

## Manganese Drilling Confirms New Mineralised Areas

### *Brumby West mineralisation significantly extended*

#### HIGHLIGHTS

- Results from 2021 drilling identified 36 holes with intersections over 15% manganese from 69 holes reported, strongly supporting upcoming Mineral Resource Estimate for Horseshoe Project (JV with OM Holdings Ltd).
- Mineralisation envelope at Brumby West has been greatly extended.
- Brumby West best manganese drilling results include:
  - BRRC167 14m @ 26.0% Mn from 22m, including 7m @ 32.4% from 22m
  - BRRC170 17m @ 23.2% Mn from 13m, including 1m @ 31.2% from 16m
  - BRRC178 12m @ 27.0% Mn from 13m, including 1m @ 33.6% from 16m and 1m @ 32.2% from 19m
  - BRRC165 10m @ 29.4% Mn from 13m, including 1m @ 32.1% from 13m, 2m @ 31.3% from 16m and 3m @ 30.3% from 20m
  - BRRC152 8m @ 27.1% Mn from 3m, including 1m @ 39% from 9m
  - BRRC156 12m @ 27.5% Mn from 12m, including 4m @ 33.2% from 18m
  - BRRC164 6m @ 23.2% Mn from 12m, including 2m @ 33.8% from 12m
  - BRRC166 7m @ 21.7% Mn from 17m
- Results to be included in upcoming Mineral Resource Estimates.
- Successful drill program following up targets identified with the Gradient Array Induced Polarisation grids (GAIP) geophysical technique.
- New prospect area Redrum identified.
- Success of GAIP surveys indicate potential for widespread application of this geophysical survey method in the Horseshoe manganese region by Bryah.
- Ore sorting sighter trial complete, with promising results for manganese identification. 3 bulk samples have now undergone bulk sorting trials and are awaiting assays.



### **MANGANESE - WHAT'S COMING UP?**

- First manganese mineral resource estimates over Horseshoe region prospects
- Plan further GAIP surveys
- Drilling planning - follow-up Brumby West and Redrum intersects
- Ore sorting of bulk samples by Steinert awaiting assays
- Mining Licence applications to support future feedstocks for mining project based on granted mining lease at Horseshoe Manganese M52/806

### **Manganese Drilling Results**

Bryah Resources Limited (ASX: BYH) (“Bryah”, “the Company”) is pleased to announce the results of drilling completed on the Brumby Creek area of the Horseshoe Manganese Project. The Project contains extensive outcroppings of manganese and is the subject of a substantial \$7M joint venture with ASX listed OM Holdings Limited (ASX: OMH). OMH is a vertically integrated manganese producer and are currently earning-in to a 51% stake in the Joint Venture (JV).

Following a Gradient Array Induced Polarisation (GAIP) geophysical survey, drilling was completed in late September 2021, with results now received. High-grade intersections have extended the Brumby West prospect and new prospects at Redrum have been discovered. The project now consists of multiple discoveries and resource targets at Brumby West, Brumby East, Area 74 and Black Hill which are additional to Horseshoe South and Horseshoe South on the granted Mining Lease (M52/806).

***CEO Ashley Jones commented, “These excellent results will strengthen the maiden Mineral Resource Estimate for the Project currently underway. As our JV partners OMH progress toward completing their 51% earn-in, we look forward to working with them to bring this historically important region back into manganese production as it was in 2011”.***

The GAIP identified multiple chargeable responses were tested for Mn mineralisation. The GAIP technique has demonstrated the potential for finding further Mn channel systems in the region. The method was successful, delineating untested areas of Mn mineralisation. The identification of a chargeable response south of the drilled Brumby West prospect was confirmed with a step out hole 80m south in holes BBRC178, BBRC0170 and BBRC0167. The excellent results open the prospect to the south and east and to further increase deposit size potential.

Testwork has been progressing, with bulk ore sorter testwork started at Steinert after initial sighter testwork on small individual samples which showed that separation and beneficiation is possible.

