

QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDING 31 MARCH 2021

HIGHLIGHTS:

Bryah Basin Copper-Gold Project (100%)

- Major drilling campaign (18,000 metres) commenced
- Phase 1 RC drilling program (8 holes for 1,925m) at significant VMS coppergold target at Windalah completed and assays pending
- Down Hole Electromagnetic Survey of 5 RC drill holes underway

Bryah Basin Manganese Joint Venture (60% JV Interest)

- Diamond drilling completed (7 holes for 201m)
- Scanning of diamond drill core using XRF technology completed ahead of beneficiation testwork and mineral resource estimate
- OM (Manganese) Limited funded project expenditure to increase JV Interest to 40%

Gabanintha Project (100%)

- Bonanza results recorded in gold assaying of samples from previous drilling. Best gold intercept:
 - 19RRC006 10m @ 27.5 g/t Au from 53m, including 4m @ 64.3 g/t Au from 54m, which includes 1m (55-56m) @ 182.0 g/t Au,
- Further 1,400 samples submitted to laboratory for Au, Pt and Pd analysis
- Conditional agreement executed for the sale of Tumblegum South Gold deposit to Star Minerals Limited. Consideration is \$500,000 cash and 9 million shares (total value of \$2,300,000), plus 7 million performance rights

Corporate

• Cash in bank at 31 March 2021 was \$1.36 Million.

Address Level 1, 85 Havelock Street West Perth WA 6005 Tel: +61 8 9321 0001 Email: info@bryah.com.au ASX Code: BYH ABN: 59 616 795 245 Shares on issue: 153,540,508 Latest Share Price: \$0.073 Market Capitalisation: \$11.2M Projects

Bryah Basin – Copper, Gold, Manganese Gabanintha – Gold, Copper bryah.com.au



This report summarises the exploration and corporate activities of Bryah Resources Limited ("Bryah" or "the Company") during the quarter ended 31 March 2021.

Management Comments

Commenting on the recent activities of the Company, Managing Director Neil Marston said,

"The Company has had an exciting start to the 2021 year. We have commenced a major drilling campaign at our flagship Bryah Basin project with Phase 1 drilling at the Windalah prospect completed this week. Drilling at Windalah is testing a large coincident geochemical and geophysical anomaly, with very high results in some key pathfinder minerals, indicating the potential for a Volcanogenic Massive Sulphide copper-gold deposit at depth.

"We also have a down hole electromagnetic survey team on site at present testing some of the holes just completed, with follow-up drilling activities to commence in the months ahead.

"At Gabanintha we have received some amazing gold assay results from the latest batch of samples tested, including **10 metres at 27.5 g/t** gold from 53 metres, with **1 metre at 182 g/t gold** from 55 metres. These samples are from drilling completed by Australian Vanadium Limited in 2019 and highlight the potential for significant gold mineralisation to be present in this area. We have a further 1,400 samples in the laboratory for gold assaying at present with results due next month.

"We have also signed an agreement to sell the Tumblegum South gold deposit at Gabanintha for cash and shares with a combined value of \$2.3 million, plus 7 million performance rights which convert to shares once certain milestones are achieved.

"In addition, we have continued progressing our manganese joint venture activities which are fully funded by our joint venture partner, OM (Manganese) Limited. In the next quarter we expect to complete beneficiation testwork on diamond core, a mineral resource estimate and geophysical surveys ahead of the next round of manganese drilling in the September quarter."

Exploration Activities

Bryah Basin Copper-Gold Project (BYH – 100%)

The Bryah Basin project covers approximately 1,125 km² in central Western Australia. The project is located close to several mining operations including the high-grade Volcanogenic Massive Sulphide (VMS) DeGrussa copper-gold mine operated by Sandfire Resources NL (ASX:SFR) and the Fortnum gold mine operated by Westgold Resources Limited (ASX:WGX).

