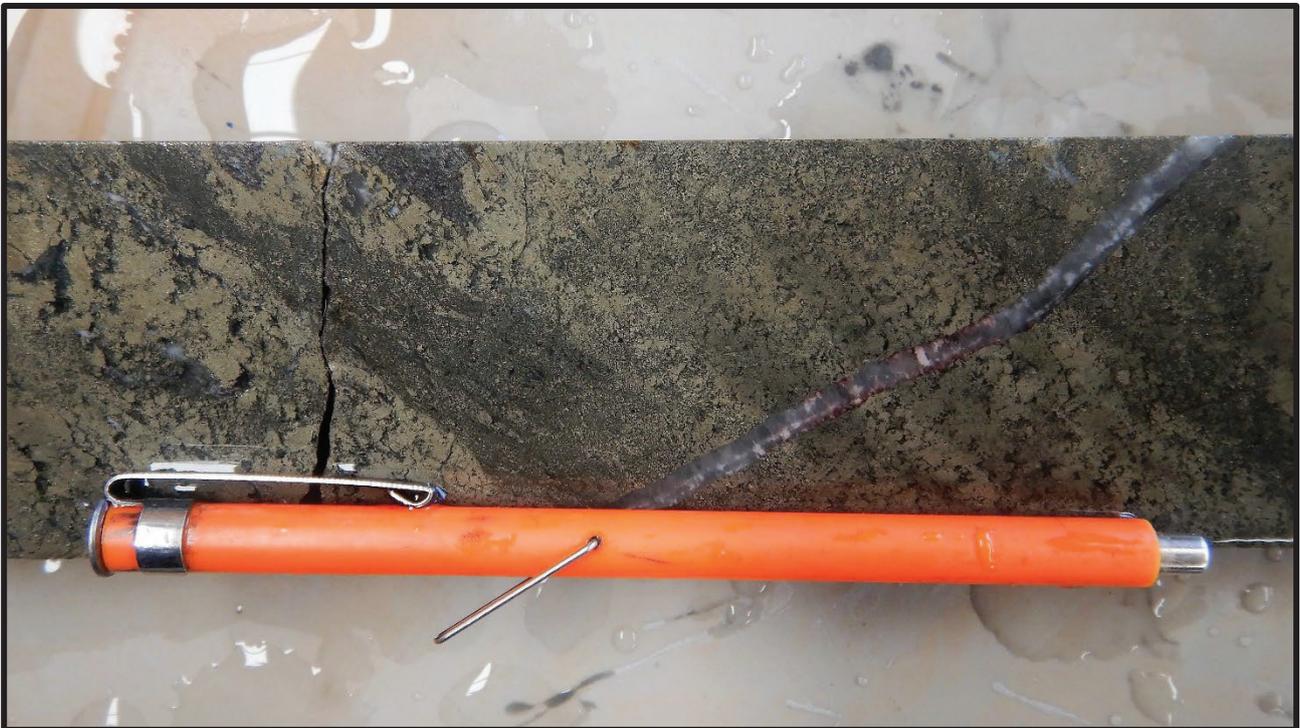
*"Receiving support from the WA Government through the EIS co-funded drilling program is an fantastic step forward for Bryah. Our geological team put forward an excellent EIS proposal which reflects the high level of understanding the team has accumulated on this project. We have successfully identified that we are now within the VMS system, intersecting sulphide stringer mineralisation interpreted to be distal or 'cooler' temperatures at the time of emplacement. This deep drilling program will target deeper and looking to take us nearer to the 'hotter' zone that may potentially host copper-gold mineralisation. This drilling of the Windalah Deeps, together with the upcoming Olympus drilling, gives Bryah some exciting months ahead. Included again are some core*

<sup>1</sup> See ASX announcement dated 12<sup>th</sup> April 2022 'Volcanogenic Massive Sulphide (VMS) system with copper-gold potential confirmed at Windalah'

<sup>2</sup> See ASX announcement dated 10<sup>th</sup> November 2021 'Bryah Secures \$130,000 EIS Drilling Grant'

*photos showing features of VMS type mineralisation we have observed<sup>3</sup> from recent drilling at Windalah. This core is spectacular to view with excellent examples of geological textures and mineralogy typical of VMS systems”*

VMS systems in the Bryah Basin are known to host high-grade copper-gold deposits such as Sandfire’s DeGrussa and Monty mines and the historical Horseshoe Lights mine, located 13 kilometres to the north of Bryah’s Windalah Prospect. The exploration target at Windalah occupies the same stratigraphic position as the Horseshoe Lights deposit. The geochemical, hyperspectral and structural information from diamond core in recent drilling has allowed the Company to refine its targeting with this EIS co-funded drilling program. Bryah is also of the view that the upcoming EIS co-funded drilling at Olympus is targeting a different part of a similar hydrothermal system to Windalah and may also be stratigraphically equivalent to the Horseshoe Lights Cu-Au mine sequence.



**Figure 1: Example banded/laminated massive sulphide (BBRD070 @ 209.2) from within 5.95m zone (BBRD070 203.97 – 209.92m) at Windalah**

<sup>3</sup>Cautionary Note: In relation to disclosure of visual mineralisation, the Company cautions that visual estimates of mineralisation content/intensity should not be considered a proxy or substitute for laboratory analyses, which are required to determine the widths and grade of the mineralisation.

