

## Bryah continues Manganese Exploration Success at Black Beauty Prospect

*Recent ground mapping identifies significant manganese outcrops at the Black Beauty Prospect located adjacent to historic Horseshoe North mine.*

### HIGHLIGHTS:

- Mapping identifies manganese outcrops over approximately **300 x 300 metre** area
- Rock chip samples from the prospect include highest value of **39.9% Mn**
- Permitting to be progressed for **future drilling of the Black Beauty Prospect.**

Bryah Resources Limited (“Bryah” or “the Company”) is pleased to report the identification of another significant manganese exploration prospect within the Bryah Basin in central Western Australia.

The area was sampled in 2018<sup>1</sup> during reconnaissance work, however a recent programme of ground mapping by Bryah personnel has now confirmed significant areas of outcropping manganese at the Black Beauty Prospect. Manganese outcrops at the Black Beauty Prospect have been mapped over an area of 300 metres x 300 metres (see Figure 1 and Plate 1). Laboratory results from 12 rock chip samples collected in 2018 show that 6 samples recorded grades of >30% Mn, including a high of **39.9% Mn** (see Table 1).

The Black Beauty Prospect is located in the Horseshoe Range approximately 300 metres east of the Horseshoe North manganese mine and approximately 1.5 kilometres north of the Company’s historic Horseshoe South manganese mine (see Figure 2).

The Company has been undertaking manganese exploration drilling within the Horseshoe Range since May 2019, funded by OM (Manganese) Limited (“OM”), a wholly owned subsidiary of ASX-listed OM Holdings Limited (ASX:OMH) under a \$7.3 million agreement signed in April 2019.<sup>2</sup>

Managing Director Neil Marston said “the Black Beauty Prospect is immediately adjacent to the historic Horseshoe North and Horseshoe South manganese mines and represents a similar target to the Brumby Creek and Cheval Prospects. Bryah’s continued success in identifying manganese prospects gives us great confidence in our strategy to prove up sufficient manganese resources to commence mining operations in the near term and, confirms the manganese potential of the Horseshoe Range.”

<sup>1</sup> Refer to Bryah ASX Announcement dated 23 July 2018

<sup>2</sup> Refer to Appendix 1 for Farm-in and Joint Venture Key Terms

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#### ASX Code: BYH

ABN: 59 616 795 245  
Shares on issue: 63,790,505  
Latest Share Price: \$0.07  
Market Capitalisation: \$4.4M

#### Projects

Bryah Basin – Copper, Gold,  
Manganese  
Gabanintha – Gold, Copper  
[bryah.com.au](http://bryah.com.au)