Bryah's tenements cover large areas of under-explored ground adjacent to the copper-gold deposit at Horseshoe Lights which is hosted in similar aged volcanic and sedimentary rocks to the DeGrussa copper-gold mine. The Bryah Basin also has several historical and current manganese mines including the Company's Horseshoe South Manganese Mine (see Figure 1).





Figure 1 - Bryah Basin Project Location Plan

Drilling

Subsequent to the end of the quarter, the Company started a major drilling program at the Windalah Prospect. The Company plans to drill approximately 8,000 metres of Reverse Circulation (RC) /diamond drilling at the Windalah Prospect to test below the significant multi-element VMS pathfinder minerals anomaly identified in earlier soil sampling and drilling, and where previous drilling has recorded some significant gold results.

The Company also plans to complete over 10,000 metres of aircore (AC) drilling across several prospect locations in 2-3 phases over the coming months.

The deep drilling at Windalah is planned to be done in three phases to enable the completion and interpretation of down hole electromagnetic (DHEM) surveys between each drilling phase.

Phase 1 drilling has been completed this week with 8 holes drilled for 1,925 metres. Of these holes, three holes (BBRC062, 63 and 68) achieved close to their target depths of up to 350 metres. Five holes did not reach target depth due to the ground conditions and may be extended with diamond tails in the following phase.

All samples from the drilling have been dispatched to Perth for analysis and results are expected to be received from the laboratory in the coming weeks.

Collar locations of the new drill holes and anomalous copper and gold results from earlier drilling are shown in Figure 2.





Figure 2 - Windalah Prospect - Drill Hole Location Plan.



DHEM Survey

A DHEM survey at the Windalah Prospect is currently underway. The plan is to survey drill holes BBRC062, 63, 65, 67 & 68 in the coming days.

Planned Activities

The next phase of RC/diamond drilling at Windalah will be undertaken once the assay results of the Phase 1 program and DHEM surveys have been received and fully analysed.

During the next quarter, an aircore drilling program will be completed over parts of the Mars Dome, including at Windalah.

The Company is also planning to undertake an extensive soil sampling program over its tenements located to the west of the Fortnum gold mine, ahead of AC drilling in that area.

Bryah Basin Manganese Joint Venture (BYH - 60% JV Interest)

In April 2019, Bryah executed a Manganese Farm-In and Joint Venture Agreement ("JV Agreement") with OMM, a wholly owned subsidiary of ASX-listed OM Holdings Limited (ASX:OMH). The JV Agreement applies to the rights to manganese only over approximately 600 km² of the entire tenement package held by the Company in the Bryah Basin. The Manganese JV includes the Horseshoe South Manganese Mine, which is the largest historical manganese mine in the region (see Figure 3).

Under Stage 1 of the JV Agreement, OMM funded \$500,000 of project expenditure which yielded highly encouraging manganese drilling results¹. In August 2019, OMM secured an initial 10% interest in the Manganese Joint Venture ("JV"), following payment of a \$250,000 Exercise Fee.

Under Stage 2 of the Agreement, OMM can progressively fund \$2.0 million of exploration expenditure in four tranches, to earn up to a 51% interest in the JV by 30 June 2022. During the quarter OMM completed Tranche 3 funding of \$500,000 to earn a 40% JV interest.

It is anticipated that Tranche 4 of \$500,000 will be funded in Q2 and Q3 of 2021 which will then increase OMM's total JV interest to 51%.

Once OMM has earned a 51% JV interest Bryah may elect for OMM to fund the next \$1.8 million of project expenditure for OMM to earn a 60% JV Interest. Thereafter Bryah may elect for OMM to fund an additional \$2.5 million of project expenditure for OMM to earn a 70% JV Interest.

Bryah is Project Manager of the JV until OMM has earned a 51% JV interest and has elected to be Project Manager.

Diamond Drilling

During the quarter, a diamond drilling program to recover core samples from the Brumby Creek and Horseshoe South Extended areas for analysis density and beneficiation testwork was completed².

