

## Drilling Extends Manganese at Horseshoe South

*Latest drilling identifies high-grade manganese mineralisation within Main Pit area.*

### HIGHLIGHTS:

- **Assay results received** from Phase 2 RC drilling programme completed at Horseshoe South, including first series of holes drilled in the main pit area
- Best intervals at **Horseshoe South Main Pit** (using a 18% Mn cut-off grade):
  - HSRC012 - 3 metres (2-5m) @ **33.8% Mn**
  - HSRC016 - 5 metres (2-7m) @ **24.2% Mn**
  - HSRC018 - 4 metres (1-5m) @ **25.8% Mn**
- Best intervals at **Horseshoe South Extended Area** (using a 18% Mn cut-off grade):
  - HERC039 - 9 metres (24-33m) @ **22.6% Mn**
  - HERC040 – 8 metres (23-31m) @ **22.0% Mn**
- Drilling was funded by manganese specialist **OM Holdings Limited (ASX:OMH)** under a recently announced \$7.3 million Manganese Farm-In and Joint Venture agreement<sup>1</sup>
- Bryah making preparations to commence exploration drilling under Stage 2 of the Agreement

Bryah Resources Limited (“Bryah” or “the Company”) is pleased to report further results from the second phase of exploration drilling within the Bryah Basin in central Western Australia. The drilling programme was funded by OM (Manganese) Limited (“OMM”), a wholly owned subsidiary of ASX-listed OM Holdings Limited (ASX:OMH) under a \$7.3 million agreement (“Agreement”) signed in April 2019<sup>2</sup>.

Managing Director Neil Marston said “These final results from the historic Horseshoe South Manganese Mine confirm the potential for zones of high-grade manganese mineralisation to be present just below the existing open pit surface. We have intersected what we consider to be remnants of high-grade channel manganese with this programme. We have also extended the zones of manganese mineralisation at the Horseshoe South Extended pit area. This drilling is a further demonstration of the potential to discover new manganese mineralisation from surface and under shallow cover within our project area.”

A total of 83 holes for 2,081 metres of reverse circulation (RC) drilling was completed in this second programme at four sites; the Brumby Creek, Black Hill and Black Caviar Prospects and the historic Horseshoe South Manganese mine (see Figure 3).

<sup>1</sup> Refer Appendix 1 for Key Terms of Farm-In and Joint Venture Agreement

<sup>2</sup> See ASX announcement dated 23 April 2019

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#### ASX Code: BYH

ABN: 59 616 795 245  
Shares on issue: 63,790,505  
Latest Share Price: \$0.074  
Market Capitalisation: \$4.7M

#### Projects

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

## Horseshoe South Drilling

The historic Horseshoe South Manganese Mine consists of two open pits, the main pit and a smaller Horseshoe South Extended Pit located close to the southern boundary of the mining lease (M52/806) (see Figure 1). The Horseshoe South Extended pit was mined in 2010/2011 by Process Minerals International, a subsidiary of Mineral Resources Limited (ASX:MIN).

A total of 32 holes were drilled for 1,124 metres in the first phase. In the second phase of drilling a further 34 holes for 666 metres were completed as shown in Figure 1.

Best assay results received from the second phase of drilling at Horseshoe South are set out in Table 1 below.

<b>Table 1 – Horseshoe South - Best Drill Results</b>	
<b>Hole No</b>	<b>Manganese Intersection (using 18% Mn cut-off grade)</b>
HERC039	9 metres (24-33m) @ 22.6% Mn
HERC040	8 metres (23-31m) @ 22.0% Mn
HSRC012	3 metres (2-5M) @ 33.8% Mn
HSRC016	5 metres (2-7m) @ 24.2% Mn
HSRC018	4 metres (1-5m) @ 25.8% Mn

Table 2 details assay results received for all the drill holes completed at Horseshoe South.

## Follow-up Activities

The Company has prepared a technical report and budget for OMM to consider ahead of OMM electing by 30 August 2019 to commit to the next the stage of on-ground exploration pursuant to the terms of the Agreement.

The budget proposes that the next phase of exploration activities, costing approximately \$500,000, focus on testing extensions of high-grade manganese mineralisation intersected at Brumby Creek and drill test new target areas including at the Cheval and Black Beauty Prospects (see Figure 2).

Planning and permitting activities are underway so that drilling on these new areas can commence as soon as possible.

