

ASX ANNOUNCEMENT 16 NOVEMBER 2023

# Manganese Drilling Results at West Brumby and Redrum continue to impress

## **HIGHLIGHTS**

- > Brumby Creek West drill hole Intersections of:
  - o 13m at 22.7% Mn in hole BBRC241 from 15m
  - o 6m at 24.4% Mn in hole BBRC249 from 19m
  - o 4m at 22.0% Mn in hole BBRC251 from 28m
- > Redrum drill hole Intersections of:
  - o 7m at 29.3% Mn in hole RRRC074 from 21m
  - o 8m at 29.6% Mn in hole RRRC076 from 14m
  - o 5m at 21.0% Mn in hole RRRC072 from 11m
  - o 7m at 20.7% Mn in hole RRRC072 from 20m
- > Black Hill North drill hole Intersections of:
  - o 3m at 34.8% Mn in hole BHRC035 from 0m
- > Epona drill hole Intersections of:
  - 5m at 21.0% Mn in hole EPRC015 from 15m
  - o 3m at 21.5% Mn in hole EPRC028 from 10m
- ➤ **Gold Trip** drill hole Intersections of:
  - o 2m at 25.5% Mn in hole GTRC005 from 3m

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 August 2023. 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: "These excellent drill results follow our other news flow, being the updated manganese resource and the granting of the mining leases. All the manganese JORC resources are now on granted mining leases. The August drilling results continue to expand the mineralisation at Brumby Creek West and Redrum. Our grades reported are



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using cutoffs higher than many other ASX reported resource grades, which should give us the competitive edge when it comes to mining".

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 1,135km² over parts of the western Bryah Basin. Figure 1 shows the Manganese Joint Venture tenement package, with prospects and an existing manganese Mineral Resource.¹

The August 2023 drill program covered 95 holes for 2938 metres. The prospects drilled were Brumby Creek West, Epona, Redrum, Black Hill North and Gold Trip. The best drill intersections continued to come from the extensional drilling around the resources at Brumby Creek and Redrum.

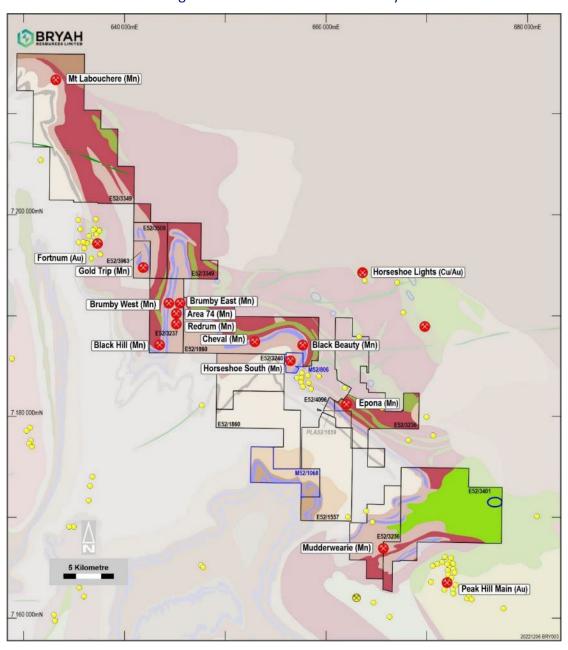


Figure 1: Prospect locations with geology map showing the Horseshoe Formation

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<sup>&</sup>lt;sup>1</sup>See ASX announcement dated 24th August 2023 'Manganese Mineral Resource increases to 3.07 MT at 20.2% Mn'.