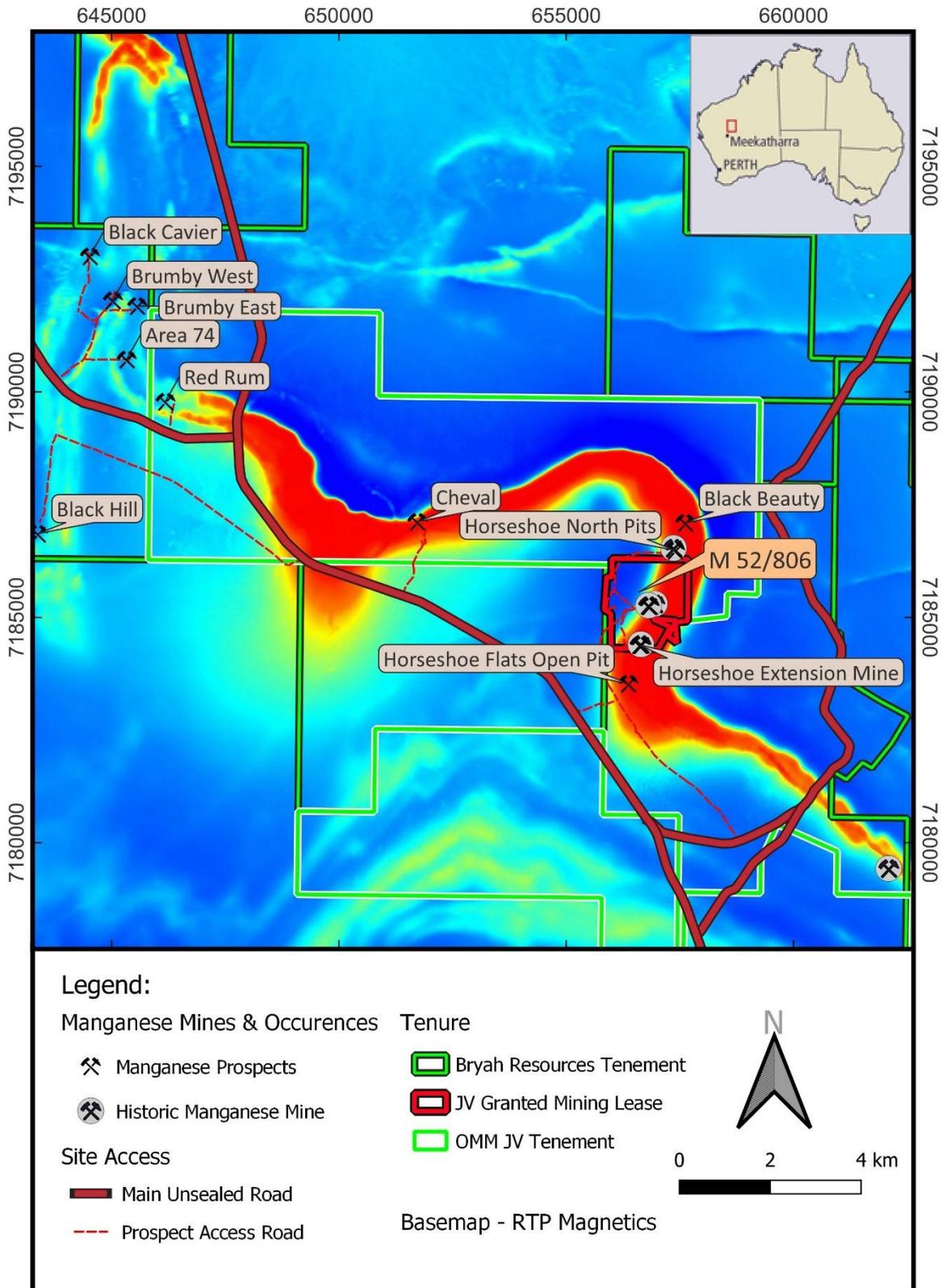


Figure 1 Location of Mn JV prospects with magnetics image showing the Mn bearing Horseshoe Formation