In total 7 holes were completed with 2 holes for 65 metres drilled at the Horseshoe South Extended area and 5 holes for 135.9 metres drilled at the Brumby Creek Project.

¹ See Quarterly Activities Report dated 31 October 2019 for full details.

² See BYH ASX Announcement dated 19th February 2021 for full details.





Figure 3 - Bryah Basin Manganese JV - Tenement Location Plan

Core Scanning

Uncut diamond core was submitted during the quarter to a laboratory in Perth to complete a nondestructive analysis of the full core length. This novel technology utilizing a Mineralyzer CS drill core scanner uses X-Ray Fluorescence (XRF) technology to deliver assays at 10cm intervals along the length of the core. The results of this core scanning have been received in the past few days and is in the process of being fully evaluated. Interpretation of this data at this resolution will now be undertaken to design a follow-up beneficiation testwork program.

Conditional Sale

During the quarter, Bryah received advice that the conditional offer for a 100% cash purchase of its interest in the Bryah Basin Manganese JV was withdrawn.

Planned Activities

Geological mapping of extensive untested areas of the Horseshoe Range has commenced to identify additional areas for manganese exploration.

During the next quarter, the Company plans to undertake a program of manganese beneficiation testwork which will most likely include Ore-sorting and Dense Media Separation trials.



The core samples will also be used to obtain initial comminution data for use in future studies.

Once the beneficiation testwork has been completed, the Company intends finalising mineral resource estimates for the Horseshoe South, Brumby Creek and Black Hill areas.

A program of ground geophysics is being planned over untested areas of the Horseshoe Range with the aim of identifying potentially covered manganiferous zones to be tested with the next RC drilling program in the September 2021 quarter.

Gabanintha Project

The Gabanintha Project covers 170 km² of ground approximately 40 km south of Meekatharra in Western Australia and includes the Tumblegum South Gold Deposit (see Figure 4).

Bryah holds the rights to all minerals except Vanadium, Uranium, Cobalt, Chromium, Titanium, Lithium, Tantalum, Manganese & Iron Ore ("Excluded Minerals"), which are retained by Australian Vanadium Limited (ASX:AVL).



Figure 4 - Gabanintha Project Location Map



Gold Sampling

Historical sampling of the vanadium-titanium-magnetite deposit for gold (Au) has been limited. Prior to 2020, gold sampling was limited to sporadic analyses, totaling 233 analyses for gold, completed largely in 2010.

The drill samples were previously analysed by XRF for a suite of elements related to vanadium exploration and have been stored by Australian Vanadium Limited in a Perth warehouse.

Sampling of 217 drill pulps in late 2020 highlighted the presence of zones of anomalous gold, adjacent to, or within the high-grade vanadium-titanium-magnetite domain at the Project, with the strongest gold mineralisation occurring in proximity to cross cutting regional faults.

An additional 247 pulps from 5 diamond and 16 RC holes drilled at the Gabanintha were submitted during the quarter to follow up on the earlier results. Sample selection was based on the occurrence of high sulphur and/or copper plus known structure intercepts. Samples were not analysed for the full suite of Platinum Group Elements (PGEs) but did include Platinum (Pt) and Palladium (Pd) in addition to Au fire assay analysis.

A long section of the vanadium deposit (see Figure 5) shows the location of holes which have been partially assayed for gold, with highlights on the best intercepts received to date.

The best down hole width gold intercepts returned from this latest sample batch were:

- 19RRC006 10m @ 27.5 g/t Au from 53m, including 4m @ 64.3 g/t Au from 54m, which includes 1m (55-56m) @ 182.0 g/t Au, and 1m @ 6.4 g/t Au from 65m.
- 19RRC011 2m @ 1.1 g/t Au from 125m, 1m @ 8.2 g/t Au from 132m and 2m @ 1.6 g/t Au from 136m.

