# **ASX Announcement**

15 January 2020



# QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDING 31 DECEMBER 2019

#### **HIGHLIGHTS:**

- Drilling program at Tumblegum South Gold-Copper Prospect completed in October 2019.
- Best assay results from the program (16 Reverse Circulation holes for 1,583m):

BGRC033 - 4 metres @ 7.83 g/t Au and 0.23% Cu (119-123m),

including 1 metre @ 30.24 g/t Au and 0.39% Cu

BGRC036 - 5 metres @ 3.81 g/t Au and 0.28% Cu (99-104m),

including 1 metre @ 12.54 g/t Au and 0.78% Cu

➤ BGRC040 - 5 metres @ 2.21 g/t Au and 0.16% Cu (92-97m),

including 1 metre @ 6.11 g/t Au and 0.28% Cu

> BGRC027 - 1 metre @ 6.71 g/t Au (24-25m), 2 metres @ 2.88 g/t Au (33-35m) and

1 metre @ 3.11g/t Au (69-70m), and

▶ BGRC038 - 1 metre @ 13.43 g/t Au and 0.51% Cu (108-109m).

- Gravity survey completed at Windalah Copper-Gold Prospect in the Bryah Basin Project.
- Bryah Basin Manganese Joint Venture commenced activities with OM (Manganese) Limited funding \$2.0 million of exploration to earn a 51% JV Interest. Detailed ground mapping and aerial surveying undertaken during the quarter.
- Upcoming Activities:
  - Completion of Mineral Resource Estimation for Tumblegum South Prospect;
  - > Drilling at Windalah Copper-Gold Project in Bryah Basin, and
  - > Bryah Basin Manganese exploration and drilling, fully funded by OM (Manganese) Limited.
- Cash in bank at 31 December 2019 was \$1.5 Million.

This report summarises the exploration and corporate activities of Bryah Resources Limited ("Bryah" or "the Company") during the quarter ended 31 December 2019.

## Management Comments

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

"This last quarter has seen the Company successfully raise funds and immediately apply them to resource definition drilling at the Tumblegum South Gold-Copper Prospect in preparation for an initial Mineral Resource Estimation, which is well advanced. Preparations are also well advanced to commence drilling activities in the Bryah Basin in early 2020."

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: 100,873,840 Latest Share Price: \$0.049 Market Capitalisation: \$4.94M **Projects** 

Bryah Basin – Copper, Gold, Manganese Gabanintha – Gold, Copper

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# **Exploration Activities**

### Gabanintha Project

The Gabanintha Project covers 170 km<sup>2</sup> of ground approximately 40 km south of Meekatharra in Western Australia and includes the Tumblegum South Gold-Copper Prospect (see Figure 1).

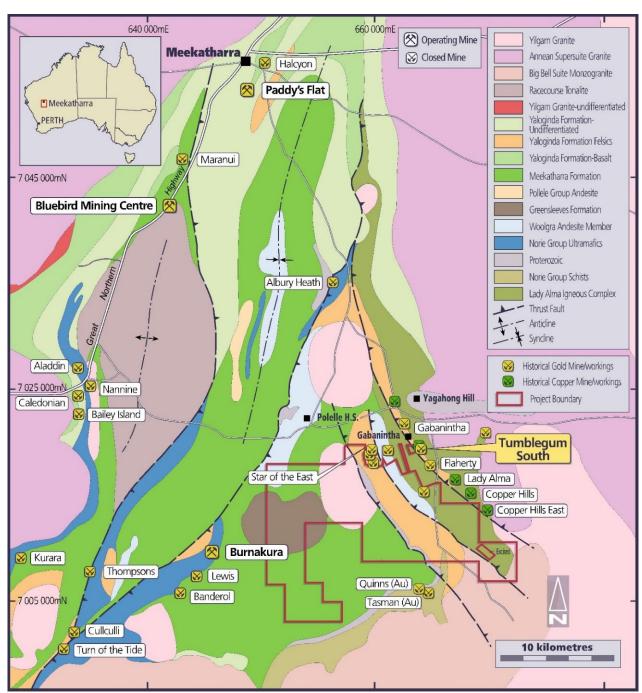


Figure 1 Gabanintha Project Location Map



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Bryah holds the rights to all minerals except Vanadium, Uranium, Cobalt, Chromium, Titanium, Lithium, Tantalum, Manganese & Iron Ore ("Excluded Minerals"). Australian Vanadium Limited (ASX:AVL) retains 100% rights in the Excluded Minerals on the Gabanintha Project.