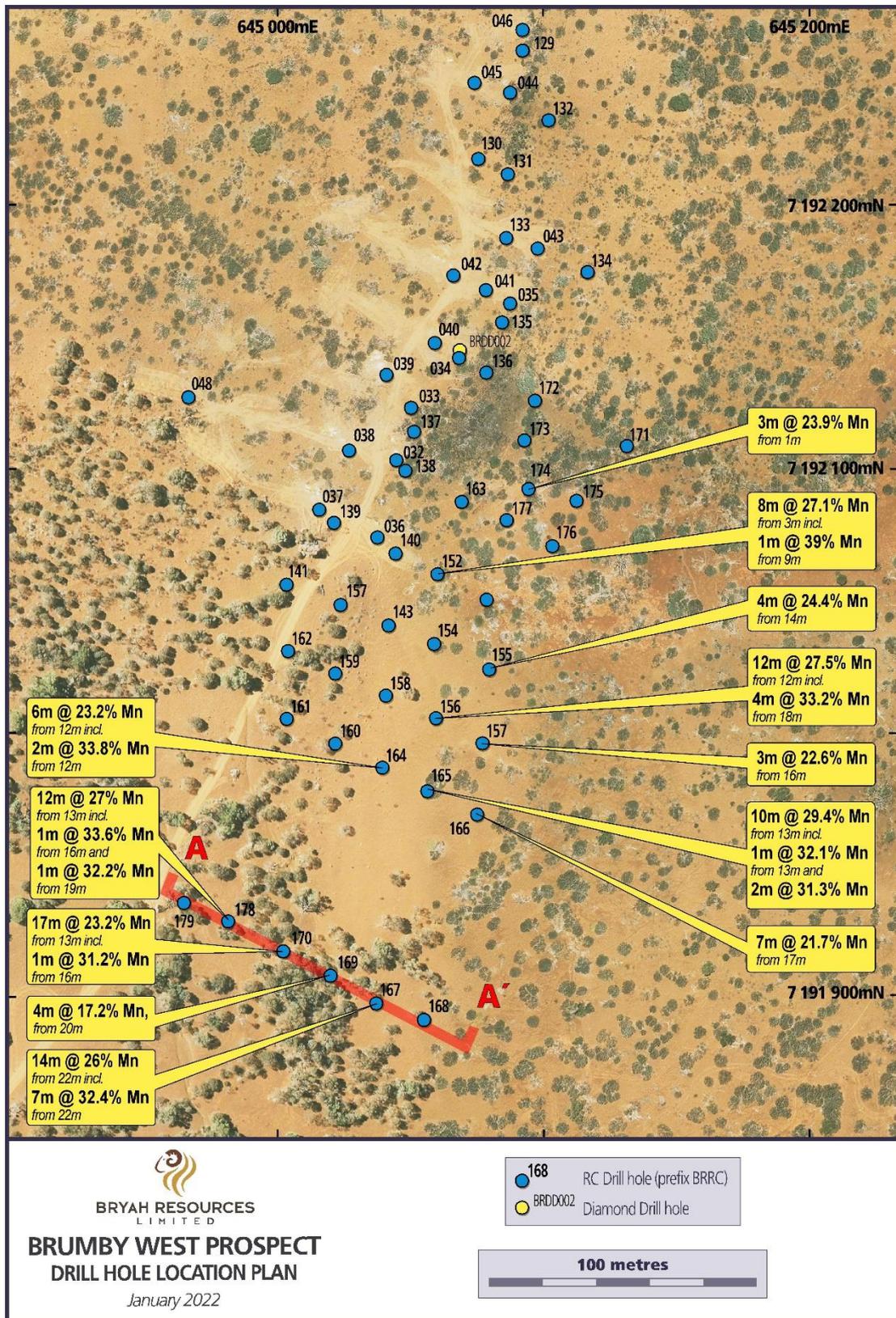


Figure 2 Brumby West Prospect significant intersections (Need Drafting and final Checking)



*Brumby West Results include:*

**BRRC152 8m @ 27.1% Mn & 19.4% Fe from 3m**  
BRRC155 2m @ 26% Mn & 21.2% Fe from 9m  
BRRC155 4m @ 24.4% Mn & 21.4% Fe from 14m  
**BRRC156 12m @ 27.5% Mn & 16% Fe from 12m**  
BRRC157 3m @ 22.6% Mn & 19% Fe from 16m  
BRRC163 4m @ 16.5% Mn & 25% Fe from 0m  
**BRRC164 6m @ 23.2% Mn & 21.8% Fe from 12m**  
**BRRC165 10m @ 29.4% Mn & 16.3% Fe from 13m**  
**BRRC166 7m @ 21.7% Mn & 23.2% Fe from 17m**  
**BRRC167 14m @ 26% Mn & 15.9% Fe from 22m**  
BRRC169 4m @ 17.2% Mn & 20.5% Fe from 20m  
**BRRC170 17m @ 23.2% Mn & 17.9% Fe from 13m**  
BRRC174 3m @ 23.9% Mn & 21.2% Fe from 1m  
BRRC176 3m @ 21.1% Mn & 23.3% Fe from 5m  
**BRRC178 12m @ 27% Mn & 18.1% Fe from 13m**

*All results composited at a minimum 15% Mn cut-off allowing 1m of internal dilution.*