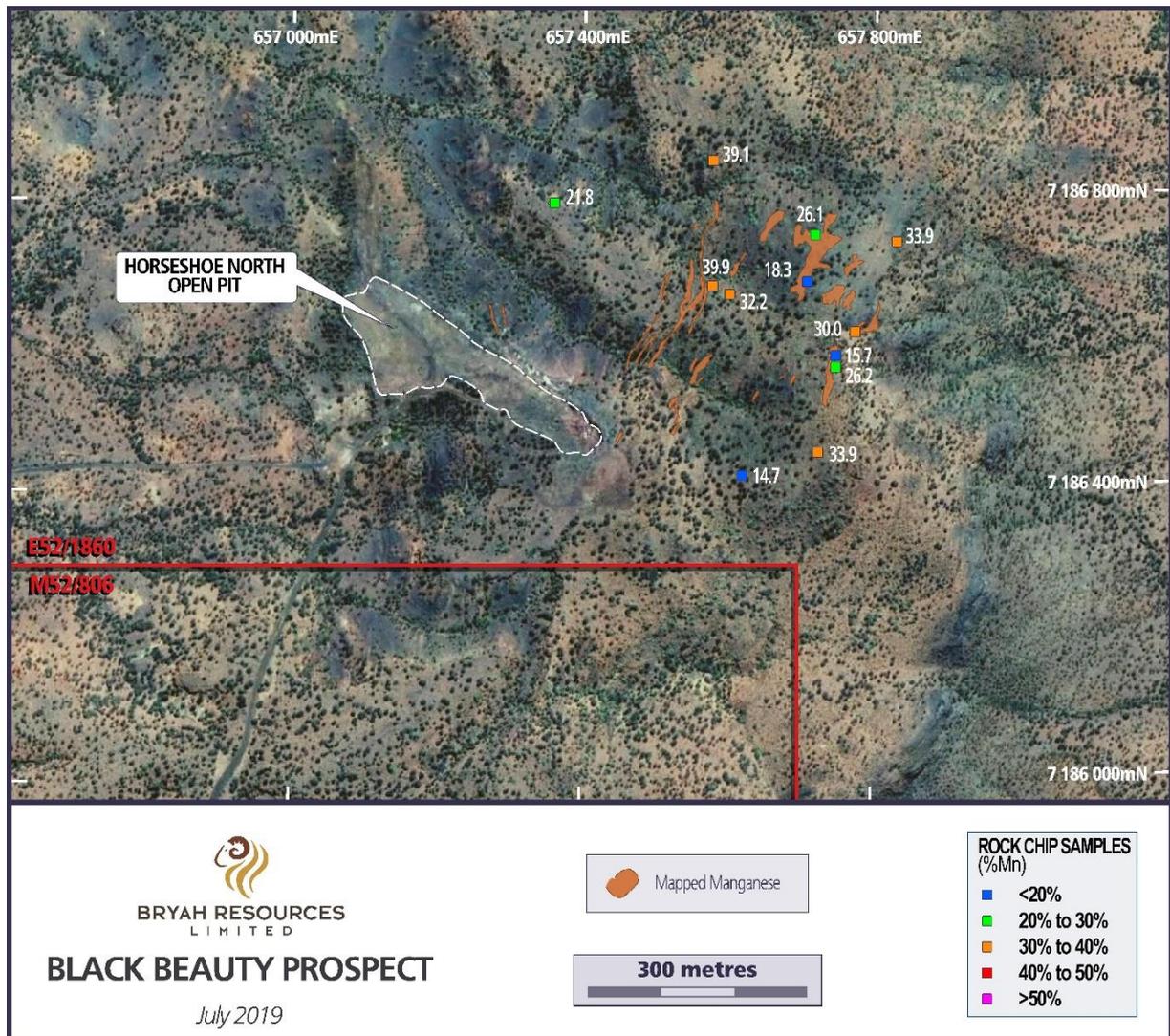


Figure 1 – Satellite imagery showing Black Beauty Prospect, sample locations and results

The first phase of the drilling programme recorded successful results at the Brumby Creek, Horseshoe South and Devils Hill Prospects<sup>3</sup> and a second phase of drilling completed in early July is due to be reported later this month.

As with the recently identified Cheval Prospect, the new Black Beauty Prospect is untested by drilling and will require a heritage survey and programme of works approval ahead of any drill testing. These permitting activities will be progressed by Bryah as soon as possible.

For further information, please contact:

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**Managing Director**

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<sup>3</sup> Refer to Bryah ASX Announcement dated 4 July 2019



*Plate 1 – Bryah geologist mapping outcrop at the Black Beauty Prospect.*

**Table 1**

**Black Beauty Prospect Rock Chip Samples - Laboratory Results<sup>4</sup>**

<b>Sample ID</b>	<b>Northing mN</b>	<b>Easting mE</b>	<b>Mn %</b>	<b>Fe %</b>	<b>Al<sub>2</sub>O<sub>3</sub> %</b>	<b>SiO<sub>2</sub> %</b>	<b>P %</b>
BRYRK243	7186781	657357	21.8	36.1	4.2	3.1	0.14
BRYRK244	7186670	657573	<b>39.9</b>	<b>9.3</b>	<b>3.2</b>	<b>13.1</b>	<b>0.14</b>
BRYRK245	7186659	657598	<b>32.2</b>	25.6	3.0	1.5	0.26
BRYRK246	7186577	657745	15.7	43.0	3.6	2.7	0.34
BRYRK247	7186607	657766	<b>30.0</b>	29.7	3.0	1.2	0.16
BRYRK248	7186674	657705	18.3	39.6	3.5	4.1	0.24
BRYRK249	7186738	657711	26.1	26.8	6.6	5.6	0.07
BRYRK250	7186839	657579	<b>39.1</b>	<b>13.0</b>	<b>5.3</b>	<b>5.6</b>	<b>0.17</b>
BRYRK258	7186409	657610	14.7	48.8	1.7	1.4	0.12
BRYRK259	7186443	657719	<b>33.9</b>	25.7	1.7	1.2	0.16
BRYRK260	7186578	657749	26.2	29.7	4.5	3.5	0.33
BRYRK261	7186729	657824	<b>33.9</b>	25.4	2.2	0.8	0.28

<sup>4</sup> Table 1 results originally reported in Bryah ASX Announcement dated 23 July 2018 and restated here for information