The above drill holes are highlighted on the long section (Figure 5), that shows the proximity of these intercepts to the modelled large-scale regional cross faults.³ The intercept in 19RRC006 and its relationship to the fault zone is shown on a local grid cross section in Figure 6.

It should be noted that the adjacent drill hole 19RRC007 has not yet been fully assayed for gold and the bottom 3 metres of the hole appear to have terminated in a sheared/fault structure.

Geological Interpretation

There are several major faults which have broken up the vanadium deposit into discrete blocks over its entire length and these all now represent gold targets (see Figure 4).

A geological map showing the drill hole locations and mapped cross faults in the vicinity of hole 19RRC006 is shown in Figure 7. The extent of these faults outside of the vanadium deposit is not yet known.

It is possible that these cross faults have opened up pathways for secondary mineralisation to form, predominantly containing gold as well as copper.

 $^{^{\}rm 3}$ See BYH ASX Announcement dated $30^{\rm th}$ March 2021 for full details.





Figure 5 – Long Section (Local Grid) view of the Project with all gold sampling locations and highlight intercepts

The long section of the vanadium deposit in Figure 5 highlights the major cross faults which separate each block of the deposit. Each one of these offsetting cross faults has the potential to host secondary gold and copper mineralisation and accordingly will need further investigation as they have largely not been drill tested to date.

With these latest drill results the Company is becoming more confident that there is an association between the presence of large-scale regional fault-related brittle deformation of the contacts of the vanadium deposit, and the gold mineralisation.

Figure 8 below shows an oblique view looking down the major faults shown in Figure 7. These faults are from the interpretation within the 3D geological model for the vanadium deposit. Gold sampling of RC holes drilled during 2019 to delineate this fault zone has preferentially returned good gold intercepts.

Follow-Up Assays

As a result of the recent results the targets to test for gold has now broadened from focusing on the high-grade vanadium zone to also examining the important cross-cutting fault zones, of which there are several within our project.

Bryah has recently submitted approximately 1,400 archived pulps for Au, Pt and Pd analysis. It is expected that these results will be available in May 2021.

An RC drilling program to test the mapped cross fault zone is expected to follow. Earlier drilling has been largely oblique to the fault zones so we expect that follow-up drilling will see the drill rigs turned off-section to properly test these cross faults. An early aim will be to test how far gold mineralisation occurs along strike and at depth within these faults.





Figure 6 – Local Grid Cross Section at 112,500mN with gold intercept in hole 19RRC006



Figure 7 – Geological Map with Drill Hole Locations and Gram Metre Intercepts (MGA95 Zone50)





Figure 8 - Oblique View of Fault Zone and New Intercepts



Sale of Tumblegum South Gold Deposit

During the quarter, the Company executed a Tenement Transfer Agreement ("Agreement"), in respect to the Tumblegum South gold deposit ("Deposit") located within the Gabanintha Project (see Figure 4). 4

The Agreement is with Star Minerals Limited, an unlisted public company and its wholly owned subsidiary ("Star Minerals").

The total consideration Bryah will receive under the Agreement for the Deposit is:

- (a) \$500,000 cash;
- (b) 9,000,000 fully paid ordinary shares in Star Minerals (valued at \$1,800,000);
- (c) 3,000,000 Class A Performance Rights, vesting upon a Measured Mineral Resource report; and
- (d) 4,000,000 Class B Performance Rights, vesting upon commencement of commercial gold production.

Completion is subject to and conditional upon each of the conditions precedent set out below being satisfied or waived on or before 31 May 2021 (Sunset Date):

- (a) Star Minerals receiving conditional approval from ASX Limited ("ASX") to admit its securities to official quotation on ASX on terms acceptable to Star Minerals (acting reasonably);
- (b) Star Minerals receiving, to the extent required by the Mining Act, consent of the Minister (or an officer of the Department duly authorised under section 82(1)(d) of the Mining Act) to registration of the transfer of the tenements, M51/888 and L51/112;
- (c) Each party obtaining all required authorisations necessary to give effect to the Agreement;
- (d) Bryah obtaining the approval of its shareholders for the effective disposal of its mineral rights over the Deposit for the purposes of ASX Listing Rule 11.4 and all other purposes; and
- (e) Kirkalocka Gold SPV Pty Ltd ("Kirkalocka") consenting to the assignment to and assumption by Star Minerals of Bryah's rights and obligations under the Development Agreement⁵ and Bryah, Star Minerals and Kirkalocka entering into a Deed of Covenant.