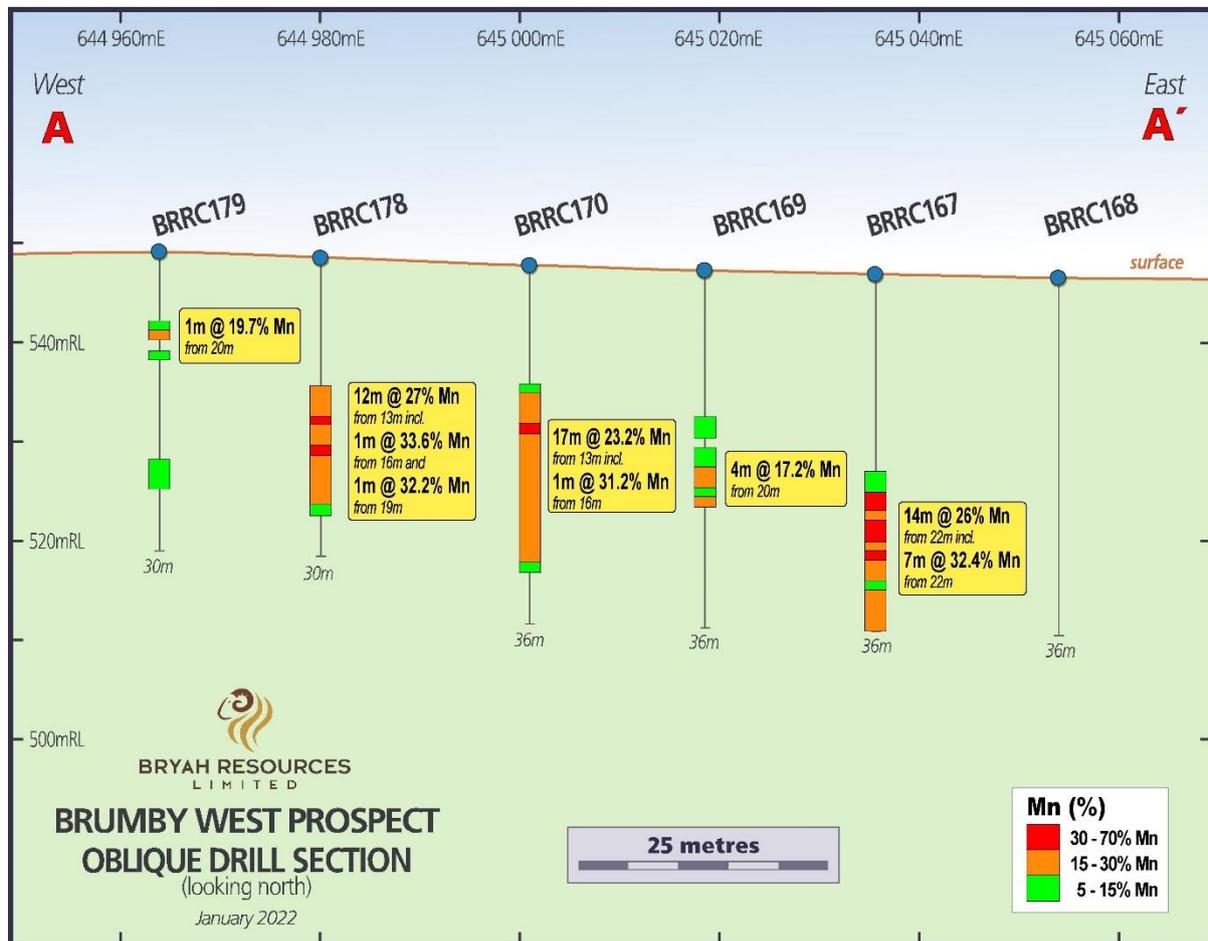


Figure 3 Section through Brumby West Southern line

### New Prospect Identified at Redrum

The Redrum area is located 11km from the granted mining licence at the Historic Horseshoe South Manganese Mine. Drilling intersected interesting Mn mineralisation, with the best hole in the recent program returning 7m @ 18% Mn. This scout drill program has shown Mn mineralisation was able to be detected by the GAIP survey technique. The hit rate where holes intersected greater than 3m @ 10% Mn at Redrum was 50%. Mineralisation styles appear similar to other prospects in the area and support further investigation.

#### Redrum Results include:

- RRRC003 1m @ 22.1% Mn & 14.2% Fe from 6m
- RRRC003 2m @ 18.3% Mn & 12.9% Fe from 40m
- RRRC008 2m @ 25.8% Mn & 14.8% Fe from 10m
- RRRC009 2m @ 21.7% Mn & 19.6% Fe from 12m
- RRRC010 5m @ 18.6% Mn & 24.4% Fe from 25m**
- RRRC011 2m @ 20.6% Mn & 25.6% Fe from 35m
- RRRC012 2m @ 16.7% Mn & 19.4% Fe from 26m



RRRC012 2m @ 18.5% Mn & 22% Fe from 30m  
**RRRC016 7m @ 18.7% Mn & 25.3% Fe from 6m**  
RRRC018 2m @ 18.4% Mn & 25.1% Fe from 7m  
RRRC018 3m @ 20.8% Mn & 22.2% Fe from 17m  
RRRC018 4m @ 19.2% Mn & 26.6% Fe from 24m  
**RRRC019 8m @ 17.8% Mn & 15.7% Fe from 19m**  
**RRRC020 6m @ 21.9% Mn & 17.6% Fe from 11m**  
RRRC022 4m @ 21.3% Mn & 20.6% Fe from 22m  
RRRC023 1m @ 24.1% Mn & 13.5% Fe from 24m  
RRRC023 1m @ 15.2% Mn & 23.9% Fe from 28m  
RRRC023 2m @ 22.6% Mn & 25% Fe from 36m  
RRRC026 2m @ 19.9% Mn & 19.3% Fe from 9m  
RRRC026 2m @ 16.6% Mn & 33.8% Fe from 25m  
RRRC028 3m @ 17.5% Mn & 19.5% Fe from 3m

*All results composited at a minimum 15% Mn cut-off allowing 1m of internal dilution.*