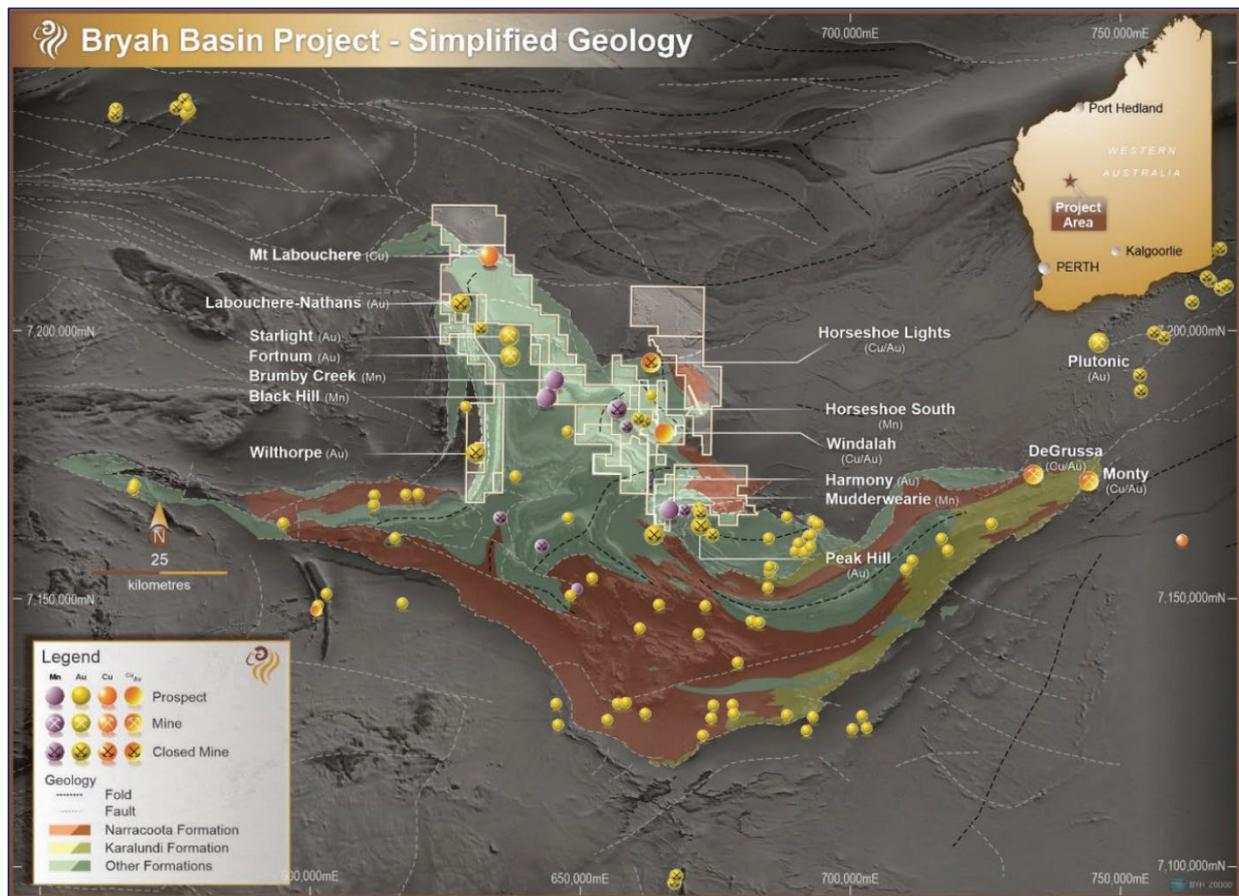


Figure 2: Bryah Basin Tenements and Regional Geology Map.

### Windalah Schematic Interpretation and Targeting

The 1,260m of diamond drilling recently completed at Windalah has greatly improved Bryah’s understanding on the geology and potential controls on mineralisation at Windalah. Figures 2 and 3 reflect this with:

- Identification of orientation and intersection of laminated ‘syn-VMS’ stringers and the ‘ore stratigraphic horizon’ analogous with the Horseshoe Lights Cu-Au mine, generating a steeply plunging target window (Figure 2 and 3).
- An improved schematic syn-depositional model that places current drilling on the periphery of an exhalative massive sulphide apron in a high sulphidation VMS system (Figure 4).