#### **Tumblegum South Gold-Copper Prospect**

During the quarter, Bryah completed a drilling programme at the Tumblegum South Gold-Copper Prospect. The Tumblegum South Prospect is conveniently situated within trucking distance of multiple existing gold plants in the region (see Figure 2).

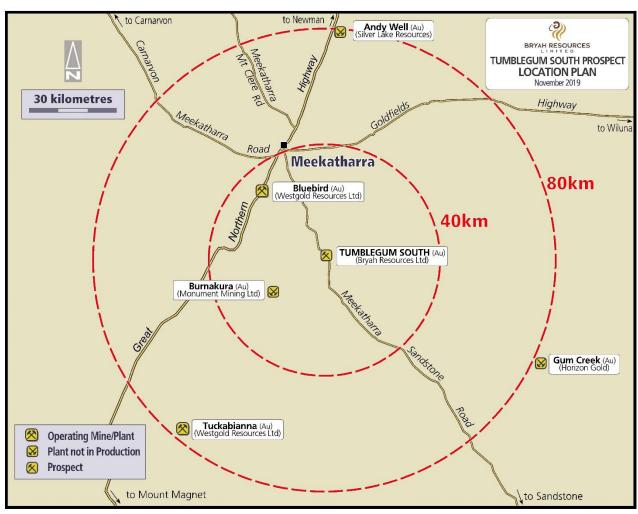


Figure 2 Tumblegum South Prospect Location Map



#### **Drilling Program Results**

A total of 16 reverse circulation (RC) drill holes for 1,583 metres were completed in the drilling program in October 2019. A full schedule of significant assay results is shown in Table 2 with selected results shown on Figure 3 and in sections in Figures Figure 4 and Figure 5<sup>1</sup>.

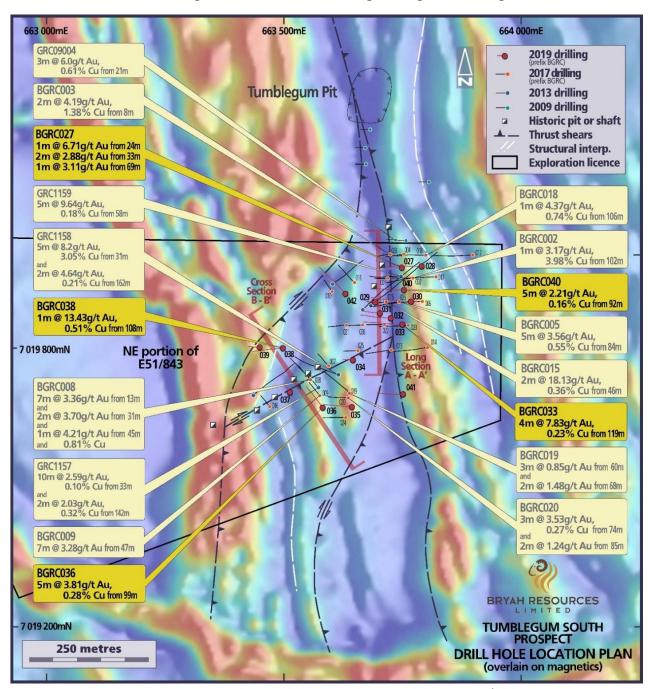


Figure 3 Tumblegum South Prospect Drill Hole Location Plan\*

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<sup>\*</sup> Following due diligence and ground truthing, some historical drill hole positions have been moved.

<sup>&</sup>lt;sup>1</sup> See ASX Announcement dated 3 December 2019 for full details



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The drilling results demonstrate that high-grade gold mineralisation occurs in multiple thrust zones located on the tenement.

Significantly, holes GRC1159, BGRC005, 015, 027, 033 and 040 have all recorded high-grade gold intercepts of between 6.11 g/t Au (BGRC040) and 32.18 g/t Au (BGRC015) over 1-2 metre intervals, within broader zones of gold mineralisation (see Figure 4).

Holes BGRC027-033 and BGRC040 were drilled to test the significant north-south orientated shear zone, which was considered to have a southerly plunge component to the mineralisation. The complete assay results from this drilling confirm this southerly plunge of gold mineralisation, which remains open to the south.