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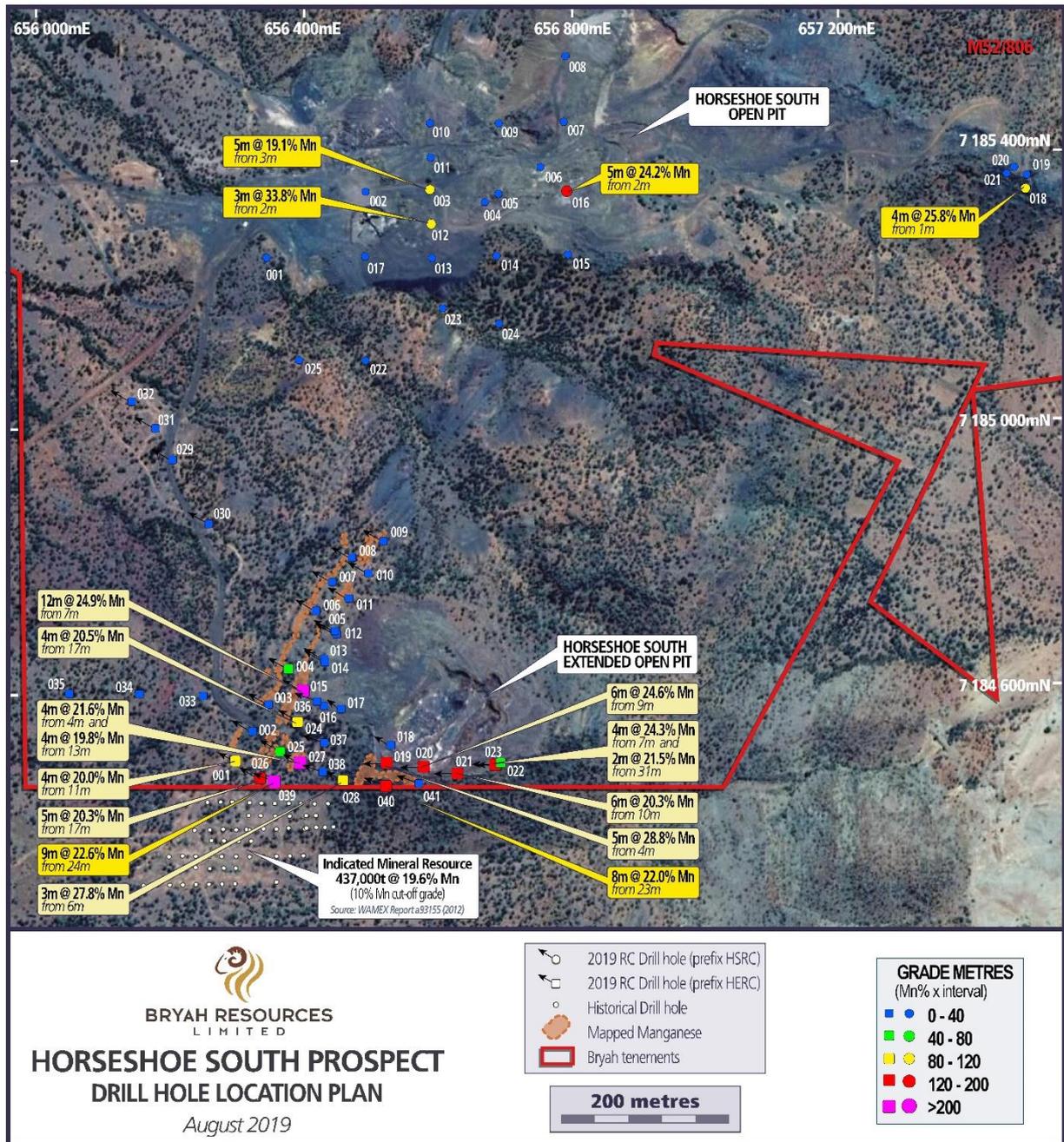


Figure 1 – Drill hole Location Plan – Horseshoe South.