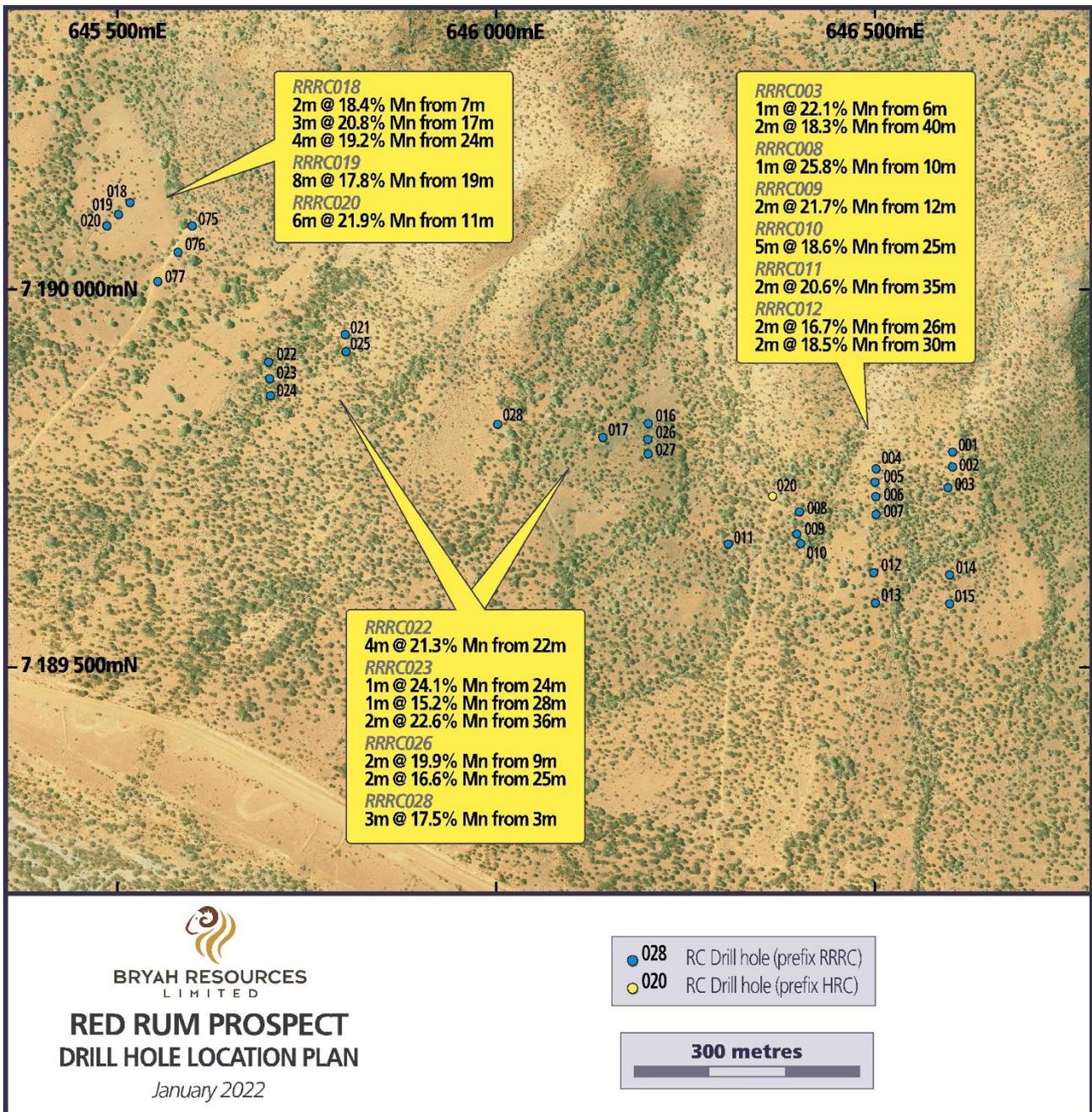


Figure 4 Map of Redrum Holes

### Next activities manganese JV

The manganese mineralisation in the Horseshoe region is largely controlled by the BYH-OMH JV tenement holding. This area has seen significant, but limited scale mining of manganese, with little or no previous regional exploration prior to the current work being undertaken by the BYH team. The number and scale of the discoveries already made by BYH and OMH point towards a substantial manganese field, capable of producing high grade manganese products for the steel and growing battery market, including High purity battery grade manganese sulphate and electrolytic manganese.



The BYH team, with assistance from OMH, as JV partner and with rights to valuable offtake of manganese products, are planning an active year ahead to bring the area back into production, including:

- *Finalising mineral resource estimates on multiple Mn prospects*
- *Analysis of specific gravity data, abrasion and crush index data*
- *Examination of the use of ore sorting technology along with other methods to identify lowest capital and operating cost processing pathway for the deposits*
- *Further GAIP surveys*
- *Follow-up drilling*
- *Mining Licence Application for new areas*
- *Mine Closure Plan lodgement and Mining Plan for M52/860*



## Company and Project Updates

Exploration follow up underway on multiple commodity targets.