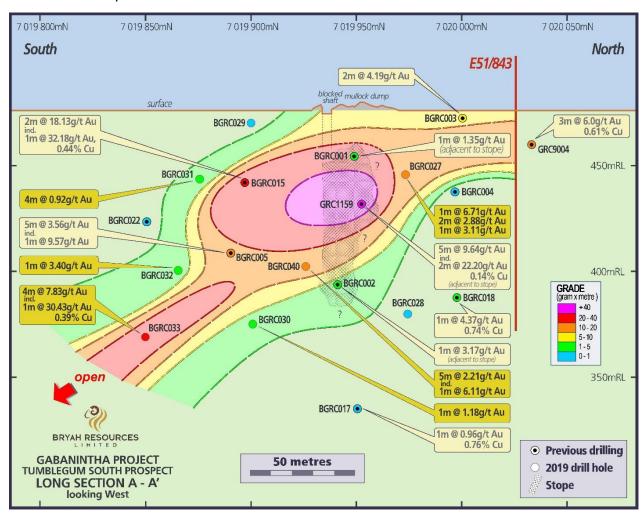


Figure 4 Tumblegum South Prospect Long Section A-A'



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Further west, holes BGRC035-37 were drilled to follow-up gold mineralisation recorded in the 2013 and 2017 drilling programs.

Holes GRC1157, BGRC008 and BGRC009 in the earlier programs intersected significant lenses of gold mineralisation, which have been confirmed with a step-back hole BGRC036 (see Figure 5). Gold mineralisation remains open in this area.

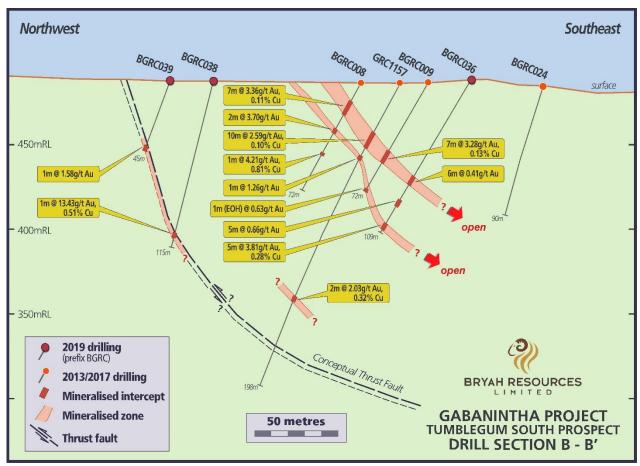


Figure 5 Tumblegum South Prospect Drill Section B-B'

#### Mineral Resource Estimate

The latest drilling results have been used to complete a revised 3D geological model of the Tumblegum South prospect.

This model is being used to undertake a Mineral Resource Estimation which is being completed in accordance with the JORC 2012 Code.

The estimation is expected to be completed in January 2020.



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#### **Bryah Basin Project**

The Bryah Basin project covers approximately 1,135 km<sup>2</sup> in central Western Australia. The project is located close to several mining operations including the high-grade DeGrussa copper-gold mine operated by Sandfire Resources NL (ASX:SFR) and the Fortnum gold mine operated by Westgold Resources Limited (ASX:WGX) (see Figure 6).

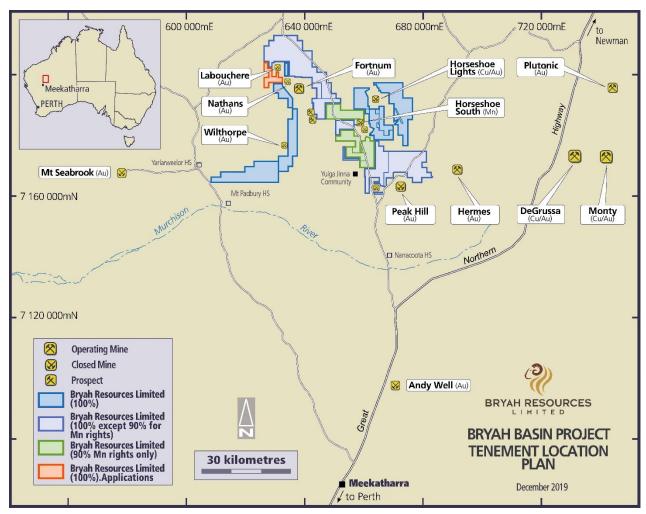


Figure 6 Bryah Basin Project Tenement Location Plan

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 recently acquired Horseshoe South Manganese Mine (see Figure 6).