## **Brumby Creek West**

Drilling in August continued to follow the shallow manganese mineralisation southwards. The mineralisation appears to be bifurcating with excellent results on the western side becoming prominent. Grade though is still excellent, with the best results of:

- 6m at 24.4% Mn from 19m in hole BBRC0249
- 13m at 22.7% Mn from 15m in hole BBRC0241
- 4m at 22.05% Mn from 28m in hole BBRC0251

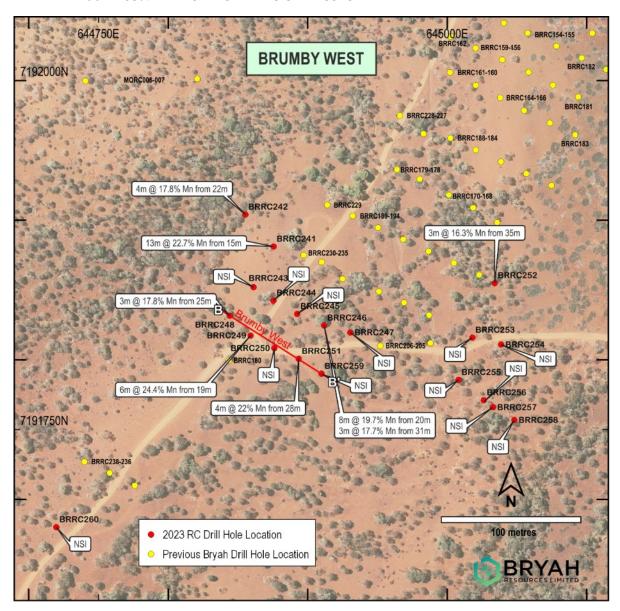


Figure 2 Collar Plan of August 2023 Manganese Drilling at Brumby Creek West (Red collars)





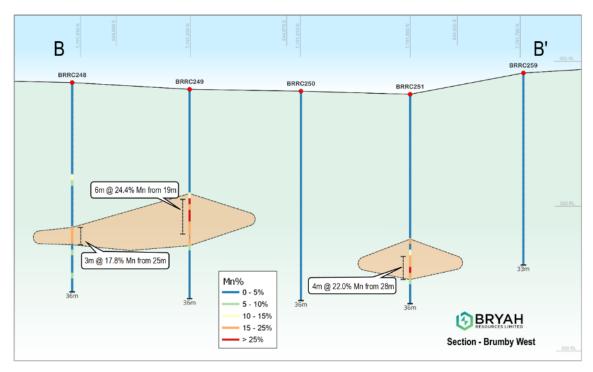


Figure 3 Oblique Section Brumby Creek West Prospect

#### Redrum

Following the mineralisation to the northeast has continued to give excellent results, whereas results to the south have closed out the mineralisation. The best northern Redrum results are:

- 7m at 29.3% Mn from 21m in hole RRRC074
- 8m at 29.6% Mn from 14m in hole RRRC076
- 5m at 21.0% Mn from 11m in hole RRRC072
- 7m at 20.7% Mn from 20m in hole RRRC072
- 3m at 21.2% Mn from 30m in hole RRRC072
- 4m at 23.8% Mn from 12m in hole RRRC084

The resource at Redrum is 780,000 tonnes - 429Kt at 19.2% Mn Indicated Resource and 251Kt at 18.0% Mn Inferred Resource (Table 1) . These further results extend the mineralisation to the north. Drilling mostly closed out the southern extent.





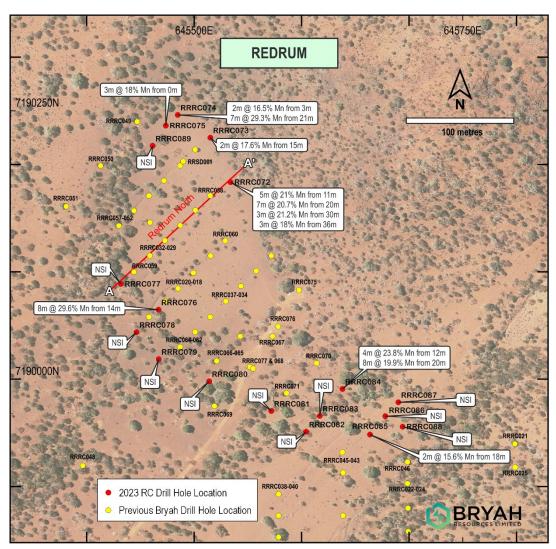


Figure 4 Collar Plan of the OAugust 2023 Manganese Drilling at Red Rum (Red collars)