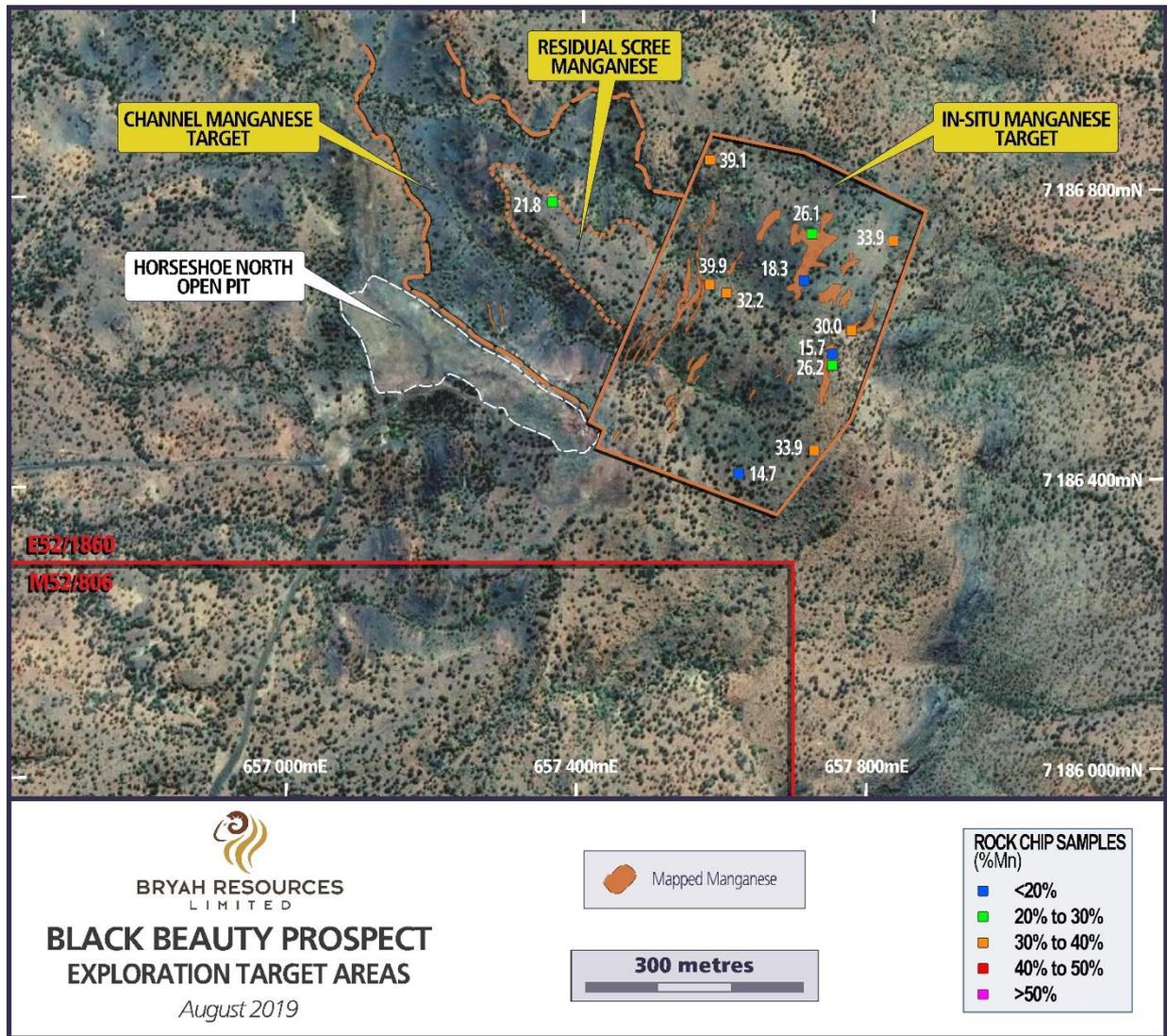


Figure 2 – Exploration Target Areas – Black Beauty Prospect.