#### Bryah Basin Manganese Joint Venture

In April 2019, Bryah executed a Manganese Farm-In and Joint Venture Agreement ("Agreement") with OM (Manganese) Limited ("OMM"), a wholly owned subsidiary of ASX-listed OM Holdings Limited (ASX:OMH)<sup>2</sup>. The Agreement applies to the rights to manganese only over approximately 660 km<sup>2</sup> of the entire tenement package held by the Company in the Bryah Basin (see Figure 6). Between April and August 2019, OMM funded \$500,000 of project expenditure which yielded highly encouraging manganese drilling results<sup>3</sup>. In August 2019, OMM elected under the Agreement to proceed and the Joint Venture was formed following payment of a \$250,000 Exercise Fee, whereby OMM secured an initial 10% interest in the Manganese Joint Venture ("JV"). Under Stage 2 of the Agreement, OMM will progressively fund the next \$2.0 million of exploration expenditure to earn up to a 51% interest in the Manganese JV by 30 June 2022.

The Manganese JV includes the Horseshoe South Manganese Mine, which is the largest historical manganese mine in the region, as well as several other manganese prospects, including Brumby Creek, Black Hill, Mudderwearie/Devils Hill and Mount Labouchere (see Figure 7).

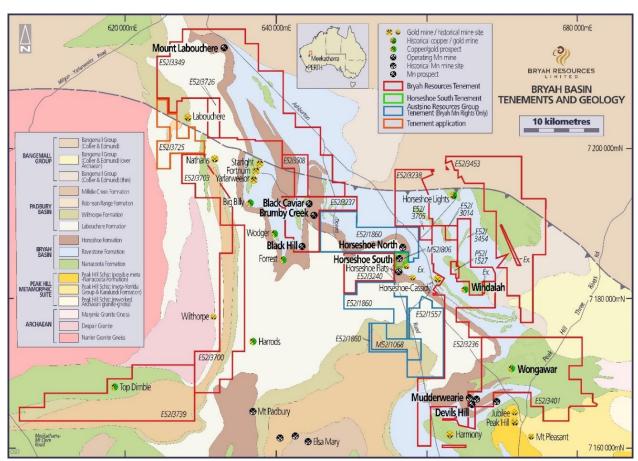


Figure 7 Bryah Basin Tenements and Geology Map

Address: Level 1, 85 Havelock Street
West Perth WA 6005

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<sup>&</sup>lt;sup>2</sup> See ASX Announcement dated 23 April 2019 for full details

<sup>&</sup>lt;sup>3</sup> See Quarterly Activities Report dated 31 October 2019 for full details



#### **Exploration Activities**

Manganese exploration activities under the JV during the quarter included a program of detailed geological mapping focusing on the historic Horseshoe South and Horseshoe North mines. This work was undertaken to improve our understanding of the nature of manganese mineralisation in these locations and across the broader Horseshoe Formation, which hosts most of the manganese deposits covered by the Manganese JV.

In addition, a high-resolution aerial survey over most of the JV tenement package was flown in November 2019. This survey has provided a highly accurate digital terrain model and high-resolution colour and near infra-red imagery. The JV has engaged with NGIS Australia Pty Ltd to undertake a Proof of Concept trial for pattern recognition using Google Artificial Intelligence/Machine Learning ("AI/ML") using this new imagery and other data sources, with the aim of accurately mapping outcropping manganese signatures within the JV area.

The JV has also completed a heritage survey over several locations during the quarter, including the Black Beauty, Cheval and Mount Labouchere prospects in preparation for the next phase of drilling.

#### Manganese JV Funding

The JV parties approved the next exploration budget of \$500,000 during the quarter. To date OMM have provided Bryah (as JV managers) with \$250,000, with the balance to be provided as called.

#### **Planned Activities**

The following activities have been approved in the exploration budget:

- a. Completion of the Google AI/ML proof of concept trial;
- b. Follow-up ground truthing and mapping of areas identified by the Al/ML trial;
- c. Follow-up RC drilling at the Horseshoe South mine, Brumby Creek and Black Hill prospects;
- d. First pass RC drilling at Mount Labouchere, Cheval and Black Beauty prospects, and
- e. Trial geophysical surveys.

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West Perth WA 6005

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#### Bryah Basin Copper-Gold Project

Exploration activities for copper-gold during the period consisted of the completion of a gravity survey over the Windalah Copper-Gold Prospect ahead of the next phase of drilling.

