

# Drilling at Brumby West to Extend Manganese Resource

# HIGHLIGHTS

- Downhole drill hole Intersections of:
  - $\circ~$  9m at **26.7%** Mn in hole BRRC232 from 13m
  - o 7m at 21.7% Mn in hole BRRC233 from 16m
  - o 12m at **21.6**% Mn in hole BRRC234 from 16m
- Resource modelling commencing to update the JORC Resource
- RC drilling to commence at four prospects<sup>1</sup> (Epona, Black Hill NE, Gold Trip and Black Beauty North and additional drilling at Brumby Creek after Program of Works and Heritage approvals.

Bryah Resources Limited (ASX: BYH, "Bryah" or "the Company") in conjunction with OM (Manganese) Ltd (OMM) is pleased to announce manganese drilling results at its 49% owned Bryah Basin manganese project. The results are part of the program drilled in December 2022. Bryah (49%) and OMM (51%) have a Joint Venture (JV) to undertake exploration to test targets in the area, with a view to commencing manganese production. OMM is a wholly owned subsidiary of OM Holdings Limited (ASX: OMH), one of the world's leading suppliers of manganese ores.

Commenting on the drilling, Bryah CEO Ashley Jones said: "Extending the resource drilling at Brumby West has again intersected high grades. It has also helped the geological interpretation and the application of the GAIP geophysics we are using for our drill targeting. The Brumby Creek area is shaping up to be a significant area supporting the existing resources on the granted mining tenement at Horseshoe South.

The Bryah Basin project area is located approximately 100km north of the town of Meekatharra in Western Australia. The Company's tenements and manganese mineral rights cover 1,135km<sup>2</sup> over parts of the western Bryah Basin. Figure 1 shows the Manganese Joint Venture tenement package, with prospects and an existing manganese Mineral Resource.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> See ASX announcement dated 2<sup>nd</sup> February 2023 ' *High-grade Rock Chips confirms Manganese Prospectivity'.* <sup>2</sup>See ASX announcement dated 3<sup>rd</sup> March 2022 '*Maiden Bryah Basin Manganese Mineral Resource*'.







Extensional resource drilling was undertaken to extend known areas of mineralisation at Brumby West and Area 74. Additional drilling at the Redrum prospect will hopefully enable a resource to be defined.

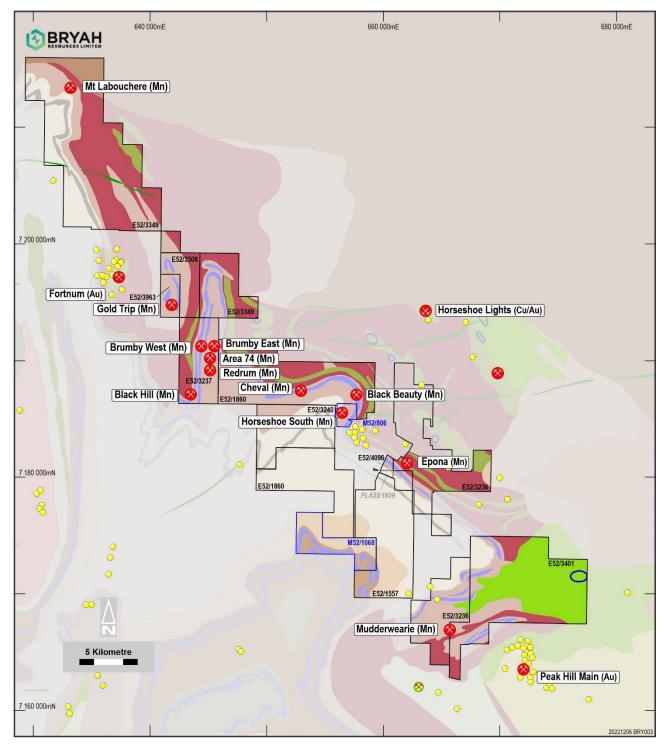


Figure 1: Prospect locations with geology map showing the Horseshoe Formation





### Drilling

Drilling during December 2022 was aimed to extend known mineralisation. The main area targeted were Brumby West which would extend the current mineral JORC resource. Further exploration drilling was completed at Red Rum. The area was open in multiple directions after the last round of drilling in 2022.