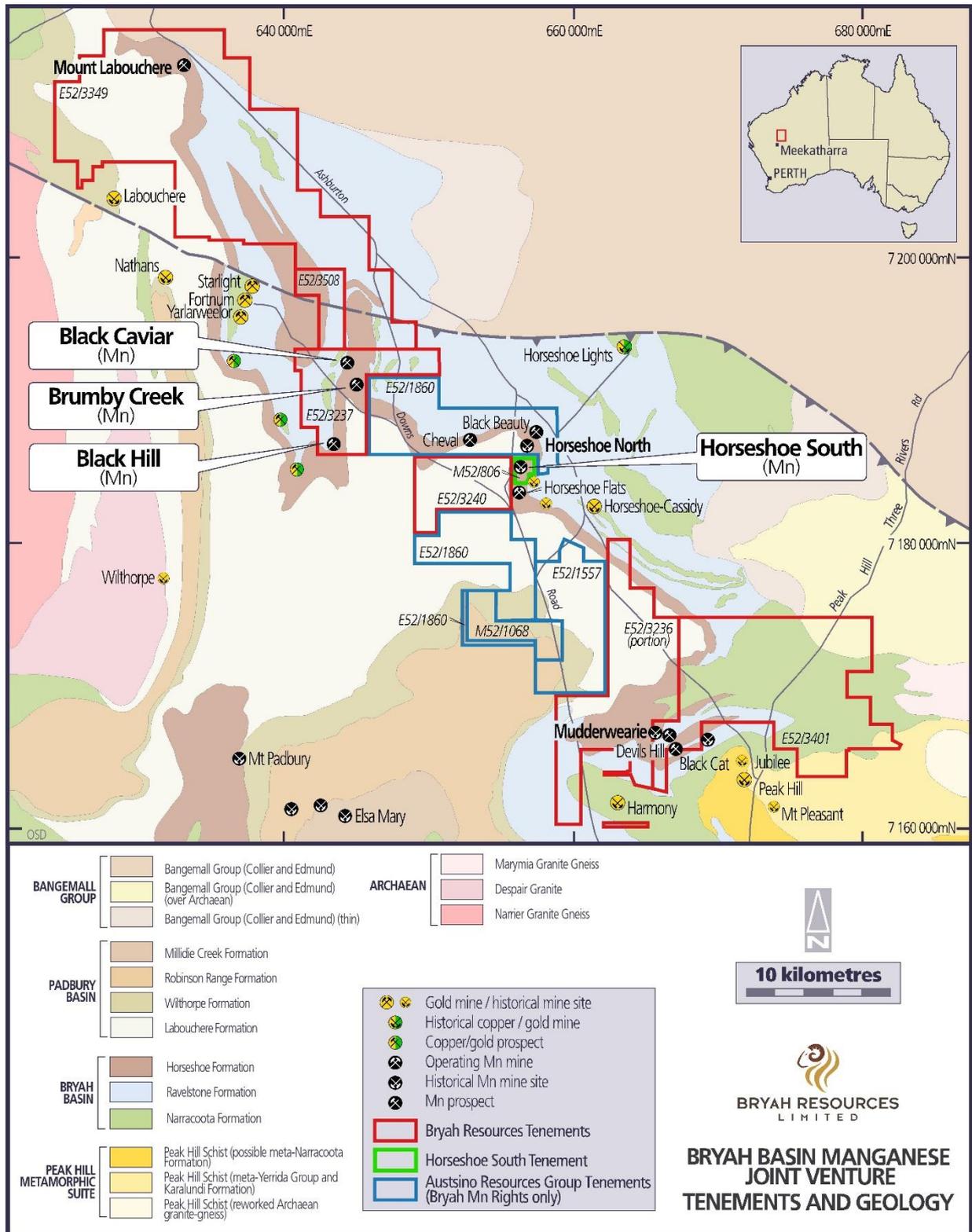


Figure 3 – Bryah Basin Tenements and Geology Plan

**Table 2**
**Drilling Results – Horseshoe South (using a cut-off grade of 18% Mn)**

Hole ID	Easting mE	Northing mN	RL(m)	Azimuth & Dip (planned)	Total Depth (m)	Depth From (m)	Depth To (m)	Interval Width (m)	Mn %	Fe %
HERC001	656295.3	7184348.0	579.6	300°/-60°	30	11	15	4	20.0	30.9
HERC002	656321.9	7184392.6	581.9	300°/-60°	30	No Significant Results				
HERC003	656346.0	7184431.1	583.6	300°/-60°	30					
HERC004	656379.2	7184483.1	585.3	300°/-60°	30					
HERC005	656408.0	7184512.3	586.2	300°/-60°	48	No Significant Results				
HERC006	656418.0	7184569.7	584.5	300°/-60°	18					
HERC007	656443.4	7184613.3	584.5	300°/-60°	54					
HERC008	656473.4	7184650.2	583.4	300°/-60°	18					
HERC009	656520.0	7184674.8	586.9	300°/-60°	15					
HERC010	656496.8	7184628.9	588.1	300°/-60°	54					
HERC011	656466.3	7184590.5	589.1	300°/-60°	54					
HERC012	656447.5	7184537.7	586.6	300°/-60°	54					
HERC013	656432.3	7184494.5	590.0	300°/-60°	6					
HERC014	656429.4	7184497.1	589.5	300°/-60°	48					
<b>HERC015</b>	<b>656402.6</b>	<b>7184451.7</b>	<b>589.2</b>	<b>300°/-60°</b>	<b>54</b>	<b>7</b>	<b>19</b>	<b>12</b>	<b>24.9</b>	14.9
HERC016	656427.6	7184430.5	591.4	VERTICAL	78	No Significant Results				
HERC017	656453.7	7184421.3	594.5	300°/-60°	24					
HERC018	656526.6	7184366.6	608.4	300°/-60°	39	2	3	1	22.2	26.7