- Windalah VMS Target Cu – Au Results
- New Hope (Gabanintha) Au drill results
- Flotation testwork for Cu-Ni
- Updated Cu, Ni, Co JORC resource update following Australian Vanadium's DFS
- Star Minerals Tumblegum South Drilling (BYH hold 20% of SMS)
- Sample results from Pegmatites observed South of Gabanintha for Lithium and rare earth mineral potential.

Corporate

- New CEO Appointed Ashley Jones with Extensive Manganese, Gold and Uranium experience
- Experienced Director and Geologist Brian Davis Appointed to the Board of Directors.
- BYH concludes successful spin-out of Star Minerals (ASX: SMS) retaining 20% holding.
- OMH continues expenditure on Manganese JV approaching 51% control position.

This announcement has been approved for release by the Board of Directors of Bryah Resources Limited.

*For further information, please contact:*

**Ashley Jones, CEO** +61 8 9321 0001

---

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



## **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.

Gabanintha, near Meekatharra, has a JORC 2012 Mineral Resource for Cu, Ni, Co<sup>i</sup> and additional structural gold potential. 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 \$2 million to earn-in to the Manganese Rights of the Project.

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 have a clear pathway to production, which will be significantly advanced in 2022 by the commencement and completion of metallurgical feasibility studies at both projects.

The Company's new Lake Johnson tenements are prospective for battery metals lithium and nickel and following the grant of these tenements, will undergo mapping and evaluation ahead of drilling. The corridor near Lake Johnson contains significant mines and discoveries of Ni and Li, including the Mount Holland Lithium Mine and the historical Maggie Hays/Emily Ann nickel deposits.



## **Competent Persons Statement – Exploration Results**

---

*The information in this announcement that relates to Exploration Results is based on information compiled by Mr Tony Standish, who is a Member of the Australian Institute of Geoscientists. Mr Standish is a consultant to Bryah Resources Limited (“the Company”). 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 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.*

## **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.*



**Appendix 1 Intersections and Collar Information**

Assay Table.15% Mn cut-off, 1 meter internal dilution.

HoleID	From	To	Interval	Mn_Pct	Fe_Pct	SiO <sub>2</sub> _Pct	P_Ppm	Al_Pct
BRRC152	3	11	8	27.1	19.4	9.0	0.14	9.1
BRRC153	11	12	1	18.2	27.0	9.8	0.09	10.3
BRRC155	9	11	2	26.0	21.2	6.0	0.08	10.4
BRRC155	14	18	4	24.4	21.4	9.2	0.13	10.0
BRRC156	12	24	12	27.5	16.0	10.4	0.10	11.4
BRRC157	16	19	3	22.6	19.0	12.4	0.06	12.7
BRRC157	21	22	1	22.0	23.8	10.2	0.11	9.4
BRRC159	30	31	1	16.8	37.6	5.1	0.31	3.8
BRRC162	19	20	1	16.3	31.8	7.9	0.24	8.4
BRRC162	28	29	1	18.6	29.0	9.3	0.23	8.1
BRRC163	0	4	4	16.5	25.0	17.1	0.12	9.8
BRRC164	12	18	6	23.2	21.8	9.5	0.07	10.9
BRRC164	20	21	1	19.0	28.9	9.9	0.20	6.4
BRRC164	31	32	1	15.9	25.3	13.3	0.15	12.0
BRRC165	13	23	10	29.4	16.3	9.2	0.07	9.7
BRRC166	17	24	7	21.7	23.2	9.4	0.05	11.5
BRRC167	22	36	14	26.0	15.9	12.5	0.05	12.0
BRRC169	20	24	4	17.2	20.5	16.3	0.04	14.4
BRRC170	13	30	17	23.2	17.9	12.4	0.08	13.1
BRRC171	1	2	1	16.1	29.6	12.3	0.08	9.1
BRRC174	1	4	3	23.9	21.2	10.5	0.14	9.2
BRRC176	5	8	3	21.1	23.3	10.7	0.05	10.9
BRRC176	9	10	1	15.9	27.7	12.5	0.12	11.3
BRRC178	13	25	12	27.0	18.1	7.6	0.10	11.4
BRRC179	8	9	1	19.7	27.1	9.0	0.04	9.7
CLRC004	5	7	2	17.1	20.5	19.1	0.11	12.2
CLRC006	9	11	2	22.6	12.5	21.9	0.24	12.4
RRRC002	4	5	1	15.2	22.0	20.7	0.08	11.2
RRRC002	6	7	1	16.2	28.4	11.2	0.43	9.0
RRRC003	6	7	1	22.1	14.2	17.1	0.17	13.8
RRRC003	13	14	1	15.3	33.2	7.6	0.33	7.5
RRRC003	24	25	1	16.8	14.4	21.3	0.02	19.3
RRRC003	40	42	2	18.3	12.9	37.3	0.03	7.3
RRRC008	7	8	1	18.3	10.1	21.0	0.07	21.0
RRRC008	10	12	2	25.8	14.8	13.1	0.21	12.5
RRRC009	12	14	2	21.7	19.6	10.6	0.16	13.0
RRRC010	25	30	5	18.6	24.4	8.7	0.33	9.3
RRRC011	35	37	2	20.6	25.6	7.3	0.35	7.5