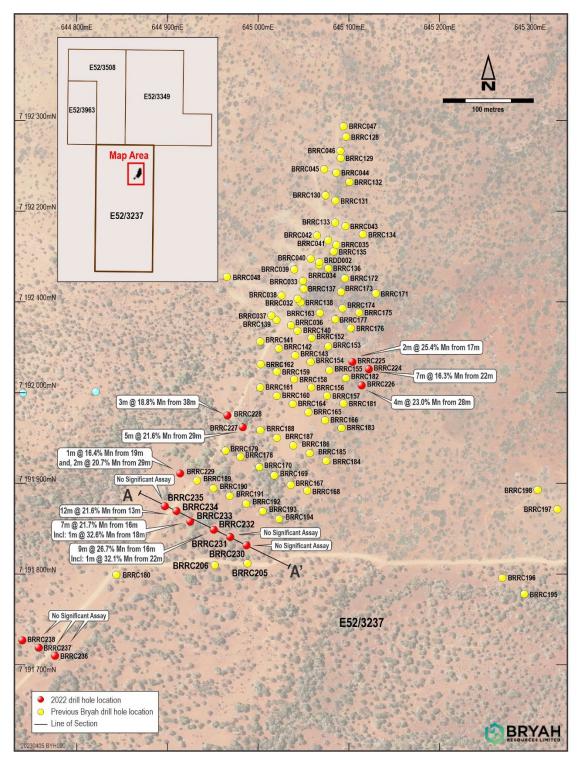


Figure 2: Collar Plan of December 2022 Manganese Drilling (Red collars)





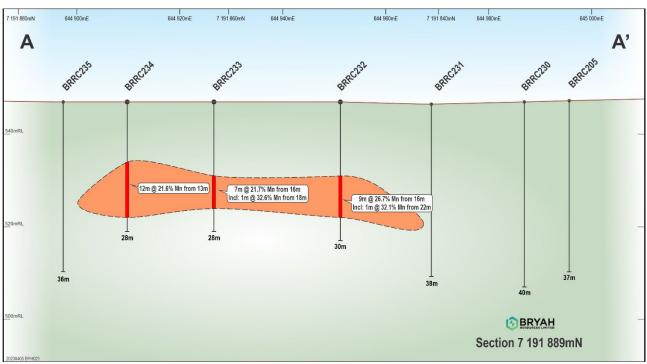


Figure 3 Oblique section A-A1 at Brumby West

Drilling continues to indicate that a mineralised Mn unit is still open to the south of the current resource area. The new drill intersections will be used to expand and update the current JORC resource of the prospect.

Hole_ID	Depth_From	Depth_To	Interval	Mn_pct	Fe_pct	MnFeRatio
BRRC224	22	29	4	19.1	18.2	0.98
BRRC225	17	19	2	25.4	18.2	1.41
BRRC226	28	32	4	23.0	14.1	1.80
BRRC227	29	34	5	21.6	18.3	1.18
BRRC228	38	41	3	18.8	14.0	1.37
BRRC229	19	20		16.4	33.9	0.48
and	29	31	2	20.7	31.1	0.67
BRRC230	NSI					
BRRC231			N	ISI		
BRRC232	16	25	9	26.7	21.4	1.32
including	22	23		32.1	12.6	2.54
BRRC233	16	23	7	21.7	25.9	0.98
including	18	19		32.6	15.0	2.18
BRRC234	13	25	12	21.6	22.8	1.02
BRRC235	NSI					
BRRC236	NSI					
BRRC237	NSI					
BRRC238	NSI					

Table 1: Significant intersections (>15 % Mn) NSI = No Significant Intersection





#### **FUTURE WORK**

Results of drilling completed in December 2022<sup>3</sup> at Redrum are still pending. Further drilling at the 4 new prospects as announced from mapping and rock chip sampling in January will commence following appropriate approvals.