<b>HERC019</b>	<b>656520.4</b>	<b>7184342.3</b>	<b>611.4</b>	<b>270°/-60°</b>	<b>19</b>	<b>4</b>	<b>9</b>	<b>5</b>	<b>28.8</b>	19.6
<b>HERC020</b>	<b>656575.9</b>	<b>7184334.5</b>	<b>619.5</b>	<b>270°/-60°</b>	<b>24</b>	<b>9</b>	<b>15</b>	<b>6</b>	<b>24.6</b>	25.7
<b>HERC021</b>	<b>656627.5</b>	<b>7184325.5</b>	<b>627.7</b>	<b>270°/-60°</b>	<b>24</b>	<b>10</b>	<b>16</b>	<b>6</b>	<b>20.3</b>	30.3
HERC022	656688.4	7184338.3	639.5	270°/-60°	7	4	7 EOH	3	20.9	23.6
<b>HERC023</b>	<b>656683.7</b>	<b>7184338.8</b>	<b>638.6</b>	<b>270°/-60°</b>	<b>36</b>	<b>7</b>	<b>11</b>	<b>4</b>	<b>24.3</b>	22.0
						31	33	2	21.5	27.5
HERC024	656389.1	7184404.4	587.9	300°/-60°	30	17	21	4	20.5	23.4
HERC025	656362.8	7184361.7	583.7	300°/-60°	42	2	3	1	22.4	17.5
HERC026	656333.1	7184322.9	581.2	300°/-60°	42	6	9	3	16.4	28.6
						17	22	5	20.3	25.6
HERC027	656394.1	7184344.7	587.9	300°/-60°	84	4	8	4	21.6	12.1
						13	17	4	19.8	12.8
<b>HERC028</b>	<b>656454.7</b>	<b>7184313.9</b>	<b>596.0</b>	<b>300°/-60°</b>	<b>54</b>	<b>6</b>	<b>9</b>	<b>3</b>	<b>27.8</b>	17.9
HERC029	656206.7	7184800.4	558.3	300°/-60°	36	No Significant Results				
HERC030	656258.0	7184703.8	561.4	VERTICAL	18					
HERC031	656182.2	7184845.3	556.9	300°/-60°	18					
HERC032	656146.8	7184886.6	555.6	300°/-60°	6					
				<b>Subtotal</b>	<b>1,124</b>					

**Notes:**

- Intervals may include up to 2 metres of internal waste.
- Due to the broad spaced nature of this drilling true thickness of mineralisation is uncertain.