Since the execution of the Agreement Bryah has obtained shareholder approval as set out in paragraph (d) above and the parties have agreed to extend the Sunset Date to 31 July 2021.

It is expected that the Star Mineral shares issued to Bryah at completion will be subject to a 1 year escrow period.

The Inferred Mineral Resource for the Deposit is **600,000 tonnes** @ **2.2 g/t Au for 42,500 ounces gold** using a cut-off grade of 0.3g/t Au.⁶

⁴ See BYH ASX Announcement dated 9 March 2021 for full details.

⁵ See BYH ASX Announcement dated 23 December 2020 for full details.

⁶ See BYH ASX Announcement dated 29 January 2020 for full details of the Mineral Resource Estimate.



Planned Activities

The Company is well advanced in updating the nickel-copper-cobalt mineral resource for the vanadium-titanium-magnetite deposit utilizing all the drilling completed by AVL in 2019 and 2020.

The current Inferred Mineral Resource is 14.3Mt @ 208ppm Cobalt, 666ppm Nickel, 217ppm Copper and 0.16% Sulphur which only relates to Fault Block 20⁷.

The update Mineral Resource estimate will include material within and below the 3 open pits as designed in AVL's latest Pre-Feasibility Study⁸ which contemplates mining operations over a 25-year mine life. The Mineral Resource update should be available for reporting in May 2021.

Corporate Activities

Capital Structure

There was no movement in the share capital structure of the Company during the quarter. As at 31 March 2021, the Company had 153,540,508 ordinary shares on issue.

Cash Position

As at the 31 March 2021, the Company had \$1.36 Million (31 December 2020: \$1.96 Million) in cash, which excluded funds provided by OMM and held on behalf of the Bryah Basin Manganese JV.

Additional ASX Information

During the quarter, the \$31,000 of exploration and evaluation expenditure capitalised comprised of geological consultants, tenement costs and general exploration expenditure.

No production and development activities were undertaken during the quarter.

The aggregate amount of payments to related parties and their associates included in Section 6.1 of the Appendix 5B cash flows from operating activities was \$109,000, comprising Directors' fees, salaries and superannuation.

The board of directors of Bryah Resources Limited has authorised this announcement to be given to the ASX.

For further information, please contact:

Neil Marston Managing Director *Tel: +61 9321 0001*

⁷ See BYH ASX announcement dated 28 November 2018 for full details.

⁸ See AVL ASX announcement dated 22 December 2020 for full details.