Further resource updates will follow the return of results with the high expectation of completing a resource on the Red Rum prospect.

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

<sup>&</sup>lt;sup>3</sup> ASX announcement 22 December 2022





#### **ABOUT BRYAH RESOURCES**

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

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

Gabanintha, near Meekatharra, has a JORC 2012 Mineral Resource for Cu, Ni, Co<sup>4</sup> and additional structural gold potential. The copper nickel resource and recently identified gold mineralisation at Gabanintha will be the subject of further drill definition and a prefeasibility study to integrate the project with the Australian Vanadium Project (ASX: AVL). The resource has been defined by the drilling efforts of AVL in the development of its vanadium project and enabled Bryah to define a base metal resources inventory.

Bryah's base metals inventory at Gabanintha and manganese JV in the Bryah Basin have a clear pathway to production, which will be significantly advanced in 2023 by the commencement and completion of metallurgical feasibility studies at both projects.

An option agreement has been signed over the Lake Johnston tenements which are prospective for battery metals lithium and nickel. On IPO the option holder Mining Green Metals Ltd will pay 5 million shares for 70% of the project, with another 5 million shares for the remaining 30%. The corridor near Lake Johnston contains significant mines and discoveries of nickel and lithium, including the Mount Holland Lithium Mine and the historical Maggie Hays/Emily Ann nickel deposits.

Bryah holds 20.75% of gold focused Star Minerals (ASX:SMS). Star has a Mineral Resource at Tumblegum South and exploration prospects in the West Bryah Basin.

<sup>&</sup>lt;sup>4</sup> See ASX announcement dated 25th May 2022 '36.0 MT Ni-Cu-Co Mineral Resource at Gabanintha'.





#### **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.

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

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

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 is based on and fairly represents information compiled by Mr Lauritz Barnes, (Consultant with Trepanier Pty Ltd), Dr Joe Drake-Brockman (Consultant with Drake-Brockman Geoinfo Pty Ltd) and Ms Gemma Lee (Principal Geologist with Bryah Resources). Mr Barnes, Dr Drake-Brockman and Ms Lee are members of the Australasian Institute of Mining and Metallurgy (AusIMM) and/or the Australian Institute of Geoscientists (AIG). All have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Barnes is the Competent Person for the estimation, Dr Drake-Brockman is the Competent Person for the geological model and site visits and Ms Lee is the Competent Person for the and the announcement of the matters based on their information in the form and context in which they appear.

The Company confirms that it is not aware of any new information or data that materially affects the information included in announcements referred to and all material assumptions and technical parameters underpinning the Mineral Resource estimates within those announcements 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.





## Appendix 1

Table 2: Drill locations

Hole_ID	Hole_Type	Max_Depth	East	North	RL	Prospect	Collar_Dip
BRRC224	RC	40	645122	7192026	550	Brumby West	-90
BRRC225	RC	37	645104	7192034	551	Brumby West	-90
BRRC226	RC	43	645114	7192008	550	Brumby West	-90
BRRC227	RC	60	644983	7191962	549	Brumby West	-90
BRRC228	RC	103	644966	7191975	549	Brumby West	-90
BRRC229	RC	40	644914	7191911	547	Brumby West	-90
BRRC230	RC	40	644987	7191832	547	Brumby West	-90
BRRC231	RC	38	644969	7191841	547	Brumby West	-90
BRRC232	RC	30	644951	7191849	547	Brumby West	-90
BRRC233	RC	28	644925	7191858	547	Brumby West	-90
BRRC234	RC	28	644910	7191870	547	Brumby West	-90
BRRC235	RC	36	644897	7191875	547	Brumby West	-90
BRRC236	RC	40	644776	7191710	547	Brumby West	-90
BRRC237	RC	40	644758	7191719	547	Brumby West	-90
BRRC238	RC	38	644740	7191727	547	Brumby West	-90