RRRC012	20	21	1	20.1	22.1	5.6	0.09	15.1
RRRC012	26	28	2	16.7	19.4	12.9	0.11	16.8
RRRC012	30	32	2	18.5	22.0	10.1	0.09	11.3
RRRC016	0	1	1	18.8	18.4	8.7	0.14	14.5
RRRC016	6	13	7	18.7	25.3	3.0	0.23	14.4
RRRC018	7	9	2	18.4	25.1	9.3	0.11	12.0
RRRC018	17	20	3	20.8	22.2	10.5	0.14	11.2
RRRC018	24	28	4	19.2	26.6	9.9	0.28	7.7
RRRC019	19	27	8	17.8	15.7	16.2	0.08	15.6
RRRC020	11	17	6	21.9	17.6	9.2	0.09	16.3
RRRC020	20	21	1	15.6	26.7	11.6	0.07	12.6
RRRC022	22	26	4	21.3	20.6	10.5	0.02	12.5
RRRC023	24	25	1	24.1	13.5	5.5	0.02	19.2
RRRC023	28	29	1	15.2	23.9	7.3	0.02	14.3
RRRC023	36	38	2	22.6	25.0	6.7	0.05	9.0
RRRC026	9	11	2	19.9	19.3	7.9	0.16	16.8
RRRC026	25	27	2	16.6	33.8	1.8	0.37	8.3
RRRC026	28	29	1	15.9	33.0	2.9	0.46	7.7
RRRC027	3	4	1	15.2	26.3	4.0	0.19	14.5
RRRC027	6	7	1	20.8	22.1	4.6	0.14	14.7
RRRC027	23	24	1	18.2	22.4	7.5	0.22	15.2
RRRC028	3	6	3	17.5	19.5	21.4	0.15	11.0
RRRC028	9	10	1	16.2	23.8	13.0	0.19	13.6

Where holes are not listed they have no significant assay over 15%.Mn

*Collar Table MGA94 – Zone 50*

Hole ID	Hole Type	East	North	RL	Depth	Dip	Azimuth
BRRC152	RC	645059	7192061	554	30	-90	0
BRRC153	RC	645077	7192051	551	30	-90	0
BRRC154	RC	645058	7192034	553	30	-90	0
BRRC155	RC	645078	7192025	552	36	-90	0
BRRC156	RC	645058	7192006	552	30	-90	0
BRRC157	RC	645076	7191997	551	30	-90	0
BRRC158	RC	645039	7192015	552	30	-90	0
BRRC159	RC	645020	7192023	553	42	-90	0
BRRC160	RC	645020	7191997	552	30	-90	0
BRRC161	RC	645002	7192006	552	42	-90	0
BRRC162	RC	645003	7192032	554	36	-90	0
BRRC163	RC	645068	7192088	551	24	-90	0
BRRC164	RC	645038	7191988	551	36	-90	0
BRRC165	RC	645055	7191979	550	30	-90	0
BRRC166	RC	645074	7191970	550	30	-90	0



BRRC167	RC	645036	7191898	547	36	-90	0
BRRC168	RC	645054	7191892	546	36	-90	0
BRRC169	RC	645019	7191909	547	36	-90	0
BRRC170	RC	645001	7191918	548	36	-90	0
BRRC171	RC	645130	7192110	543	18	-90	0
BRRC172	RC	645095	7192126	549	18	-90	0
BRRC173	RC	645091	7192111	548	24	-90	0
BRRC174	RC	645093	7192093	547	18	-90	0
BRRC175	RC	645111	7192089	545	18	-90	0
BRRC176	RC	645102	7192071	547	18	-90	0
BRRC177	RC	645085	7192081	549	18	-90	0
BRRC178	RC	644980	7191929	548	30	-90	0
BRRC179	RC	644964	7191936	549	30	-90	0
CLRC001	RC	645300	7192600	530	30	-90	0
CLRC002	RC	645340	7192600	529	30	-90	0
CLRC003	RC	645380	7192600	527	30	-90	0
CLRC004	RC	645440	7192800	525	30	-90	0
CLRC005	RC	645480	7192800	526	30	-90	0
CLRC006	RC	645460	7192900	524	30	-90	0
MORC001	RC	644340	7192001	532	30	-90	0
MORC002	RC	644421	7192001	537	18	-90	0
MORC003	RC	644501	7192000	539	30	-90	0
MORC004	RC	644580	7192001	542	30	-90	0
MORC005	RC	644659	7192001	547	30	-90	0
MORC006	RC	644741	7192000	553	30	-90	0
MORC007	RC	644821	7192001	558	30	-90	0
RRRC001	RC	646602	7189784	552	48	-90	0
RRRC002	RC	646601	7189763	551	42	-90	0
RRRC003	RC	646600	7189747	550	48	-90	0
RRRC004	RC	646500	7189762	549	40	-90	0
RRRC005	RC	646500	7189743	548	40	-90	0
RRRC006	RC	646501	7189723	546	40	-90	0
RRRC007	RC	646500	7189702	545	40	-90	0
RRRC008	RC	646400	7189704	544	48	-90	0
RRRC009	RC	646400	7189684	543	42	-90	0
RRRC010	RC	646400	7189661	542	48	-90	0
RRRC011	RC	646399	7189642	541	48	-90	0
RRRC012	RC	646499	7189623	540	42	-90	0
RRRC013	RC	646500	7189583	538	48	-90	0
RRRC014	RC	646599	7189621	541	48	-90	0
RRRC015	RC	646599	7189581	539	28	-90	0
RRRC016	RC	646200	7189820	544	30	-90	0
RRRC017	RC	646141	7189804	542	24	-90	0
RRRC018	RC	645515	7190115	538	36	-90	0
RRRC019	RC	645499	7190099	536	36	-90	0
RRRC020	RC	645485	7190085	535	30	-90	0