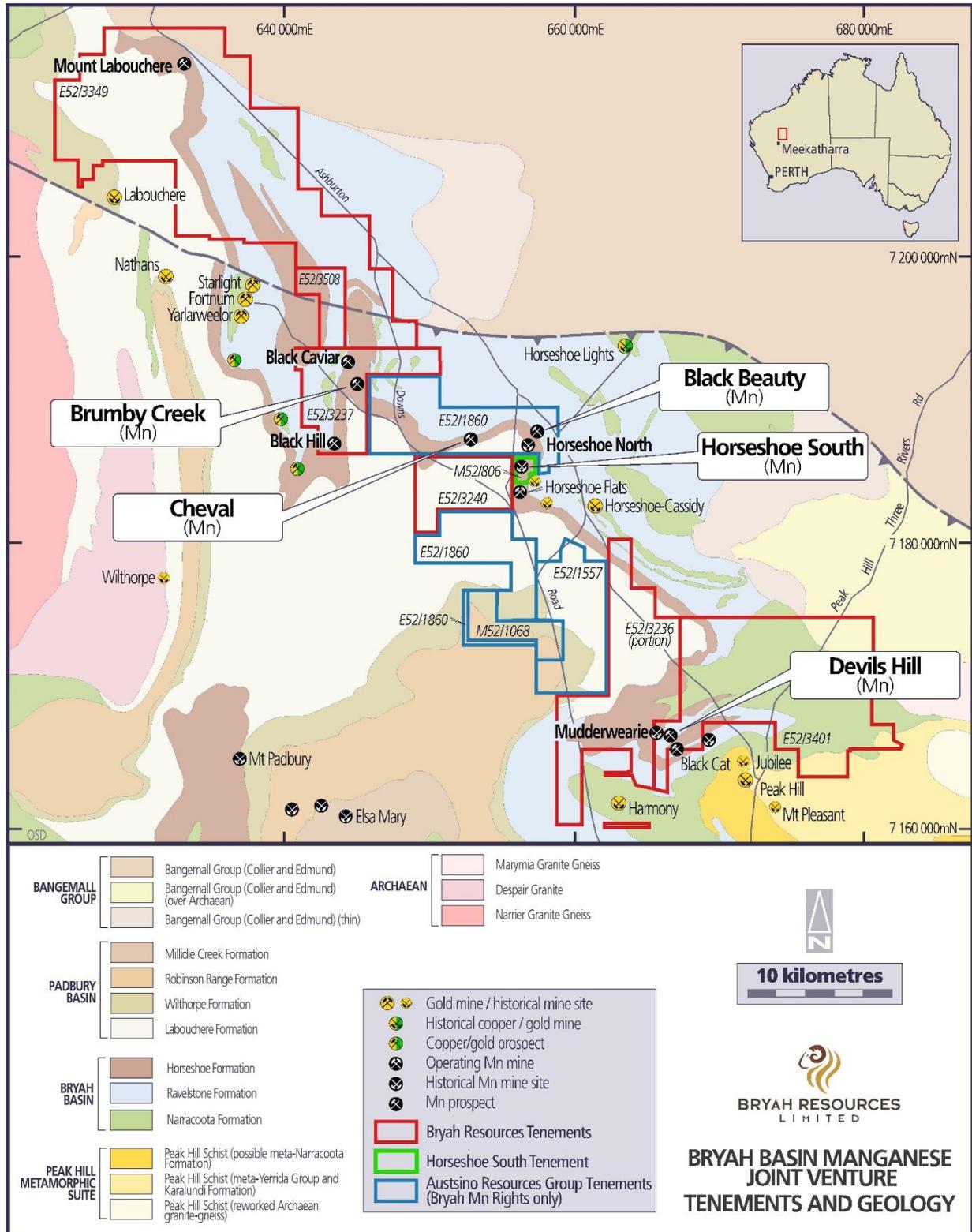


Figure 2 – Bryah Basin Manganese JV Tenements and Geology Map

## Appendix 1

### Bryah Basin Manganese Farm-In and Joint Venture Agreement Key Terms

- The Farm-In and Joint Venture Agreement (Agreement) between Bryah and OM includes a Signing Fee of \$0.25 million, which was paid to Bryah on 18 April 2019.
- The Joint Venture (JV) applies to Manganese Mineral Rights only, with Bryah retaining rights to all other minerals.
- In Stage 1, OM will fund \$0.5 million on project expenditure by 31 July 2019.
- OM may elect to proceed to Stage 2 by paying an Exercise Fee of \$0.25 million to Bryah to earn an initial 10% JV interest 30 days after Bryah supplies OM with the results of the Stage 1 exploration.
- In Stage 2, OM will fund a further \$2.0 million of project expenditure by 30 June 2022 to earn an additional 41% JV interest, giving OM a total of 51% JV interest.
- Bryah is to be Project Manager for Stage 1 and Stage 2 of the Farm-In.
- Upon OM earning its 51% JV interest, OM may elect to be Project Manager and Bryah may elect not to contribute to project expenditure, diluting from 49% to 40% JV interest by OM funding the next \$1.8 million of project expenditure.
- Upon OM earning its 60% JV interest, Bryah may elect not to contribute to project expenditure, diluting from 40% to 30% JV interest by OM funding the next \$2.5 million of project expenditure.
- OM's right to acquire a JV interest is subject to OM obtaining Foreign Investment Review Board approval to it acquiring a JV interest.
- The aim of the JV is to explore for commercially mineable manganese and carry out Feasibility Studies.
- If a positive Feasibility Study is supported by a Decision to Mine then OM and Bryah may elect to participate in a Mining Joint Venture in proportion to their JV interests or convert to a Royalty.
- Bryah is to negotiate a sales agency agreement on commercial terms with OM Holdings Ltd in respect to all manganese ore production under the Mining JV.
- The JV includes an area of Mutual Interest which extends for a radius of 100 kilometres from the Horseshoe South Manganese Mine (M52/806).
- Tenements covered under the Agreement are:
  - a. E52/3236 (southern portion), E52/3237, E52/3240, E52/3349, E52/3401, and E52/3508 registered in the name of Bryah Resources Limited,
  - b. M52/806 to be registered in the name of Bryah Resources Limited, and
  - c. E52/1557, E52/1860, and M52/1068 registered in the name of Desert Resources Pty Ltd, a subsidiary of Austsino Resources Group Limited (ASX:ANS) (Manganese Mineral Rights only) (See Figure 2).

## About Bryah Resources Limited

*Bryah Resources Limited is a copper-gold-manganese focused explorer with 2 projects located in central Western Australia, being the 880 km<sup>2</sup> Bryah Basin Project and the 200km<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 farm-in and 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 3).*