#### **Gravity Survey**

#### Windalah Copper-Gold Prospect

In October 2019, a 1,100 point gravity survey was completed on a 100 metres x 50 metres grid over the Windalah Copper-Gold Prospect, where an RC drilling program in 2018 identified high-grade gold mineralisation in two holes, BBRC019 (5m @ 6.62 g/t Au) and BBRC020 (3m @ 6.69 g/t Au)<sup>4</sup>.

The gravity survey also covered a significant coincident antimony (Sb), arsenic (As) and selenium (Se) anomaly located to the east of the RC drilling program. The area of the survey also covers two Priority 2 anomalies identified in the 2018 Variable Time-domain Electromagnetic (VTEM) survey (see Figure 8).

The presence of the Windalah antimony anomaly, along with other pathfinder anomalism in arsenic and selenium, provides significant evidence of the possible presence of an alteration cell, which may be proximal to a high value orebody.

Processing of the gravity survey data has been completed and is currently being used, in conjunction with other geophysical and geological data, to produce a more detailed geological interpretation and model of the area.

Initial observations from the gravity survey are:

- 1. A distinct gravity high (shown in red) has been identified in the southern portion of the survey area which appears to map a line of outcropping chert, which is interpreted as lying at the contact between the highly prospective Narracoota Formation and the overlying Ravelstone Formation. This contact zone is commonly referred to as the "Horseshoe Lights Mine Sequence" due to its similar geology to that which hosts the high-grade copper-gold deposit located at the Horseshoe Lights copper-gold mine, situated 13 kilometres to the north. Importantly drill holes BBRC019 and 020 lie on this contact.
- This gravity high feature extends over 800 metres east of the easternmost mapped chert outcrop, where it is concealed under shallow transported material. This extension of the Horseshoe Lights Mine Sequence lies at the southern end of the multi-element soil anomaly, and
- 3. Another major feature is the large gravity low (shown in blue) which is parallel to and slightly offset from the largest VTEM anomaly identified in the area.

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<sup>&</sup>lt;sup>4</sup> See ASX Announcement dated 22 November 2018 for full details



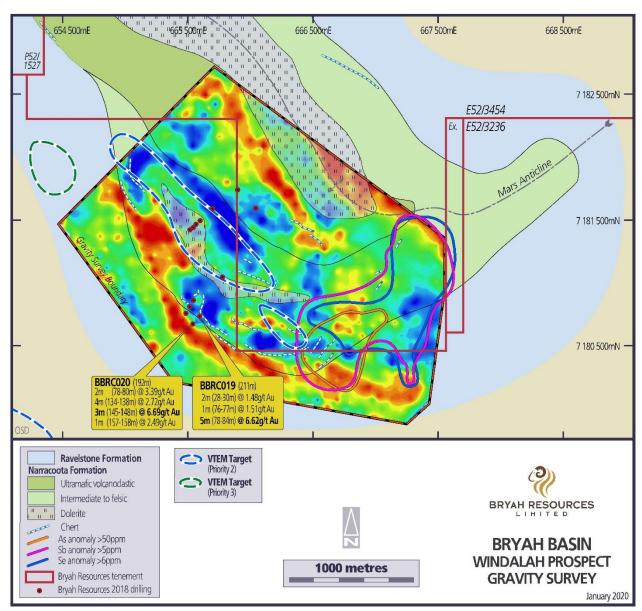


Figure 8 Windalah Prospect Gravity Survey

#### **Landholding Expansion**

In October 2019, Bryah announced that it had significantly increased its land holding in the Bryah Basin<sup>5</sup>.

The newly acquired tenements lie on the western side of the Padbury and Bryah Basins (see Figure 7). Approximately 255 km<sup>2</sup> of highly prospective ground has been secured by the recent grant of four new exploration licences (E52/3700, E52/3703, E52/3726 and E52/3739) and the application for exploration licence E52/3725. The tenements cover more than 50 km<sup>2</sup> of the highly prospective

<sup>&</sup>lt;sup>5</sup> See ASX Announcement dated 21 October 2019 for full details



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Narracoota Formation, including over 40-line kilometres of the prospective strike contact between the Narracoota Formation and Proterozoic metasediments of the Padbury Basin (see Figure 7).