RRRC021	RC	645799	7189940	543	24	-90	0
RRRC022	RC	645699	7189903	536	40	-90	0
RRRC023	RC	645699	7189880	536	48	-90	0
RRRC024	RC	645699	7189858	535	40	-90	0
RRRC025	RC	645799	7189918	542	24	-90	0
RRRC026	RC	646201	7189800	543	41	-90	0
RRRC027	RC	646200	7189781	542	24	-90	0
RRRC028	RC	646000	7189820	541	24	-90	0



## Appendix 2 - Manganese RC Drilling

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

#### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• For this drilling program Bryah Resources Limited (Bryah Resources) utilised vertical Reverse Circulation (RC) drill holes.</li> <li>• RC drilling was to generally 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, initially by the hole then removed and stored at a bag farm.</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.</li> <li>• 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>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Bryah Resources' RC holes were drilled with a contract RC drilling rig.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></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 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> </ul>



## BRYAH RESOURCES LIMITED

Criteria	JORC Code explanation	Commentary
		<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> <li>• At this stage, no investigations have been made into whether there is a relationship between sample recovery and grade.</li> </ul>
<b>Logging</b>	<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 was logged. Where no sample was returned due to cavities/voids it was recorded as such.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<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 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> </ul> </li> <li>• Quality Control Procedures were: <ul style="list-style-type: none"> <li>○ A duplicated sample was collected at random intervals on the cyclone nominally 1 per 100 samples.</li> <li>○ Certified Reference Material (CRM) samples were inserted in the field every 40 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> </ul> </li> </ul>



## BRYAH RESOURCES LIMITED

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <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>
<b>Quality of assay data and laboratory tests</b>	<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>
<b>Verification of sampling and assaying</b>	<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 the drilling and sampling processes in the field.</li> <li>● All primary data related to logging and sampling are captured using laptops into LogChief 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>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>● <i>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.</i></li> <li>● <i>Specification of the grid system used.</i></li> <li>● <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>● All collars have currently been surveyed with a differential 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 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-Trac downhole as a single-shot tool to collect the surveys approximately every 30m down the hole in a stainless-steel starter rod.</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>



## BRYAH RESOURCES LIMITED

Criteria	JORC Code explanation	Commentary
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <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>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></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.</li> <li>• The sedimentary package at Horseshoe South strikes roughly north-south 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 recognized at this time and it is not considered to have introduced a sampling bias.</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></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>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></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
<b>Mineral tenement and land tenure status</b>	<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 relevant tenements drilled in this program (E52/3237 and E52/1806) are 100% owned or beneficially held by Bryah Resources Limited. OM (Manganese) Limited holds a 30% 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>
<b>Exploration done by other parties</b>	<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 these anomalies was undertaken.</li> </ul>
<b>Geology</b>	<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>



**BRYAH RESOURCES  
LIMITED**

Criteria	JORC Code explanation	Commentary
<b>Drill hole Information</b>	<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 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>	<ul style="list-style-type: none"> <li>• Refer to Table 4 of this announcement.</li> </ul>
<b>Data aggregation methods</b>	<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>
<b>Relationship between mineralisation widths and intercept lengths</b>	<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>• 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>
<b>Diagrams</b>	<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>
<b>Balanced reporting</b>	<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>• Refer to Appendix of this announcement.</li> </ul>
<b>Other substantive exploration data</b>	<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>



**BRYAH RESOURCES**  
L I M I T E D

Criteria	JORC Code explanation	Commentary
<b>Further work</b>	<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>• Additional drilling to test for lateral extensions of manganese mineralisation have not yet been planned.</li> </ul>

<sup>i</sup> See ASX announcement dated 1<sup>st</sup> June 2021 '31.3 MT Ni-Cu-Co Mineral Resource at Gabanintha