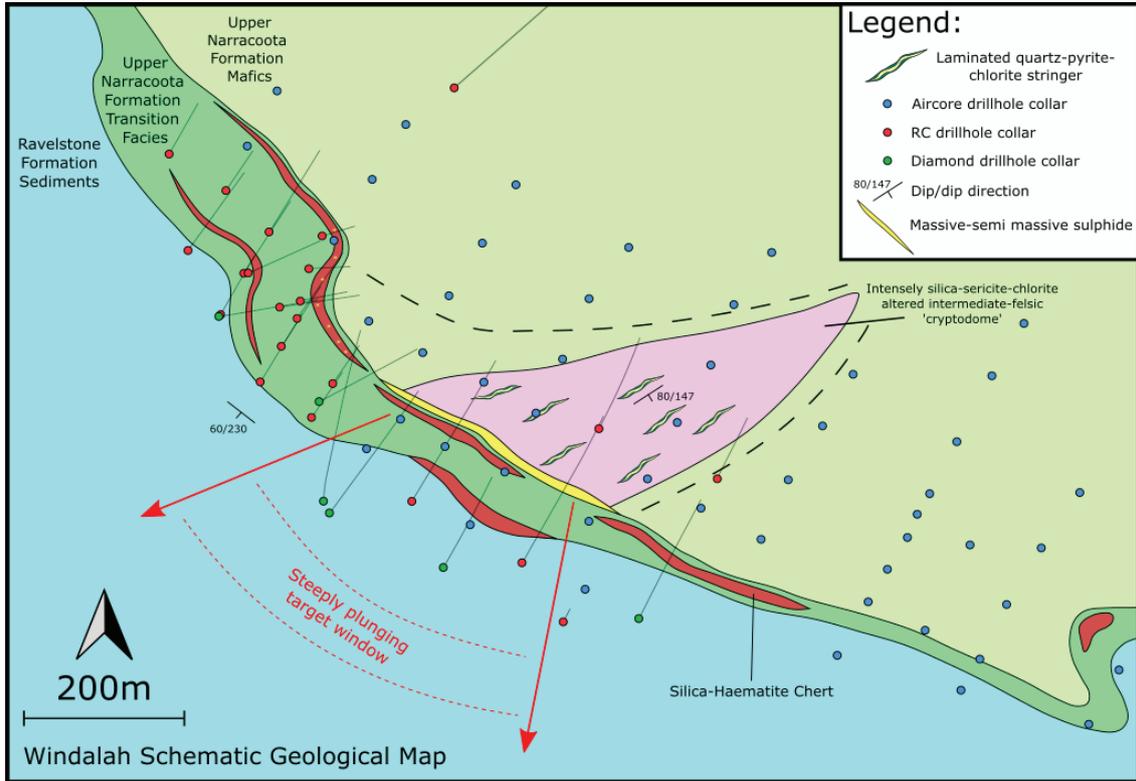


Figure 3: Schematic geological map of the Windalah prospect

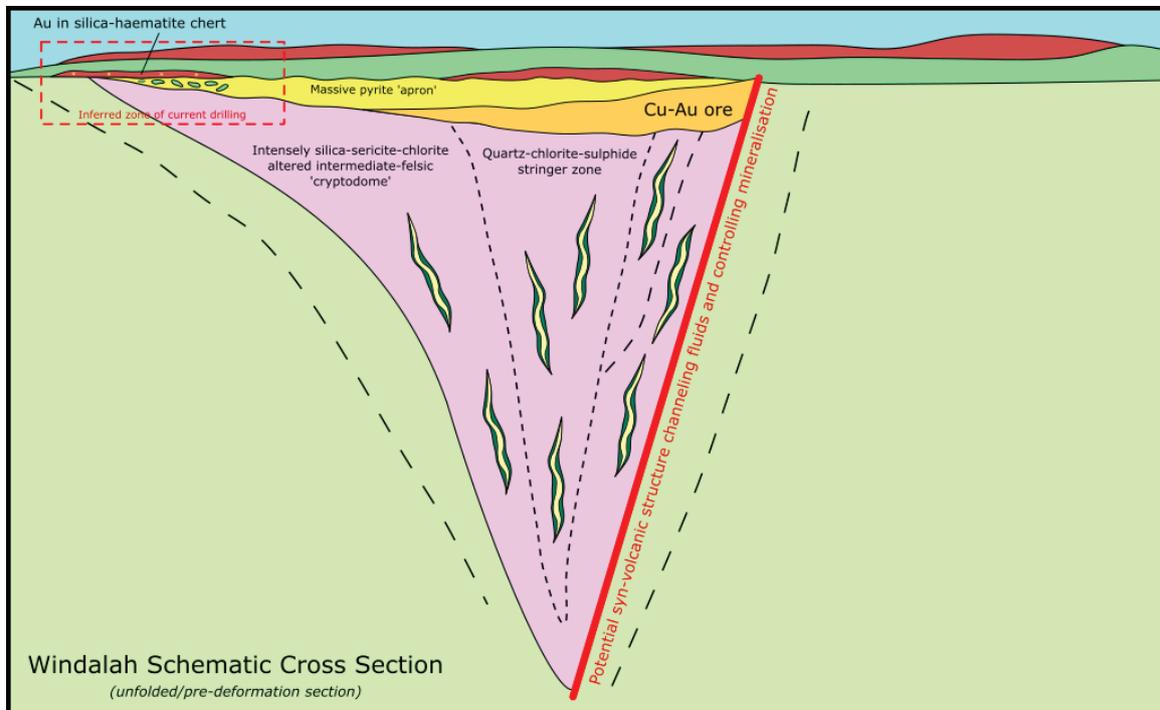
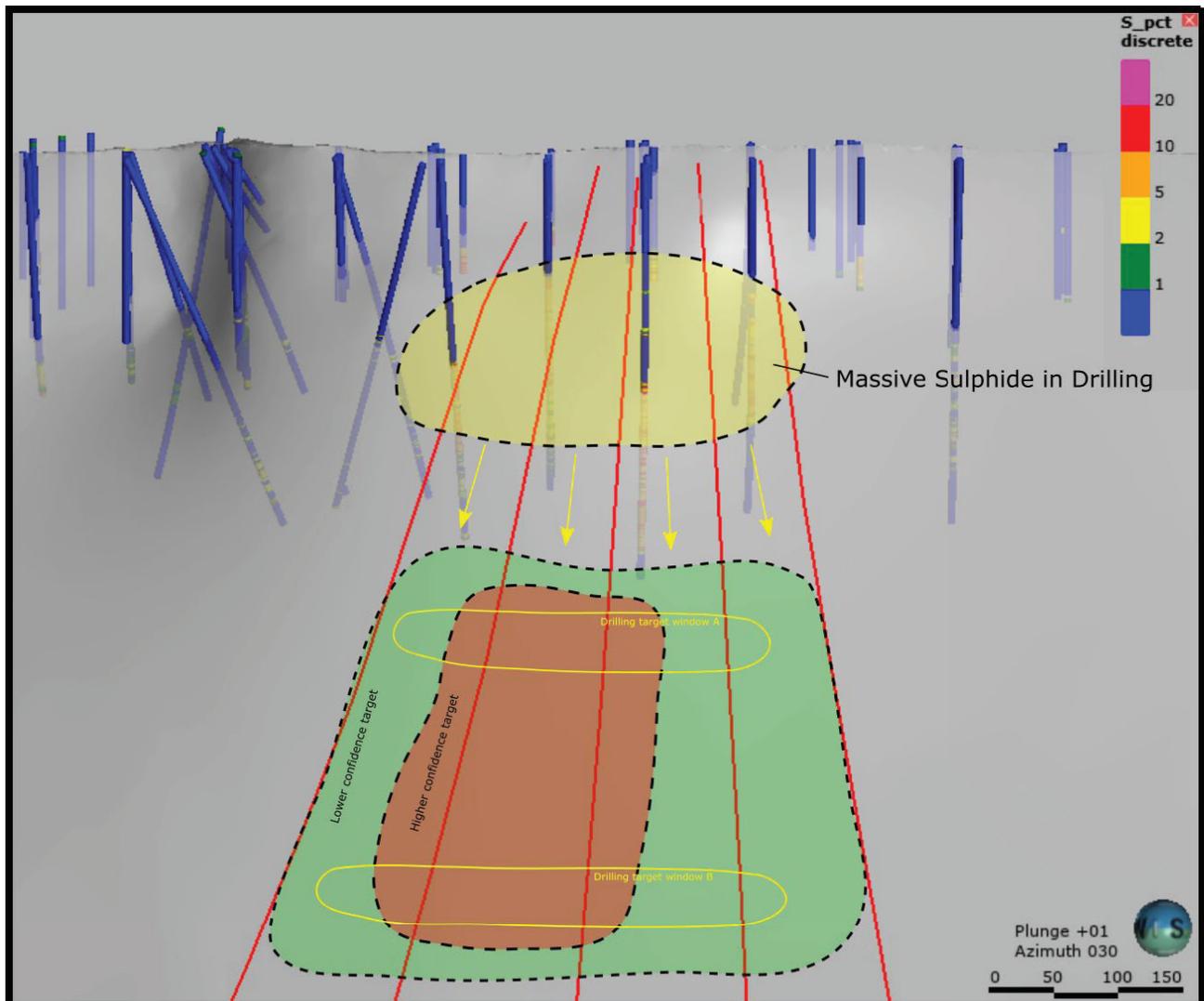