In December 2019 a reconnaissance survey was undertaken of E52/3739 to confirm site access and to visit a number of the historical gold workings in the area. Old workings and shafts up to approximately 10 metres depth were inspected at various locations (see Figure 9), including the Top Dimble prospect. The geological setting on E52/3739 is analogous to the Livingstone Gold Project operated by Kingston Resources Ltd, located approximately 40 kilometres to the west.

Several rock chip samples were collected and have been submitted for laboratory analysis.

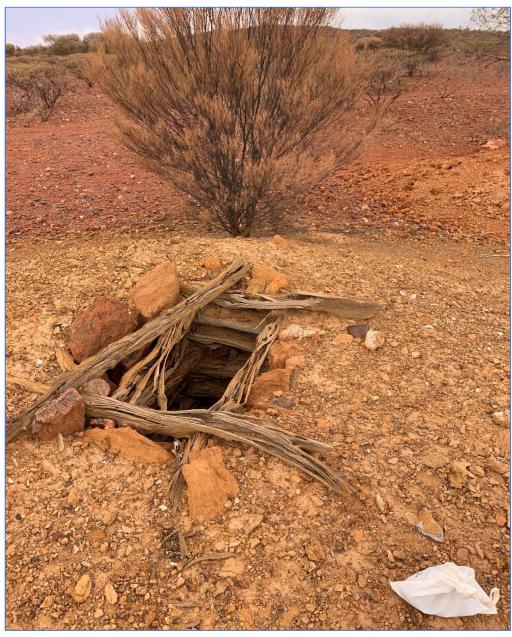


Figure 9 One of the Historical Gold Workings Located on E52/3739



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#### **Planned Activities**

The following copper-gold exploration activities are planned for the Windalah Prospect in the Bryah Basin:

- a. Completion of detailed geological interpretation based on the latest available information;
- b. Aircore drilling to test the major multi-element soil anomaly, and
- c. RC drilling.

## **Corporate Activities**

#### Capital Raising

In early October 2019, Bryah completed a capital raising of \$2.0 million at \$0.06 per share ("Placement"). Hartleys Limited were Lead Manager to the Placement, which has been strongly supported by new investors, as well as from a number of existing shareholders. The Board of Directors participated to collectively subscribe \$150,000 in the Placement.

The Placement proceeds are being applied to:

- undertake sufficient drilling at the Tumblegum South prospect within the Gabanintha Project to allow for an initial Mineral Resource estimate;
- advance exploration for gold and copper-gold deposits in the Bryah Basin, with a focus on drill testing the Windalah, Wongawar and other prospects; and
- for working capital.

On 11 December 2019, the Company completed a conversion of \$150,000 of outstanding debt to equity with Australian Vanadium Limited, by the issue of 3,750,000 new shares at a deemed price of \$0.04/share. The shares were issued under the Company's available placement capacity under ASX Listing Rules 7.1.

#### Cash Position

As at the 31 December 2019, the Company had \$1.5 Million (30 September 2019: \$259,000) in cash, which excluded funds provided by OMM and held on behalf of the Bryah Basin Manganese Joint Venture.

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



Email: info@bryah.com.au

**Table 1 Tenement Information** 

Tenement Information as Required by Listing Rule 5.3.3  For the Quarter Ended 31 December 2019											
			Interest		Quarter %						
Western Australia	Gabanintha	E51/843	100%1		Nil						
		E51/1396	100%1		Nil						
		E51/1534	100%¹		Nil						
		E51/1685	100% <sup>1</sup>		Nil						
		E51/1694	100% <sup>1</sup>		Nil						
		E51/1695	100% <sup>1</sup>		Nil						
		P51/2566	100%¹		Nil						
		P51/2567	100%¹		Nil						
		P51/2634	100%¹		Nil						
		MLA51/878	Nil	Application	Nil						
Western Australia	Bryah Basin	P52/1627	100%		Nil						
		E52/3014	100%		Nil						
		E52/3236	100%²,6		Nil						
		E52/3237	100% <sup>2,6</sup>		Nil						
		E52/3238	100%²		Nil						
		E52/3240	100% <sup>2,6</sup>		Nil						
		E52/3349	100% <sup>3,6</sup>		Nil						
		E52/3401	100%4,6		Nil						
		E52/3453	100%4		Nil						
		E52/3454	100%4		Nil						
		E52/3508	100% <sup>6</sup>		Nil						
		E52/3700	100%		Nil						
		E52/3705	100%		Nil						
		E52/3726	100%		Nil						
		E52/3703	100%	Licence Granted	100%						
		E52/3739	100%	Licence Granted	100%						
		E52/3725	Nil	Application	Nil						
		M52/1068	90% <sup>5</sup>	Manganese Rights only	10%						
		E52/1557	90% <sup>5</sup>	Manganese Rights only	10%						
		E52/1860	90% <sup>5</sup>	Manganese Rights only	10%						
		M52/806	100% <sup>6</sup>	3	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: Pet FC Pty Limited retains a 0.75% Net Smelter Return Royalty