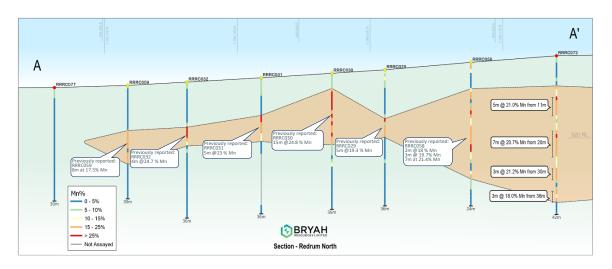


Figure 5 Oblique Section Redrum Prospect (previous results included <sup>2 3</sup>)

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<sup>&</sup>lt;sup>2</sup> ASX announcement 31 August 2022 'Continued Manganese Drilling Success-Redrum and Brumby West'

<sup>&</sup>lt;sup>3</sup> ASX announcement 10 May 2023 `Drilling at Redrum Increases Resource Potential`





#### **Black Hill Horth**

Drilling during August 2023 program drill tested outcropping manganese that mapped and was sampled earlier in the year. Channel manganese was not intersected. Two holes intersected surface cap manganese.

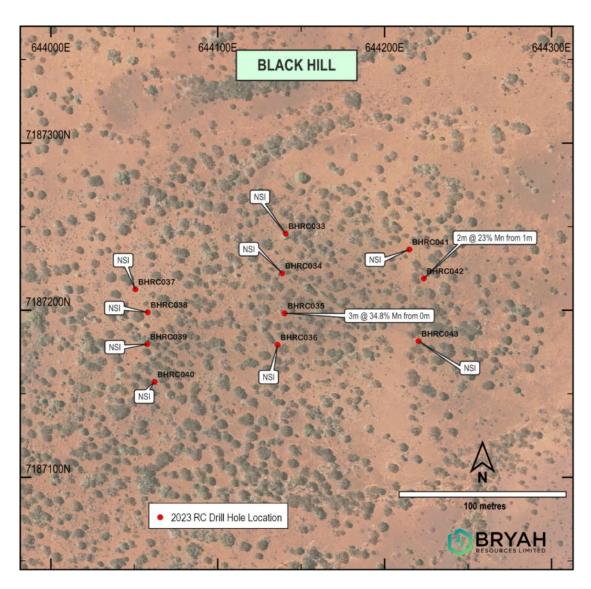


Figure 6 Collar Plan of August 2023 Manganese Drilling at Black Hill North (Red collars)

The surface cap is high grade in places returning:

- 3m at 34.8% Mn from surface in hole BHRC038
- 2m at 23.0% Mn from 1m in hole BHRC042





## **Gold Trip**

The drilling at Gold Trip only intersected surface cap style mineralisation. Bryah will evaluate any other potential in the area. The notable result was:

2m at 25.5% Mn from 3m in hole GTRC005

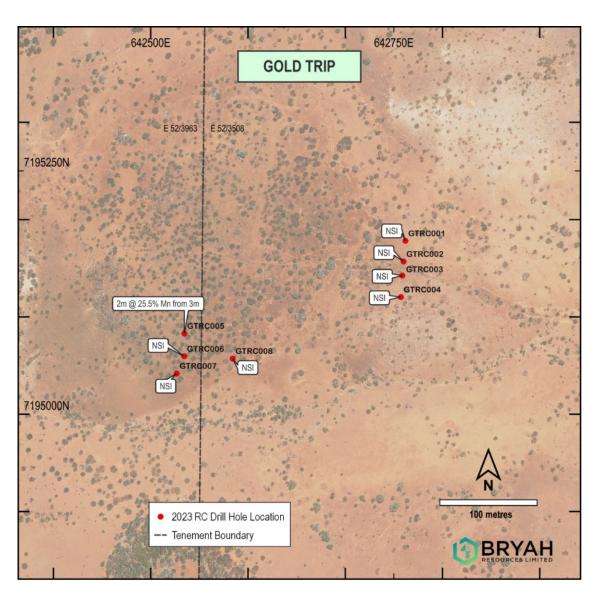


Figure 7 Collar Plan of August 2023 Manganese Drilling at Gold Trip (Red collars)