**Table 2 (continued)**
**Drilling Results – Horseshoe South (using a cut-off grade of 18% Mn)**

Hole ID	Easting mE	Northing mN	RL(m)	Azimuth & Dip (planned)	Total Depth (m)	Depth From (m)	Depth To (m)	Interval Width (m)	Mn %	Fe %
HERC033	656248.0	7184447.0	577.7	VERTICAL	12	No Significant Results				
HERC034	656153.8	7184449.3	577.4	VERTICAL	30					
HERC035	656049.1	7184450.6	574.5	VERTICAL	18					
HERC036	656418.6	7184435.7	590.6	290°/-60°	54					
HERC037	656428.4	7184372.8	590.2	290°/-60°	54					
HERC038	656425.1	7184330.8	592.0	290°/-60°	30					
<b>HERC039</b>	<b>656355.1</b>	<b>7184312.7</b>	<b>583.6</b>	<b>290°/-60°</b>	<b>42</b>	<b>24</b>	<b>33</b>	<b>9</b>	<b>22.6</b>	13.5
<b>HERC040</b>	<b>656519.1</b>	<b>7184310.9</b>	<b>606.7</b>	<b>290°/-60°</b>	<b>42</b>	<b>23</b>	<b>31</b>	<b>8</b>	<b>22.0</b>	24.5
HERC041	656569.3	7184310.4	616.5	290°/-60°	42	No Significant Results				
HSRC001	656427.6	7184430.5	591.4	VERTICAL	18	No Significant Results				
HSRC002	656453.7	7184421.3	594.5	VERTICAL	12					
HSRC003	656526.6	7184366.6	608.4	VERTICAL	12	3	8	5	19.1	35.0
HSRC004	656520.4	7184342.3	611.4	VERTICAL	12	No Significant Results				
HSRC005	656575.9	7184334.5	619.5	VERTICAL	12					
HSRC006	656627.5	7184325.5	627.7	VERTICAL	6					
HSRC007	656688.4	7184338.3	639.5	VERTICAL	12					
HSRC008	656350.4	7185101.1	561.4	VERTICAL	12					
HSRC009	656499.1	7185199.9	562.2	VERTICAL	12					
HSRC010	656596.7	7185199.7	569.2	VERTICAL	12					
HSRC011	656676.9	7185179.4	578.5	VERTICAL	12					
<b>HSRC012</b>	<b>656697.4</b>	<b>7185195.9</b>	<b>582.5</b>	<b>VERTICAL</b>	<b>12</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>33.8</b>	19.3
HSRC013	656761.3	7185233.2	579.6	VERTICAL	12	No Significant Results				
HSRC014	656799.0	7185299.7	586.5	VERTICAL	12					
HSRC015	656799.4	7185397.5	591.3	VERTICAL	12					
<b>HSRC016</b>	<b>656697.8</b>	<b>7185298.1</b>	<b>575.6</b>	<b>VERTICAL</b>	<b>12</b>	<b>2</b>	<b>7</b>	<b>5</b>	<b>24.2</b>	18.2
HSRC017	656598.8	7185300.2	572.6	VERTICAL	12	No Significant Results				
<b>HSRC018</b>	<b>656596.6</b>	<b>7185250.4</b>	<b>567.1</b>	<b>VERTICAL</b>	<b>24</b>	<b>1</b>	<b>5</b>	<b>4</b>	<b>25.8</b>	18.0
HSRC019	656597.0	7185149.7	570.8	VERTICAL	30	No Significant Results				
HSRC020	656597.2	7185099.4	575.3	VERTICAL	12					
HSRC021	656694.6	7185098.9	587.7	VERTICAL	12					
HSRC022	656800.2	7185100.5	599.4	VERTICAL	12					
HSRC023	656800.8	7185196.6	591.3	VERTICAL	30					
HSRC024	656496.9	7185102.0	566.1	VERTICAL	12					
HSRC025	657488.1	7185193.6	631.4	VERTICAL	6					
<b>Subtotal</b>					<b>666</b>					
<b>TOTAL</b>					<b>1,790</b>					

**Notes:**

- Intervals may include up to 2 metres of internal waste.
- Due to the broad spaced nature of this drilling true thickness of mineralisation is uncertain.

## Appendix 1

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

- The Farm-In and Joint Venture Agreement (Agreement) between Bryah and OMM 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, OMM has funded \$0.5 million on project expenditure by 31 July 2019.
- OMM 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 OMM with the results of the Stage 1 exploration.
- In Stage 2, OMM will fund a further \$2.0 million of project expenditure by 30 June 2022 to earn an additional 41% JV interest, giving OMM a total of 51% JV interest.
- Bryah is to be Project Manager for Stage 1 and Stage 2 of the Farm-In.
- Upon OMM earning its 51% JV interest, OMM may elect to be Project Manager and Bryah may elect not to contribute to project expenditure, diluting from 49% to 40% JV interest by OMM funding the next \$1.8 million of project expenditure.
- Upon OMM earning its 60% JV interest, Bryah may elect not to contribute to project expenditure, diluting from 40% to 30% JV interest by OMM funding the next \$2.5 million of project expenditure.
- OMM's right to acquire a JV interest is subject to OMM 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 OMM 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 1)