Note 3: Australian Vanadium 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 a 90% interest in the rights to prospect, explore, mine and develop manganese ore ("Manganese Rights"). OM (Manganese) Limited has earned a 10% interest in these Manganese Rights.

Note 6: OM (Manganese) Limited has earned a 10% 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.



# Table 2 Tumblegum South Prospect

Significant Assay Results – at a Cut-off >0.5g/t Au

Hole ID	Easting mE	Northing mN	RL	Azimuth & Dip (planned)	Total Depth (m)	Depth From (m)	Depth To (m)	Interval Width (m)	Gold g/t	Cu %
BGRC027 663745.		7019972.8	479.6	270º/-60º	73	24	25	1	6.71	0.07
	000745.5					33	35	2	2.88	0.19
	663745.5					66	67	1	0.50	0.05
						69	70	1	3.11	0.21
BGRC028	663786.4	7019975.4	479.0	270º/-60º	127	67	68	1	0.55	0.02
BGRC029	663688.8	7019898.0	481.6	270º/-60º	40	No Significant Result				
DODOOO	663763.5	7019898.8	481.3	270º/-60º	151	121	122	1	1.18	0.18
BGRC030						127	128	1	0.55	-
BGRC031 663	000007.0	7019874.0	482.0	270º/-60º	73	53	54	1	0.91	-
	663697.9					58	62	4	0.92	0.02
BGRC032	663721.2	7019864.1	482.1	270º/-60º	116	104	105	1	3.40	0.03
BGRC033	663746.1	7019850.2	481.7	270º/-60º	157	119	123	4*	7.83	0.23
including					122	123	1	30.24	0.39	
BGRC034	663642.2	7019774.2	478.6	270º/-60º	40	No Significant Result				
BGRC035	663639.9	7019673.3	480.2	270º/-60º	115	No Significant Result				
	663579.4	7019672.6	482.8	322º/-60º	109	67	68	1	0.51	0.04
BGRC036						72	73	1	0.97	0.14
						82	87	5	0.66	0.05
						90	94	4	0.50	0.09
						99	104	5*	3.81	0.28
including						102	103	1	12.54	0.78
BGRC037	663510.8	7019704.5	483.4	322º/-60º	46	No Significant Result				
BGRC038	663495.2	7019800.0	483.8	270º/-60º	115	108	109	1	13.43	0.51
BGRC039	663446.8	7019801.4	484.0	270º/-60º	45	44	45	1	1.58	0.07
BGRC040	663748.6	7019924.3	480.9	270º/-60º	121	14	17	3	0.59	0.03
						92	97	5*	2.21	0.16
Including					92 93 1 6.11 0.28					
BGRC041	663747.3	7019700.3	479.4	270º/-60º	105	No Significant Result				
BGRC042	663626.6	7019916.7	483.7	320º/-60º	150	No Significant Result				

Notes:

Interval widths are measured down hole and may not represent true width of mineralisation

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Tel: +61 8 9321 0001 Email: info@bryah.com.au

 $<sup>\</sup>ensuremath{^*}$  includes up to 2 metres of internal dilution.



#### **About Bryah Resources Limited**

Bryah Resources Limited is a copper-gold-manganese focused explorer with 2 projects located in central Western Australia, being the 1,135km<sup>2</sup> Bryah Basin Project and the 170km<sup>2</sup> Gabanintha Project.

The Bryah Basin is host to the high-grade copper-gold mines at DeGrussa, discovered by Sandfire Resources NL in 2009, and at Horseshoe Lights, which was mined until 1994. The Bryah Basin also has several historical and current manganese mines including the recently acquired Horseshoe South mine.

The Company has secured a joint venture agreement with OM (Manganese) Limited in respect to its manganese rights only in respect to approximately 660 km<sup>2</sup> of its Bryah Basin tenement holdings (see Figure 7).

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.

#### **Competent Persons Statement**

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.

#### 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.

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West Perth WA 6005 Email: info@bryah.com.au