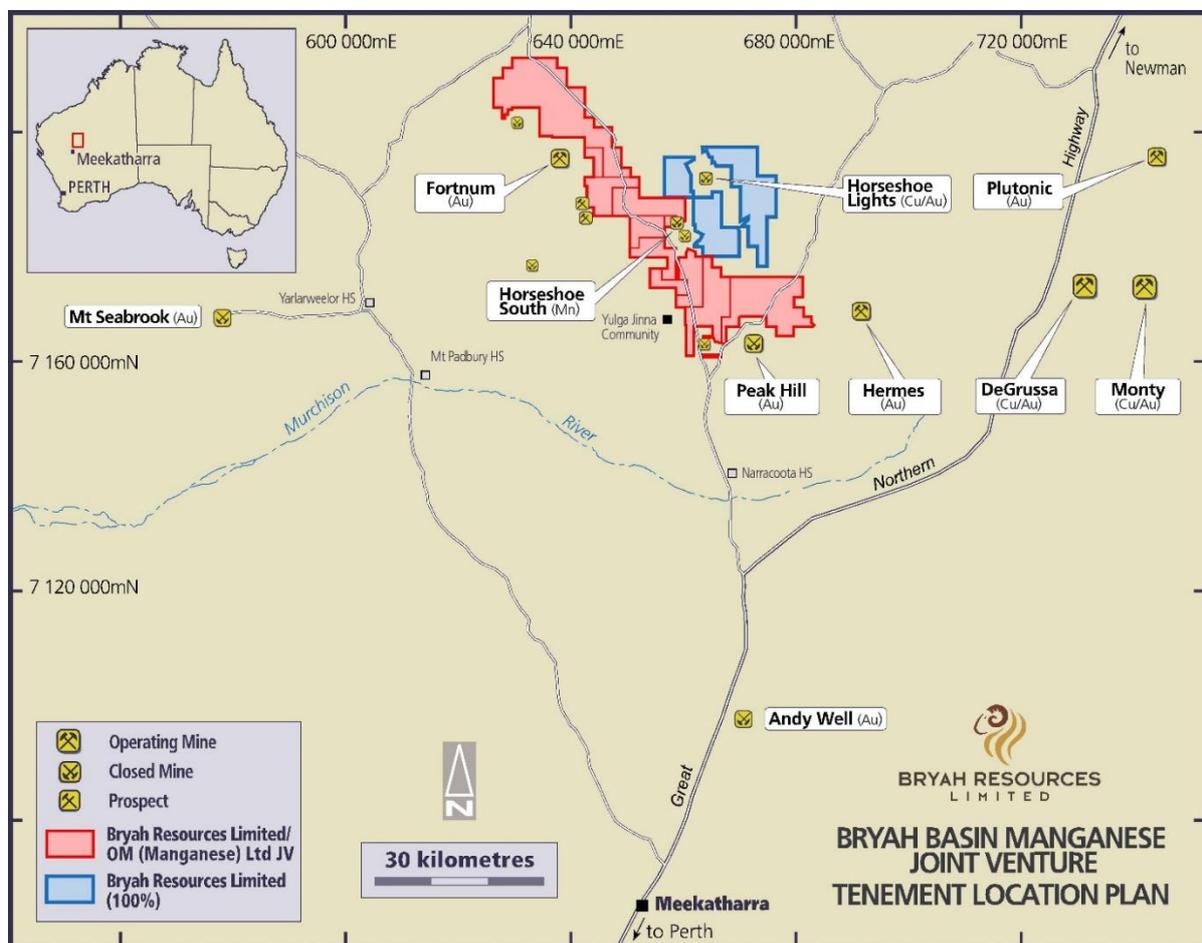


Figure 3 – Tenement Location Plan

*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 Rohan Williams, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Williams is an employee of Bryah Resources Limited (“the Company”). Rohan Williams 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’. Rohan Williams 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.*

## Manganese Exploration and Sampling

### JORC Code, 2012 Edition – Table 1 Exploration Results

#### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Rock samples were collected with sample sizes of between 2kg and 5kg from recorded locations.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling undertaken in this mapping programme.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling undertaken in this mapping programme.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling undertaken in this mapping programme.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>The sample sizes are considered appropriate to correctly represent the surface manganese mineralisation.</li> </ul>

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Laboratory checks and samples containing standards were included in the analyses.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling undertaken in this mapping programme.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>All sample locations were located by the Field Geologist using a conventional hand-held GPS.</li> <li>The grid system for the Bryah Project is MGA_GDA94 Zone 50.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>As this programme was a reconnaissance programme the sample results are indicative in nature and are not necessarily representative of the surrounding geology.</li> <li>Outcrop samples were not composited.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling undertaken in this programme, so the relationship of samples collected to geological structures is not known.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>The samples collected were placed in calico bags and transported to the relevant Perth laboratory by courier.</li> <li>Sample security was not considered a significant risk.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>The Company database has been compiled from primary data by independent database consultants and was based on original assay data and historical database compilations.</li> <li>A regular review of the data and sampling techniques is carried out internally.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li>• <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The rights to manganese on the relevant tenement (E52/1860) are 100% owned by Bryah Resources Limited.