Figure 4: Conceptual pre deformation/unfolded/syngenetic cross section through Windalah2F<sup>4</sup>.

<sup>4</sup> Note that this section is entirely conceptual in nature and insufficient drilling has been completed to date to validate the legitimacy of these interpretations. The relative scale of domains within the section are not to be considered reliable estimations of the scale of potential mineralisation.



*Figure 5: Windalah deep target window resolved after recent diamond drilling. View is looking at the ore stratigraphic horizon viewed from the southwest. Red lines are trace of syn-VMS vein intersection with the ore stratigraphic horizon which defines the plunging target window to depth.*

## Regional Geological Interpretation

Windalah lies on the southern limb of the Mars Dome, which forms part of a series of double-plunging anticlinal dome structures in the northern Bryah Basin. This is termed the Aquarius trend and consists also of the Saturn and Jupiter Domes to the north-west. These dome structures connect laterally with outcropping Narracoota Formation to the northeast through a series of possible covered dome and basin structures (Figure 6).

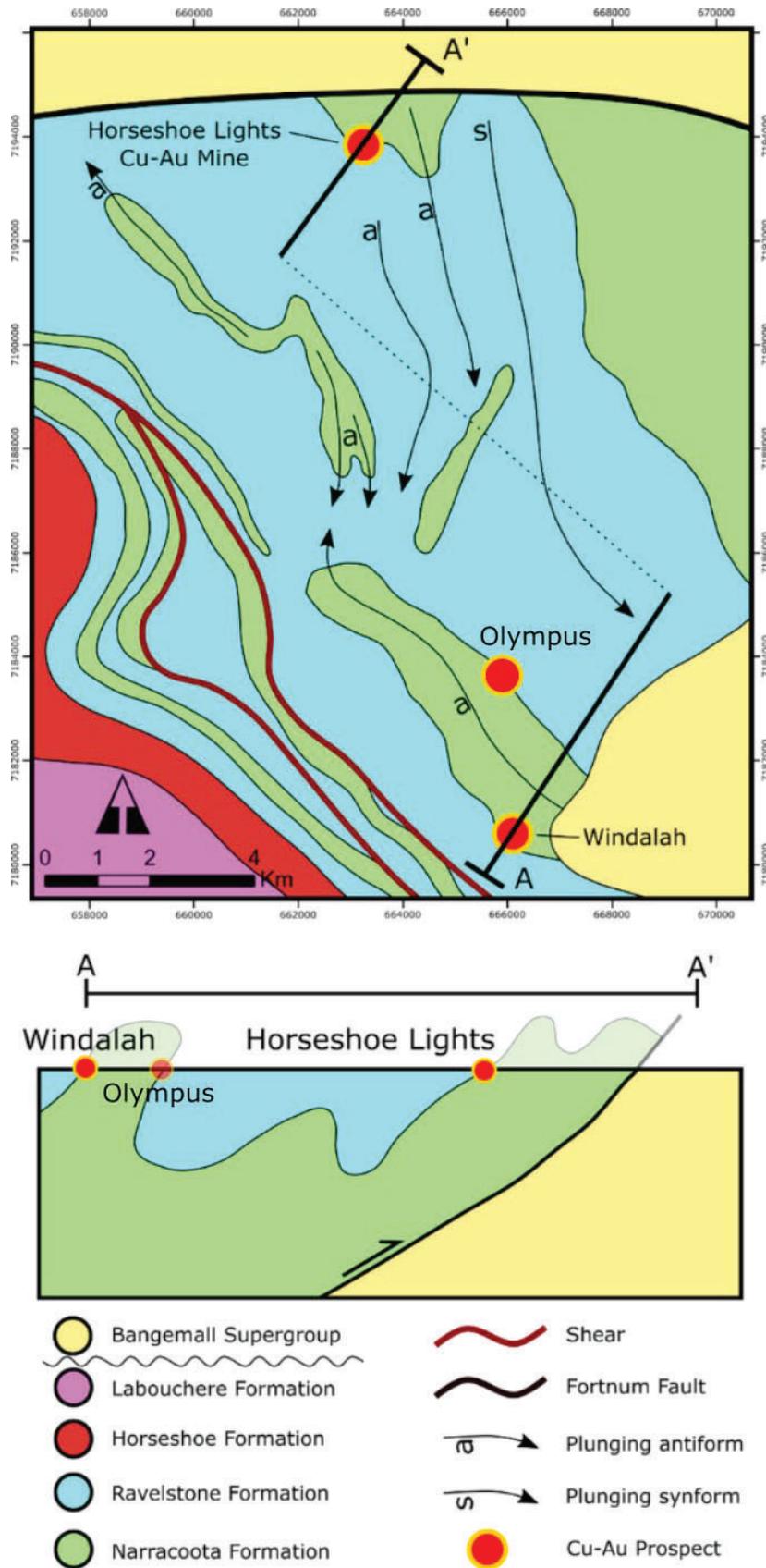


Figure 6: Schematic regional geological map and cross section of the Horseshoe Lights / Aquarius Trend area

The core of the Mars Dome consists of Upper Narracoota Formation volcanic rocks. The contact with overlying Ravelstone Formation sediments (that traces the flanks of the dome structure) is marked by an intermediate-felsic transition facies that is lithologically and geochemically similar to the Horseshoe Lights mine stratigraphy and may represent an evolved, fertile magmatic setting for the development of shallow marine VMS deposits.