Grid is MGA94\_50

# Appendix 2

Table 3: 2012 JORC Manganese Mineral Resources at 15% Mn Cut-off<sup>2</sup>

Prospect	Category	Kt*	Mn %	Fe %
Area 74		239	23.6	21.4
Brumby Creek East and Brumby Creek West		525	21.2	19.1
Horseshoe South and Horseshoe South Extended	Indicated	295	20.5	23.6
Black Hill		24	29.7	20.2
Total Indicated		1,083	21.7	20.9
Brumby Creek East and Brumby Creek West		403	20.3	21.8
Horseshoe South and Horseshoe South Extended	Inferred	351	19.5	29.9
Total Inferred		753	19.9	25.6
Total Mineral Resource		1,836	21.0	22.8

\* Totals may not add up due to rounding. Kt = 1,000 Tonnes

<sup>1</sup> See ASX announcement dated 3rd March 2022 Maiden Bryah Basin Manganese Mineral Resource





# Appendix 4 - Manganese RC Drilling

# JORC Code, 2012 Edition – Table 1 Exploration Results

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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.</li> </ul>	<ul> <li>For this drilling program Bryah Resources Limited (Bryah Resources) utilised vertical Reverse Circulation (RC) drill holes.</li> <li>RC drilling was to accepted industry standard producing 1m samples of approximately 3kg weight which were collected beneath a rotary cone splitter mounted under the cyclone.</li> <li>The splitter reject sample was collected into green plastic bags which were numbered and laid into 10m rows, left in place at the hole until assays were returned and results validated.</li> <li>The holes were sampled as 1m samples from the splitter and placed into pre-numbered calico bags with the draw-sting 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, but only selected samples (based on visual logging) were collected and 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> <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> <li>Bryah Resources' RC holes were drilled with a contract slimline RC drilling rig.</li> </ul>
Drill sample recovery	<ul> <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> <li>The RC samples were not weighed or measured for recovery on the rig but will be completed on a campaign basis later as required. A visual estimate of recovery was made in 3 categories (Poor/Fair/Good).</li> <li>To ensure maximum sample recovery and the representivity of the samples, an experienced Company geologist was present during drilling to monitor the sampling process. Any issues were immediately rectified.</li> <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>





Criteria	JORC Code explanation	Commentary
		• At this stage, no investigations have been made into whether there is a relationship between sample recovery and grade.
Logging	<ul> <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> <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 was logged. Where no sample was returned due to cavities/voids it was recorded as such.</li> <li>Rockchip samples were described geologically, along with location data with a hand held GPS during a mapping program that was following up Geophysical (GAIP) survey data.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <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> <li>Sampling technique: <ul> <li>All RC samples were collected by the RC rig into a 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. Moisture was logged in a qualitative way.</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> <li>Quality Control Procedures were:</li> <li>A duplicate sample was collected at regular intervals on the cyclone nominally 1 per 20 samples.</li> <li>Certified Reference Material (CRM) samples were inserted in the field every 50 samples containing a range of manganese values.</li> <li>Blank samples are inserted at the start of each hole.</li> <li>Overall QAQC insertion rate of 1:15 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> </ul> </li> </ul>