## **Epona**

The surface mapping at Epona indicated potential manganese over a large area. The area was drilled on an 80m line spacing to test the potential. The most southern lines showed significant intersections and worthy of follow up for a potential channel manganese mineralisation. The southern holes gave intersections of:

• 5m at 21.0% Mn from 15m in hole EPRC015





• 3m at 20.4% Mn from 12m in hole EPRC016

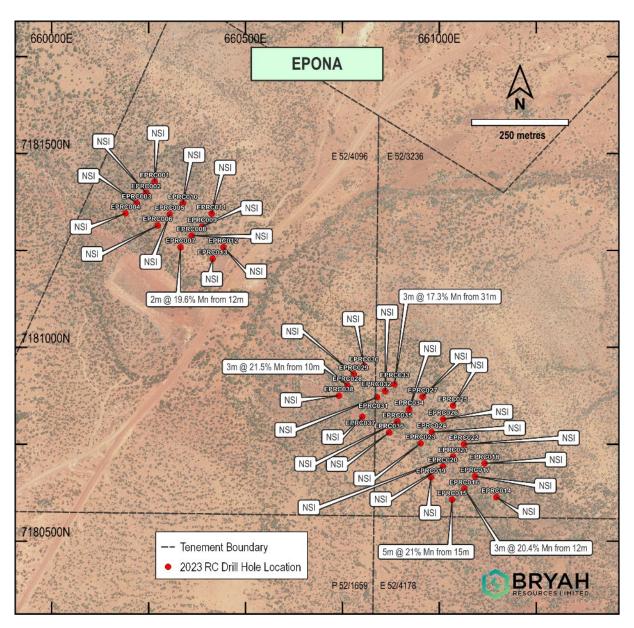


Figure 8 Collar Plan of August 2023 Manganese Drilling at Epona (Red collars)

The drilling will now be incorporated in to the current JORC resource.

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.

The prospective Bryah Basin licences cover 1,048km² 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 \$350m. Bryah and OMH have an excellent working relationship, with OMH having already spent over \$3.5 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.

The Lake Johnston tenements are prospective for battery metals lithium and nickel. 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 14.73% of gold focused Star Minerals (ASX:SMS). Star has a Mineral Resource at Tumblegum South and exploration prospects in the West Bryah Basin.

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<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 report that relates to Exploration Results and Exploration Targets is based on and fairly represents information and supporting documentation prepared by Tony Standish. Mr Standish is a member of the Australian Institute of Geoscientists (AIG) and has 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. Mr 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.

#### **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), and Ms Gemma Lee (Principal Geologist with Bryah Resources). Mr Barnes and Ms Lee are members of the Australasian Institute of Mining and Metallurgy (AusIMM) and/or the Australian Institute of Geoscientists (AIG). Both 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, Ms Lee is the Competent Person for the geological model and site visits and for the geological database. Mr Barnes is the Competent Person for the estimation. Mr Barnes, and Ms Lee consent to the inclusion in this 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 1: Drill locations Grid MGA94\_50