### **Local Geological Interpretation**

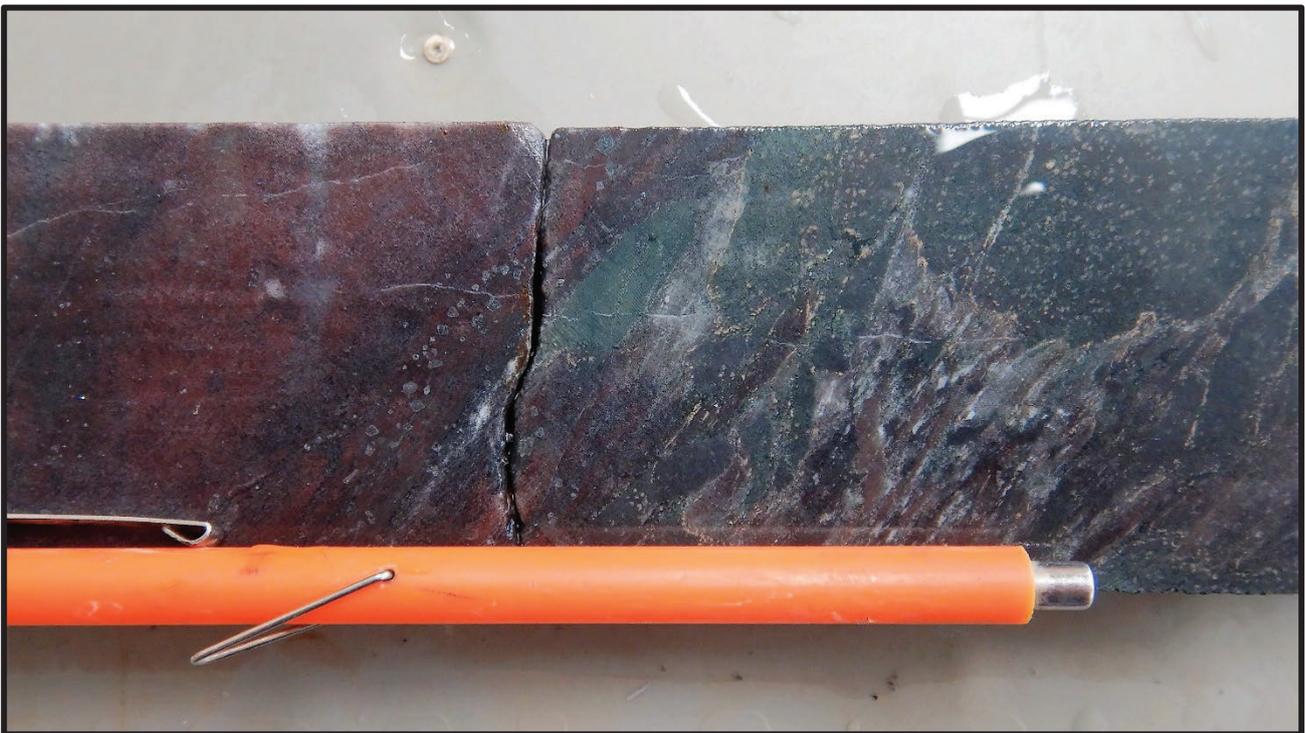
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Diamond drilling at Windalah has so far confirmed a significant high sulphidation Volcanogenic Massive Sulphide (VMS) system with copper-gold potential. Recent drilling has identified numerous lithofacies, textures, mineralogy, alterations, and styles of mineralisation that are typical of high sulphidation VMS deposits such as the nearby Horseshoe Lights Cu-Au mine. Highlight observations include:

- **VMS** lithofacies including silica-haematite chert horizons (figure 7), polymictic volcanic/volcaniclastic breccia (Figure 8); amygdaloidal/vesicular basalts and volcaniclastic rocks analogous to **Horseshoe Lights Mine Sequence**;
- **Laminated semi-massive pyrite** (Figure 1) horizon with trace copper mineralisation .
- The exhalative massive sulphide horizon (e.g. BBRD070 203.97m – 209.92m, **5.95m total @ ~44 wt% pyrite<sup>1</sup>**) is located at the **equivalent stratigraphic position of the Horseshoe Lights Cu-Au mine**, beneath the Upper Narracoota-Ravelstone Formation contact, marked by the presence of a marker silica-haematite chert unit above amygdaloidal and volcaniclastic rocks;
- This exhalative sulphide horizon also overlies a **substantial thickness of intensely silica-sericite and chlorite altered** (Figure 10), **pseudobrecciated** (Figure 11) **volcanic rocks with substantial quartz-pyrite-chlorite stringer/vein mineralisation** (e.g. BBDD001 192.44m – 328.6m, **136.16m total**).
- **Deformed, laminated quartz-pyrite-chlorite stringers** in the footwall zone (Figure 12 and Figure 13) are potentially syn-VMS as they are folded by the regional axial planar fabric;
- **Remobilised copper mineralisation** in small (usually <2cm thick) quartz and/or carbonate veins. Minor copper minerals occur on the selvage or disseminated on the margins of these veins. This is a strong indication of a proximal significant copper source;
- Supergene upgrade and visual identification of secondary **copper minerals** including **Bornite, Chalcopyrite** and **Malachite**;
- Bornite and chalcopyrite occur in remobilised tensional quartz-carbonate veins and sulphide stringers, whilst malachite is present in oxidised quartz veins and in trace quantities through part of the massive laminated pyrite;
- A clear **zoned alteration system** with intense silica-sericite alteration centred around the centre of the most significantly sulphide mineralised rocks. Distal to the system centre, the possibly identical rock types are characterised by a chlorite-carbonate alteration.