## 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 4).

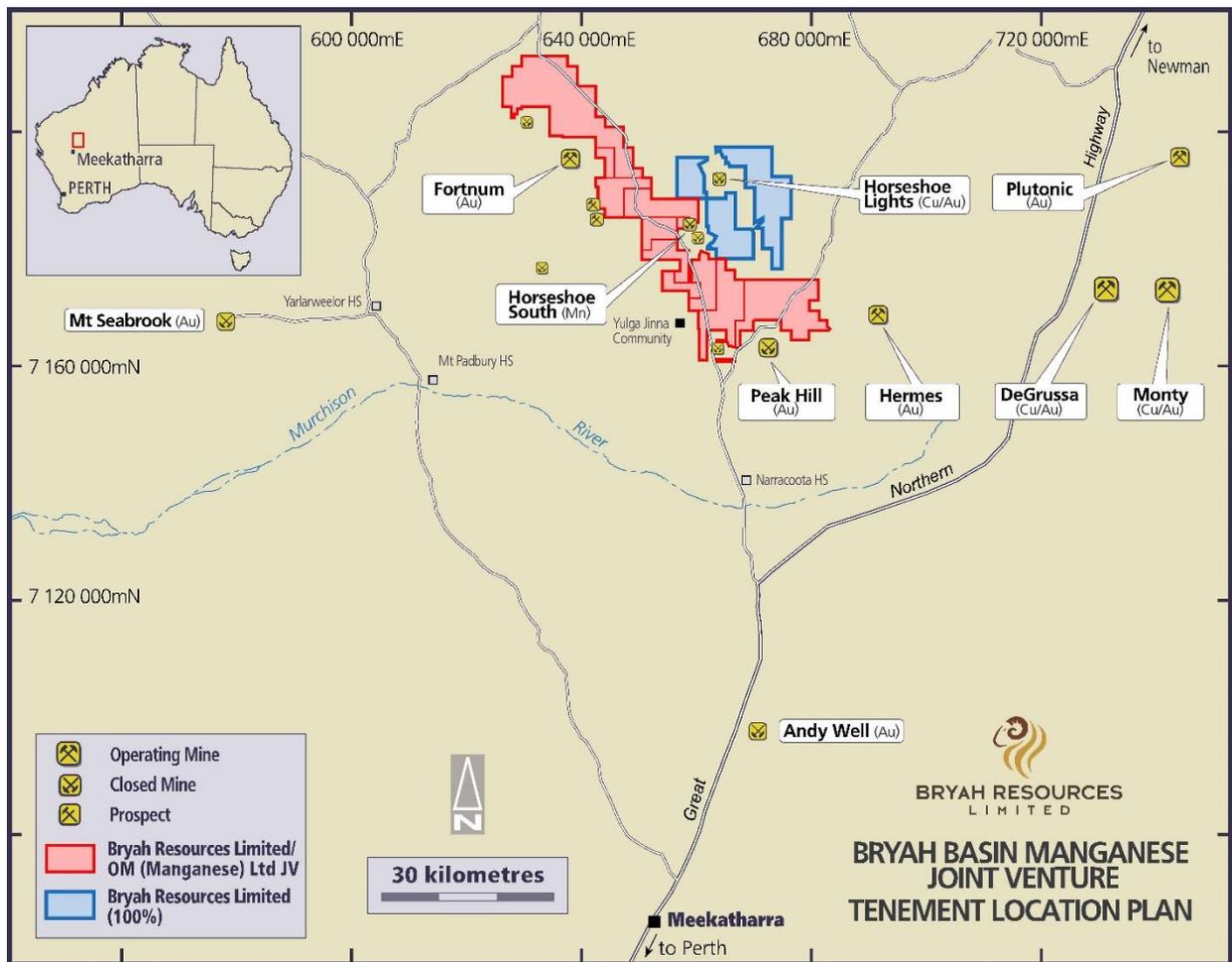


Figure 4 – Tenement Location Plan

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>For this drilling programme Bryah Resources Limited (Bryah Resources) utilised predominantly vertical Reverse Circulation (RC) drill holes with some angled holes included.</li> <li>RC drilling was to generally accepted industry standard producing 1m samples of approximately 3kg weight which were collected beneath a cyclone and then passed through a rotary cone splitter.</li> <li>The splitter reject sample was collected into green plastic bags which were numbered and laid into 10m rows.</li> <li>The holes were sampled as 1m samples from the splitter and placed into pre-numbered calico bags with the drawstring tied up and then placed inside the green plastic bag for later collection and despatch.</li> <li>The full length of each hole drilled was sampled.</li> <li>Selected samples collected were submitted to a contract commercial laboratory for sorting, drying, crushing, splitting and pulverising.</li> <li>A prepared sample is then fused in a lithium borate flux with lithium nitrate additive. The resultant glass bead is analysed via X-Ray Fluorescence (XRF). XRF is suitable analysis for a wide range of geological ores.</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>Bryah Resources' RC holes were drilled with a contract RC drilling rig.</li> <li>All RC holes were drilled using a 140mm face sampling drilling bit.</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>The RC samples were not weighed or measured for recovery on the rig but will be completed on a campaign basis at a later date as required.</li> <li>To ensure maximum sample recovery and the representivity of the samples, an experienced Company</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>geologist was present during drilling to monitor the sampling process. Any issues were immediately rectified.</p> <ul style="list-style-type: none"> <li>• Bryah Resources is satisfied that the RC holes have taken a sufficiently representative sample of the interval and minimal loss of fines has occurred in the RC drilling resulting in minimal sample bias.</li> <li>• No twin RC drill holes have been completed to assess sample bias.</li> </ul> <p>At this stage no investigations have been made into whether there is a relationship between sample recovery and grade.</p>
Logging	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All the 1m RC samples were sieved and collected into 20m chip trays for geological logging of colour, weathering, lithology, alteration and mineralisation for potential Mineral Resource estimation and mining studies.</li> <li>• RC logging is both qualitative and quantitative in nature.</li> <li>• The total length of the RC holes were logged. Where no sample was returned due to cavities/voids it was recorded as such.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sampling technique: <ul style="list-style-type: none"> <li>○ All RC samples were collected from the RC rig and were collected beneath the cyclone and then passed through the cone splitter.</li> <li>○ The samples were generally dry and all attempts were made to ensure the collected samples were dry.</li> <li>○ The cyclone and cone splitter were cleaned with compressed air at the end of every 6m RC drill rod.</li> <li>○ The sample sizes were appropriate to correctly represent the mineralisation based on the style of mineralisation, the thickness and consistency of intersections, the sampling methodology and percent value assay ranges for the primary elements.</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• Quality Control Procedures were:               <ul style="list-style-type: none"> <li>○ A duplicated sample was collected every 50 samples.</li> <li>○ Certified Reference Material (CRM) samples were inserted in the field every 50 samples containing a range of manganese values.</li> <li>○ Overall QAQC insertion rate of 1:30 samples</li> <li>○ Laboratory repeats taken and standards inserted at pre-determined level specified by the laboratory.</li> <li>○ Sample preparation at the laboratory: The samples are weighed and dried at 105°C, then coarsely crushed to -6.3mm using a jaw crusher. If the sample size is greater than 2.5kg the samples are then riffle split. Samples are then pulverised by LM5 or disc pulveriser to 80% passing -75 microns</li> <li>○ The sample sizes are considered appropriate to correctly represent the mineralisation based on the style of mineralisation, the thickness and consistency of intersections, the sampling methodology and the assay value ranges expected for manganese and its impurities.