Criteria	JORC Code explanation	Commentary
		<ul> <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>
Quality of assay data and laboratory tests	<ul> <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> <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, blanks, and Certified Reference Material standards were included in the analyses.</li> </ul>
Verification of sampling and assaying	<ul> <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> <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 and supervised the drilling and sampling processes in the field.</li> <li>All primary data related to logging and sampling are captured using laptops into point of capture validation LogChief templates.</li> <li>All data is sent to Perth and stored in the centralised SQL Server database with a Data Shed front end which is managed by professional database consultants.</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>
Location of data points	<ul> <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> <li>All collars have currently been surveyed with a handheld GPS by Bryah staff and will be independently surveyed by surveyors using a differential GPS for accurate collar location and RL. The digital data has been loaded directly to the company SQL Server database.</li> <li>No downhole surveys have been completed as all holes are shallow and nominally vertical.</li> <li>The grid system for the Bryah Basin prospect is MGA_GDA94 Zone 50.</li> <li>Topographic control is from a digital elevation model derived from aerial geophysical surveys.</li> </ul>
Data spacing and distribution	<ul> <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> <li>As this program tested several locations there was considerable variation in the drill spacing and drillhole orientation.</li> <li>The drill spacing in this program is to provide sufficient information to establish the degree of geological and grade continuity applied under the 2012 JORC code for a mineral resource. Sample compositing was not applied to this drilling; all sampling was at 1m intervals.</li> </ul>





Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul> <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> <li>The attitude of the lithological units varies greatly both within the prospects and between prospect to prospect.</li> <li>The sedimentary package the Horseshoe Range broadly runs northwest/southeast but due to folding can dip at a range of attitudes and directions. Manganese mineralisation can follow and/or overprint sedimentary bedding.</li> <li>No drilling orientation and sampling bias has been recognised at this time and it is not considered to have introduced a sampling bias.</li> </ul>
	The measures taken to ensure sample security.	<ul> <li>The calico samples collected were placed in polyweave sacks, and then packaged in bulka bags by company staff, before being transported to the relevant Perth laboratory by commercial freight.</li> <li>Sample security is not considered a significant risk.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <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> <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> <li>The relevant tenements drilled in this program are E52/3237, E52/1860 and M52/806. M52/806 and E52/3237 is 100% owned by Bryah Resources Limited, while E52/1860 Bryah hold the mineral rights to Manganese only. OM (Manganese) Limited holds a 51% joint venture interest in respect to the manganese rights only on these tenements.</li> <li>Rockchip sampling on E52/3236, E52/3237, E52/3508, E52/3963 and E52/4096 is 100% owned by Bryah Resources Limited, while E52/1860 Bryah hold the mineral rights to Manganese) Limited holds a 51% joint venture interest in respect to the manganese rights only on these tenements.</li> <li>Rockchip sampling on E52/3236, E52/3237, E52/3508, E52/3963 and E52/4096 is 100% owned by Bryah Resources Limited, while E52/1860 Bryah hold the mineral rights to Manganese only. OM (Manganese) Limited holds a 51% joint venture interest in respect to the manganese rights only on these tenements.</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>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <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 sizeable 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 these anomalies was undertaken.</li> </ul>
Geology	• Deposit type, geological setting, and style of mineralisation.	<ul> <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 paleochannels' or paleo water table concretions of manganese oxide. Although detailed</li> </ul>





Criteria	JORC Code explanation	Commentary
		surveys have not been completed, the location of most manganese deposits is at about the elevation of the former palaeosurface. These deposits are now left as hilltop mesas or capping (inverted relief).
Drill hole Information	<ul> <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> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in m) 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>	Refer to Table 4 of this announcement.
Data aggregation methods	<ul> <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> <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>
Relationship between mineralisation widths and intercept lengths	<ul> <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> <li>In this program 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> </ul>
Diagrams	<ul> <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>	See attached figures within this announcement.
Balanced reporting	<ul> <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> <li>Refer to Appendix 2 of this announcement.</li> </ul>
Other substantive exploration data	<ul> <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> <li>No other exploration data available.</li> </ul>





Criteria	JORC Code explanation	Commentary
Further work	<ul> <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> <li>Additional planning and drilling to test for lateral extensions of manganese mineralisation is ongoing.</li> </ul>