- **Large intersections of significantly sulphide enriched rocks** with various mineralisation styles including massive exhalative sulphide, stringer pyrite, laminated quartz-pyrite-chlorite veins, disseminated pyrite and breccia matrix replacement pyrite. Intersections include:
  - **146.38m @ ~15.8 wt% pyrite** (BBDD001, 182.22-328.60m) and
  - **89.17m @ ~19.5 wt% pyrite** (BBRD070, 176.64-265.81m)<sup>5</sup>.

Geological evidence indicates that Bryah Resources is currently drilling the periphery of a potentially mineralised high sulphidation VMS system, with remarkable similarities to the nearby Horseshoe Lights Cu-Au mine. Figure 3 and Figure 4 provide a schematic interpretation of the geology at Windalah and a syn-mineralisation model.



*Figure 7: Silica-haematite chert. Typical Horseshoe Lights mine sequence hanging wall stratigraphy (BBDD001 @ 117.5m)*

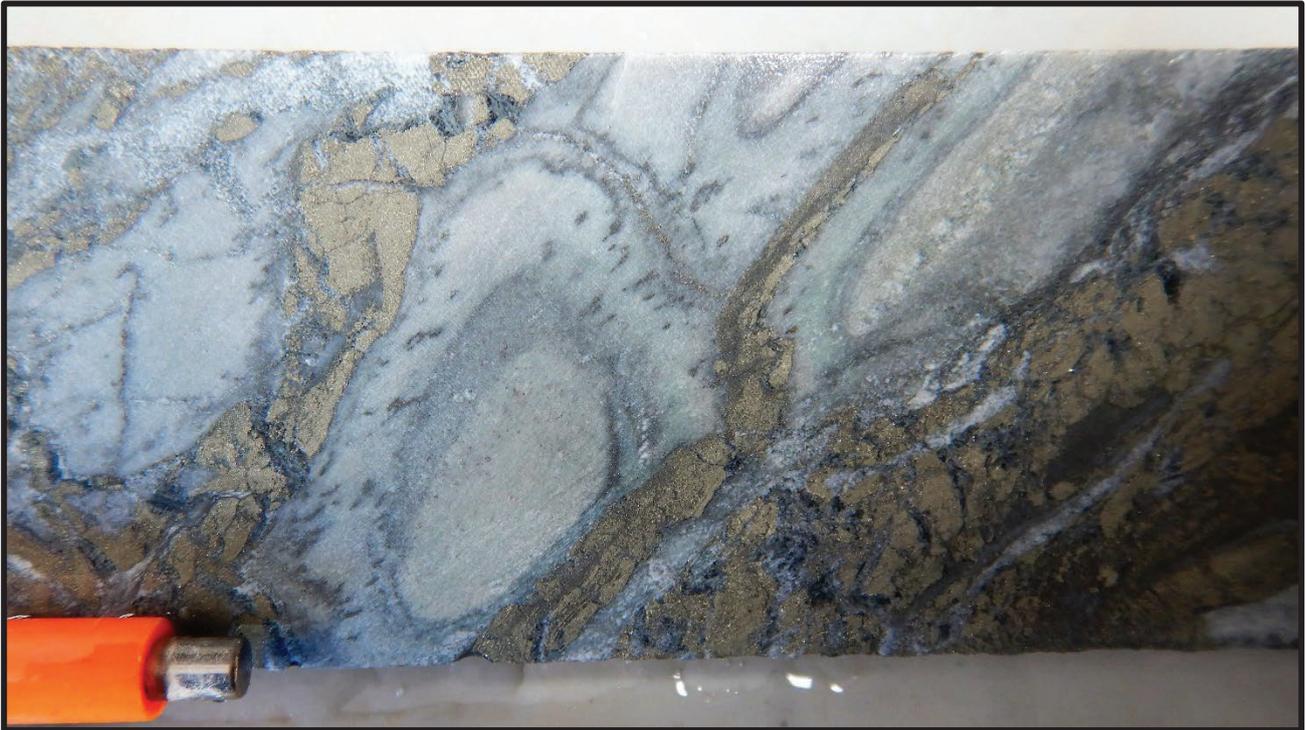
<sup>5</sup> wt% pyrite estimates are based on sulphur assays. The accepted estimation is pyrite wt% = S% x 1.87 (assuming all sulphur is in pyrite)