HoleID	Max_Depth	NAT_East	NAT_North	NAT_RL	Lease_ID	Prospect
BHRC033	12	644141	7187246	541	E52_3237	Black Hill
BHRC034	12	644139	7187222	541	E52_3237	Black Hill
BHRC035	24	644140	7187198	541	E52_3237	Black Hill
BHRC036	6	644136	7187179	540	E52_3237	Black Hill
BHRC037	12	644051	7187213	544	E52_3237	Black Hill
BHRC038	12	644058	7187199	545	E52 3237	Black Hill
BHRC039	30	644058	7187180	546	E52 3237	Black Hill
BHRC040	12	644062	7187157	545	E52 3237	Black Hill
BHRC041	12	644215	7187236	536	E52 3237	Black Hill
BHRC042	12	644223	7187219	536	E52 3237	Black Hill
BHRC043	12	644220	7187181	536	E52 3237	Black Hill
BRRC241	36	644876	7191881	548	E52 3237	Brumby West
BRRC242	36	644855	7191904	548	E52 3237	Brumby West
BRRC243	36	644861	7191852	547	E52 3237	Brumby West
BRRC244	40	644875	7191842	547	E52 3237	Brumby West
BRRC245	36	644892	7191833	546	E52 3237	Brumby West
BRRC246	40	644912	7191835	545	E52 3237	Brumby West
BRRC247	36	644931	7191823	545	E52 3237	Brumby West
BRRC248	36	644844	7191820	546	E52 3237	Brumby West
BRRC249	36	644859	7191832	545	E52_3237	Brumby West
BRRC250	36	644876	7191817	545	E52 3237	Brumby West
	36	644894	7191808	543	E52_3237	. '
BRRC251	42			545	_	Brumby West
BRRC252	1	645034	7191855		E52_3237	Brumby West
BRRC253	36	645018	7191816	545	E52_3237	Brumby West
BRRC254	50	645039	7191811	544	E52_3237	Brumby West
BRRC255	45	645008	7191786	544	E52_3237	Brumby West
BRRC256	45	645026	7191771	543	E52_3237	Brumby West
BRRC257	48	645033	7191766	543	E52_3237	Brumby West
BRRC258	43	645048	7191757	548	E52_3237	Brumby West
BRRC259	33	644910	7191790	548	E52_3237	Brumby West
BRRC260	42	644720	7191680	541	E52_3237	Brumby West
EPRC001	30	660266	7181428	540	E52_4096	Epona
EPRC002	36	660244	7181399	540	E52_4096	Epona
EPRC003	41	660219	7181372	540	E52_4096	Epona
EPRC004	36	660191	7181346	540	E52_4096	Epona
EPRC005	36	660304	7181344	574	E52_4096	Epona
EPRC006	36	660274	7181315	571	E52_4096	Epona
EPRC007	36	660332	7181258	540	E52_4096	Epona
EPRC008	30	660361	7181288	540	E52_4096	Epona
EPRC009	30	660388	7181312	540	E52_4096	Epona
EPRC010	36	660338	7181372	578	E52_4096	Epona
EPRC011	24	660413	7181345	567	E52_4096	Epona
EPRC012	24	660443	7181258	560	E52_4096	Epona
EPRC013	30	660415	7181228	560	E52_4096	Epona
EPRC014	18	661147	7180614	566	E52_3236	Epona
EPRC015	30	661033	7180607	584	E52_3236	Epona
EPRC016	33	661065	7180635	587	E52_3236	Epona
EPRC017	30	661093	7180667	588	E52_3236	Epona
EPRC018	24	661117	7180701	589	E52_3236	Epona
EPRC019	28	660979	7180665	572	E52_3236	Epona
EPRC020	18	661009	7180693	573	E52_3236	Epona
EPRC021	45	661036	7180719	574	E52 3236	Epona
	33	661063	7180750	574	E52 3236	Epona