Table 1 - Tenement Information

Location		or the Quarter Tenements	Economic	Notes	Change in
Location	Project	Tenements	Interest	Notes	Quarter %
Western Australia	Gabanintha	EE1/040	100% ^{1,2}		Nil
	Gabanintha	E51/843	100% ^{1,2}		
		E51/1396			Nil
		E51/1534	100% ^{1,2}		Nil
		E51/1685	100% ^{1,2}		Nil
		E51/1694	100% ^{1,2}		Nil
		E51/1695	100% ^{1,2}		Nil
		P51/2566	100% ^{1,2}		Nil
		P51/2567	100% ^{1,2}		Nil
		P51/2634	100% ^{1,2}		Nil
		M51/878	100% ^{1,2}		Nil
		M51/888	100% ^{1,2}		Nil
		L51/112	100%	Tenement Application	Nil
Western Australia	Bryah Basin	P52/1627	100%		Nil
		E52/3014	100%		Nil
		E52/3236	100% ^{3,6}		Nil
		E52/3237	100% ^{3,6}		Nil
		E52/3238	100% ³		Nil
		E52/3240	100% ^{3,6}		Nil
		E52/3349	100% ^{2,6}		Nil
		E52/3401	100% ^{4,6}		Nil
		E52/3453	100%4		Nil
		E52/3454	100%4		Nil
		E52/3508	100% ⁶		Nil
		E52/3700	100%		Nil
		E52/3705	100%		Nil
		E52/3726	100%		Nil
		E52/3703	100%		Nil
		E52/3739	100%		Nil
		E52/3725	100%		Nil
		E52/3796	100%		Nil
		E52/3865	100%		Nil
		M52/1068	60% ⁵	Manganese Rights only	-10%
		E52/1557	60% ⁵	Manganese Rights only	-10%
		E52/1860	60% ⁵	Manganese Rights only	-10%
		M52/806	100%6		Nil

Note 1: Bryah Resources Limited holds the Mineral Rights for all minerals except V/U/Co/Cr/Ti/Li/Ta/Mn & iron ore only. Australian Vanadium Limited retains 100% rights in V/U/Co/Cr/Ti/Li/Ta/Mn & iron ore on the Gabanintha Project.

Note 2: Australian Vanadium Limited retains a 0.75% Net Smelter Return Royalty

Note 3: Pet FC Pty Limited retains a 0.75% Net Smelter Return Royalty

Note 4: Jalein Pty Limited retains a 0.75% Net Smelter Return Royalty

Note 5: Bryah Resources Limited holds an 60% interest in the rights to prospect, explore, mine and develop manganese ore ("Manganese Rights"). OM (Manganese) Limited has earned a 40% interest in these Manganese Rights.

Note 6: OM (Manganese) Limited has earned a 40% interest in the Manganese Mineral Rights only on these tenements (southern portion of E52/3236 only). Bryah retains 100% rights to all other minerals on these tenements.

Note 7: Compulsory partial surrenders of E52/3236, E52/3237 and E52/3238 as required under the Mining Act were completed during the quarter.



About Bryah Resources Limited

Bryah Resources Limited is a copper-gold-manganese focused explorer with 2 projects located in central Western Australia, being the 1,125km² Bryah Basin Project and the 170km² Gabanintha Project.

The Bryah Basin is host to the high-grade copper-gold mines at DeGrussa, discovered by Sandfire Resources Limited in 2009, and at Horseshoe Lights, which was mined until 1994. The Bryah Basin also has several historical and current manganese mines including the Company's recently acquired Horseshoe South mine. The Company has secured a joint venture agreement with OM (Manganese) Limited in respect to its manganese rights only on approximately 600 km² of its Bryah Basin tenement holdings.

At Gabanintha, Bryah holds the rights to all minerals except Vanadium, Uranium, Cobalt, Chromium, Titanium, Lithium, Tantalum, Manganese & Iron Ore (Excluded Minerals). Australian Vanadium Limited retains 100% rights in the Excluded Minerals on the Gabanintha Project. Bryah has announced a maiden Inferred Mineral Resource at the Tumblegum South Prospect at Gabanintha of **600,000 tonnes @ 2.2 g/t Au for 42,500 oz Au**⁹.

Competent Persons Statement – Exploration Results

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"). Mr 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'. Mr 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.

Competent Person Statement — Mineral Resource Estimation

The information in this announcement that relates to Mineral Resources (see BYH ASX announcement dated 29 January 2020) is based on and fairly represents information compiled by Mr Ashley Jones, Consultant with Kamili Geology Pty Ltd. Mr Jones is a member of the Australasian Institute of Mining and Metallurgy (AusIMM).

The Company confirms that it is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Mineral Resource estimate with that announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not materially changed from the original announcement.

Forward Looking Statements

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.

⁹ See BYH ASX Announcement dated 29 January 2020 for full details.