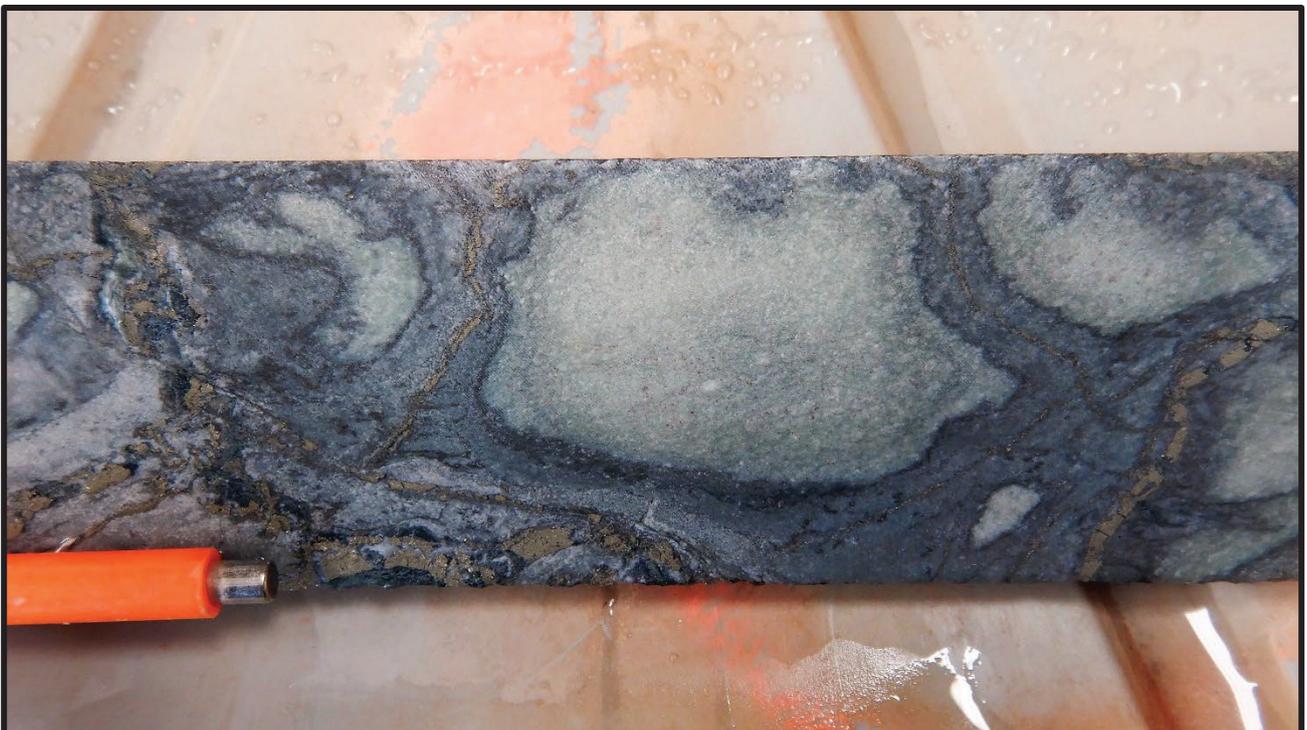
*Figure 8: Polymictic volcanic breccia with matrix sulphide replacement. Typical Horseshoe Lights mine sequence stratigraphy (BBDD001 @ 285.1m)*



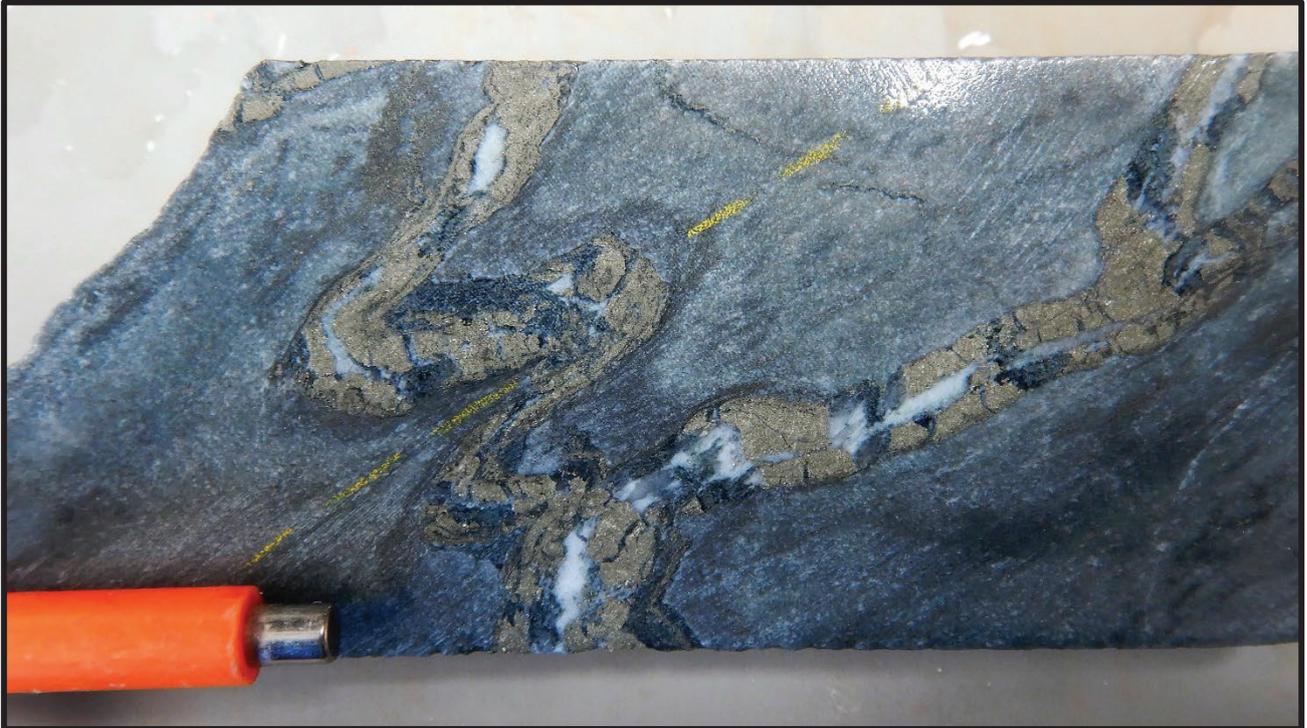
*Figure 9: Trace malachite in massive sulphide (BBRD070 @ 208.8m)*