HoleID	Max_Depth	NAT_East	NAT_North	NAT_RL	Lease_ID	Prospect
EPRC023	30	660952	7180752	583	E52_3236	Epona
EPRC024	42	660980	7180781	588	E52_3236	Epona
EPRC025	30	661035	7180850	537	E52_3236	Epona
EPRC026	36	661010	7180815	583	E52_3236	Epona
EPRC027	30	660957	7180873	579	E52_3236	Epona
EPRC028	30	660763	7180902	564	E52_4096	Epona
EPRC029	24	660780	7180931	566	E52_4096	Epona
EPRC030	36	660806	7180952	571	E52_4096	Epona
EPRC031	20	660840	7180871	584	E52_3236	Epona
EPRC032	30	660860	7180887	587	E52_3236	Epona
EPRC033	51	660884	7180905	585	E52_3236	Epona
EPRC034	30	660922	7180840	577	E52_3236	Epona
EPRC035	30	660892	7180808	575	E52_3236	Epona
EPRC036	26	660871	7180780	574	E52_3236	Epona
EPRC037	24	660802	7180821	584	E52_4096	Epona
EPRC038	34	660741	7180875	583	E52_4096	Epona
GTRC001	30	642762	7195178	510	E52_3508	Gold Trip
GTRC002	30	642760	7195157	509	E52_3508	Gold Trip
GTRC003	30	642759	7195143	509	E52_3508	Gold Trip
GTRC004	30	642757	7195120	510	E52_3508	Gold Trip
GTRC005	30	642535	7195083	514	E52_3963	Gold Trip
GTRC006	30	642534	7195060	514	E52_3963	Gold Trip
GTRC007	24	642527	7195042	513	E52_3963	Gold Trip
GTRC008	30	642584	7195057	513	E52_3963	Gold Trip
RRRC072	42	645534	7190184	542	E52_3237	Redrum
RRRC073	36	645515	7190225	542	E52_3237	Redrum
RRRC074	30	645485	7190246	541	E52_3237	Redrum
RRRC075	36	645474	7190236	540	E52_3237	Redrum
RRRC076	30	645467	7190065	534	E52_3237	Redrum
RRRC077	30	645432	7190089	533	E52_3237	Redrum
RRRC078	33	645446	7190044	533	E52_3237	Redrum
RRRC079	30	645467	7190019	533	E52_3237	Redrum
RRRC080	30	645514	7189998	534	E52_3237	Redrum
RRRC081	34	645572	7189970	535	E52_3237	Redrum
RRRC082	32	645604	7189951	536	E52_3237	Redrum
RRRC083	30	645617	7189966	537	E52_3237	Redrum
RRRC084	33	645638	7189991	538	E52_3237	Redrum
RRRC085	30	645664	7189948	538	E52_3237	Redrum
RRRC086	33	645678	7189966	539	E52_3237	Redrum
RRRC087	30	645690	7189979	540	E52_3237	Redrum
RRRC088	30	645694	7189956	538	E52_3237	Redrum
RRRC089	24	645461	7190217	538	E52_3237	Redrum

All holes were vertical

Table 2 Significant Intersections

Hole_ID	Depth_From	Depth_To	Interval	Mn_pct	Fe_pct	
BHRC033			NSI			
BHRC034			NSI			
BHRC035	0	3	3	34.8	17.1	
BHRC036			NSI			
BHRC037	NSI					
BHRC038		NSI				
BHRC039	NSI					
BHRC040		NSI				
BHRC041	NSI					
BHRC042	1	3	2	23.0	23.4	
BHRC043			NSI			
BRRC241	15	28	13	22.7	19.4	