</li> <li>• At the time of reporting, there are no known impediments to obtaining a licence to operate in the area and the tenement is in good standing.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The manganese deposits in the region were discovered during the gold rush period between 1897 and 1911 however were of little interest to explorers at the time.</li> <li>• Mining operations between 1948 and 1967 received the focus of early exploration.</li> <li>• Manganese exploration conducted by BHP Limited, King Mining Corporation Ltd, Valiant Consolidated Ltd and various others since the 1960's was concentrated mainly around the historic pits at Elsa Group, Millidie, Horseshoe South, Mudderwearie and Ravelstone.</li> <li>• Tuart Resources Limited and Peak Hill Manganese Pty Ltd undertook regional exploration over a large portion of the Bryah and Padbury Basins in the period after 2000, identifying numerous manganese anomalies from satellite imagery and aerial photography. Only limited on-ground exploration of many of these anomalies was undertaken.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• These manganese occurrences are within the Lower Proterozoic Bryah and Padbury Basins. Manganese deposits are a product of prolonged weathering and oxidation of sedimentary rocks and chemical concentration and re-deposition of manganese within ancient drainage systems. Most of the manganese deposits are remnants of former drainage palaeochannels. Although detailed surveys have not been completed, the location of most manganese deposits appears to be at about the elevation of the former palaeosurface. These deposits are now left as hilltop mesas or cappings (inverted relief).</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:               <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling undertaken in this mapping programme.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>No high-grade cuts have been applied to the reporting of exploration results.</li> <li>No metal equivalent values have been used.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>As this programme was a limited programme of mapping no relationships can be established.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>See attached figures within this announcement.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>All results are reported without any cut-off grades.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>No other exploration data available.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling for manganese has been completed nearby at Horseshoe South, Brumby Creek and Devils Hill by the Company and recently announced to ASX, with further results to follow.</li> </ul>