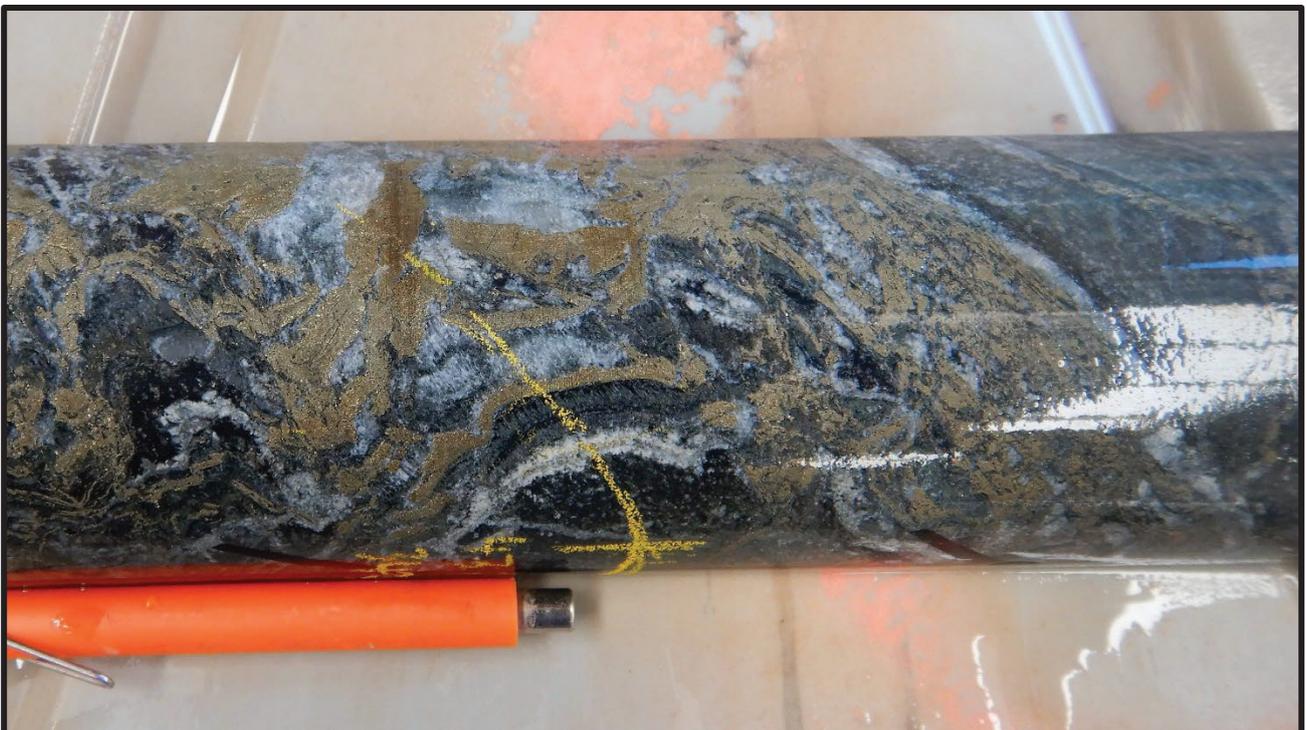
*Figure 10: Intensely silica-sericite altered footwall volcanic rock with weak pseudobreccia texture (BBDD001 @ 251.7m)*



*Figure 11: Strongly silica-sericite-pyrite-chlorite altered pseudobreccia in footwall alteration zone (BBDD001 @ 296.9m). Note occurrence also of laminated quartz-chlorite-pyrite stringers*



*Figure 12: Laminated syn-VMS quartz-pyrite-chlorite veins in sericite altered footwall volcanics, folded in axial planar foliation (BBDD001 @ 271.4m)*



*Figure 13: Second example of laminated syn-VMS quartz-pyrite-chlorite veins folded and cleaved in regional axial planar foliation (BBRD070 @ 245.9m)*

*For further information, please contact:*

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*This announcement has been produced in accordance with the Company's published continuous disclosure policy and has been approved by the Board*

## **ABOUT BRYAH RESOURCES**

Bryah's assets are all located in Western Australia, a Tier One global mining and exploration jurisdiction. Strategically the Projects are energy metals focused, or able to exploit synergies of geological knowledge, locality and exploration.

Gabanintha, near Meekatharra, has a JORC 2012 Mineral Resource for Cu, Ni, Co<sup>6</sup> and additional structural gold potential. The prospective Bryah Basin licences cover 1,048km<sup>2</sup> and have a potential new Volcanogenic Massive Sulphide (VMS) 'Horseshoe Lights type' mine analogue at the Windalah prospect, and multiple other similar untested targets. The area also contains extensive outcroppings of manganese, the subject of a substantial \$7M joint venture with ASX listed OM Holdings Limited (ASX: OMH). OMH is a vertically integrated manganese producer and refiner with a market capitalisation of over \$600m. Bryah and OMH have an excellent working relationship, with OMH having already spent over \$3 million to earn-in to the Manganese Rights of the Project.

The copper nickel resource and recently identified gold mineralisation at Gabanintha will be the subject of further drill definition and a prefeasibility study to integrate the project with the Australian Vanadium Project (ASX: AVL). The resource has been defined by the drilling efforts of AVL in the development of its vanadium project and enabled Bryah to define a base metal resources inventory.

Bryah's base metals inventory at Gabanintha and manganese JV have a clear pathway to production, which will be significantly advanced in 2022 by the commencement and completion of metallurgical feasibility studies at both projects.

The Company's new Lake Johnston tenements are prospective for battery metals lithium and nickel and following the grant of these tenements, will undergo mapping and evaluation ahead of drilling. The corridor near Lake Johnson contains significant mines and discoveries of Ni and Li, including the Mount Holland Lithium Mine and the historical Maggie Hays/Emily Ann nickel deposits.

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<sup>6</sup> See ASX announcement dated 1<sup>st</sup> June 2021 '31.3 MT Ni-Cu-Co Mineral Resource at Gabanintha

## **Forward Looking Statements**

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*This report may contain certain “forward-looking statements” which may not have been based solely on historical facts, but rather may be based on the Company’s current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward looking statements are subject to risks, uncertainties, assumptions and other factors which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Readers should not place undue reliance on forward looking information. The Company does not undertake any obligation to release publicly any revisions to any “forward looking statement” to reflect events or circumstances after the date of this report, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.*

## **COMPETENT PERSON STATEMENT – EXPLORATION RESULTS AND EXPLORATION TARGETS**

*The information in this announcement that relates to Exploration Results is based on information compiled by Mr Tony Standish, who is a Member of the Australian Institute of Geoscientists. Mr Standish is a consultant to Bryah Resources Limited (“the Company”). Tony Standish has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Tony Standish consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.*

*Where the Company refers to Exploration Results in this announcement (referencing previous releases made to the ASX), the Company is not aware of any new information or data that materially affects the information included in the relevant market announcements.*