BRRC242	22	26	4	17.8	21.8
BRRC243	22	20	NSI	17.0	21.0
BRRC244			NSI		
BRRC245			NSI		
BRRC246	20	28	8	19.7	26.2
BRRC246	31	34	3	17.7	25.2
BRRC247	31	3-7	NSI	17.7	25.2
BRRC248	25	28	3	17.8	31.3
BRRC249	19	25	6	24.4	22.6
BRRC250	13	23	NSI	24.4	22.0
BRRC251	28	32	4	22.0	20.3
BRRC252	35	38	3	16.3	15.2
BRRC253	33	30	NSI	10.5	13.2
BRRC254			NSI		
BRRC255			NSI		
BRRC256			NSI		
BRRC257			NSI		
BRRC258			NSI		
BRRC259			NSI		
BRRC260			NSI		
EPRC001			NSI		
EPRC002			NSI		
EPRC003			NSI		
EPRC004			NSI		
EPRC005			NSI		
EPRC006			NSI		
EPRC007	12	14	2	19.6	28.6
EPRC008	12	14	NSI	15.0	20.0
EPRC009			NSI		
EPRC010			NSI		
EPRC011			NSI		
EPRC012			NSI		
EPRC013			NSI		
EPRC014			NSI		
EPRC015	15	20	5	21.0	31.3
EPRC016	12	15	3	20.4	25.8
EPRC017		13	NSI	20.1	25.0
EPRC018			NSI		
EPRC019			NSI		
EPRC020			NSI		
EPRC021			NSI		
EPRC022			NSI		
EPRC023			NSI		
EPRC024			NSI		
EPRC025			NSI		
EPRC026			NSI		
EPRC027			NSI		
EPRC028	10	13	3	21.5	22.7
EPRC029			NSI	-	
EPRC030			NSI		
EPRC031			NSI		
EPRC032			NSI		
EPRC033	31	34	3	17.3	32.8
EPRC034			NSI	-	
EPRC035			NSI		
EPRC036			NSI		
EPRC037			NSI		
EPRC038			NSI		
GTRC001			NSI		
GTRC002			NSI		
GTRC003			NSI		
GTRC004			NSI		
GTRC005	3	5	2	25.5	18.2
GTRC006			NSI	-	
GTRC007			NSI		
GTRC008			NSI		





RRRC072	11	16	5	21.0	28.6	
RRRC072	20	27	7	20.7	20.0	
RRRC072	30	33	3	21.2	25.4	
RRRC072	36	39	3	18.0	24.1	
RRRC073	15	17	2	17.6	23.7	
RRRC074	3	5	2	16.5	18.8	
RRRC074	21	28	7	29.3	21.5	
RRRC075	0	3	3	18.0	24.9	
RRRC076	14	22	8	29.6	18.2	
RRRC077			NSI			
RRRC078	NSI					
RRRC079			NSI			
RRRC080			NSI			
RRRC081			NSI			
RRRC082		NSI				
RRRC083			NSI			
RRRC084	12	16	4	23.8	27.6	
RRRC084	20	28	8	19.9	23.0	
RRRC085	18	20	2	15.6	28.1	
RRRC086	NSI					
RRRC087	NSI					
RRRC088	NSI					
RRRC089	NSI					

# Appendix 2

Table 3 August 2023 Manganese Mineral Resource at 15% Mn Cut-off  $^1$ 

			2023 Estimate	
Prospect	Category	kt	Mn %	Fe %
Area 74		286	24.1	21.1
Brumby Creek		1,038	20.6	20.5
Horseshoe	Indicated	295	20.5	23.6
Redrum		429	19.2	22.7
Black Hill		24	29.7	20.2
Total Indicate	Total Indicated		20.9	21.5
Area 74		16	18.0	23.5
Brumby Creek	الموادة الموادة	276	18.5	24.4
Horseshoe	Inferred	351	19.5	29.9
Redrum		351	18.0	23.8
Total Inferre	Total Inferred		18.6	26.1
Total Mineral Res	Total Mineral Resource		20.2	23.0

Note: Appropriate rounding applied. kt = 1,000 tonnes

 $<sup>^{1}\,\</sup>mathrm{See}$  ASX announcement dated 24th August 2023





# **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 types (e.g. submarine nodules) may warrant disclosure of detailed information.</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 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>	Bryah Resources' RC holes were drilled with a contract slimline RC drilling rig.
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>





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		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> </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: <ul> <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> </ul> </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>





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		<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>





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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	The results of any audits or reviews of sampling techniques and data.	<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, E52/3508, E52/3963, E52/4096 and E52/3236, which are 100% owned by Bryah Resources Limited. 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.	• 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 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).





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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 Appendix 1 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>	Refer to Appendix 1 of this announcement.
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>	No other exploration data available.





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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>