</li> </ul> </li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• XRF is suitable for the total analysis of a range of geological ores and is appropriate for analysis of manganese and its associated impurities.</li> <li>• Duplicates and samples containing standards were included in the analyses.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Significant intersections have been independently verified by alternative company personnel.</li> <li>• The use of twinned holes has not been implemented and is not considered necessary at this stage of exploration.</li> <li>• The Competent Person has visited the site &amp; supervised all the drilling and sampling process in the field.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>All primary data related to logging and sampling are captured using palmtops into Excel templates.</li> <li>All data is sent to Perth and stored in the centralised Access database with a Data Shed front end which is managed by company geologists.</li> <li>No adjustments or calibrations have been made to any assay data, apart from resetting below detection values to half positive detection.</li> </ul>
<i>Location of data points</i>	<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 collars have been independently surveyed by surveyors using a differential GPS for accurate collar location and RL with the digital data entered directly into the company Access database.</li> <li>Downhole surveys have been completed on all the RC drill holes by the drillers. They used a Reflex EZ-Shot downhole multi-shot tool to collect the surveys every 30m down the hole.</li> <li>The grid system for the Bryah Basin prospect is MGA_GDA94 Zone 50.</li> <li>Topographic control is based upon known survey datums located within the project area.</li> </ul>
<i>Data spacing and distribution</i>	<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 there was considerable variation in the drill spacing and drillhole orientation.</li> <li>The drill spacing is generally not sufficient to establish the degree of geological and grade continuity applied under the 2012 JORC code.</li> <li>No sample compositing was been applied to this drilling with all samples collected at 1m intervals.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<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>The attitude of the lithological units varies greatly both within the prospects and between prospect to prospect. At Horseshoe South Extended the strike of the stratigraphy is approximately 030° so the drilling was conducted on an azimuth of 290° to intersect the lithological units orthogonally. Some holes were drilled in other orientations to intersect specific mineralised structures, but always with an</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>attempt to drill orthogonal to the strike of the interpreted structure. Due to locally varying intersection angles between drillholes and lithological units all results are defined as downhole widths.</p> <ul style="list-style-type: none"> <li>No drilling orientation and sampling bias has been recognized at this time and it is not considered to have introduced a sampling bias.</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 company personnel.</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
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The relevant tenement is 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 tenements are in good standing.</li> </ul>

Criteria	JORC Code explanation	Commentary
<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>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>• <i>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:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Refer to Tables 2 of this ASX Announcement for details of sample locations, etc.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></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><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>As this programme was a first pass programme there was some variation in the drill spacing and hole orientation.</li> <li>Due to locally varying intersection angles between drill holes and lithological units all results are defined as downhole widths.</li> <li>This drill spacing is also not sufficient to establish the degree of geological and grade continuity applied under the 2012 JORC Code.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>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.</i></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><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Refer to Tables 2 of this ASX Announcement.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>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.</i></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><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>See attached figures within this announcement.</li> </ul>