

# BRYAH COMPLETES INITIAL MANGANESE DRILLING PROGRAMME

*First phase of manganese exploration drilling successfully completed with follow-up programme to commence in June 2019.* 

### HIGHLIGHTS:

- Drilling programme was managed by Bryah and funded by **OM Holdings Limited** (ASX:OMH) as part of recently announced Manganese Farm-In and Joint Venture agreement.
- Shallow RC drilling programme of **122 holes for 3,062 metres** completed at 4 sites (Horseshoe South, Brumby Creek, Devils Hill and Black Cat).
- **1,354 samples** at laboratory for analysis. Further samples to follow shortly.
- Assay results expected to be available from the laboratory in **June 2019**.
- Follow-up drilling is planned to commence in June 2019.

Bryah Resources Limited ("Bryah" or "the Company") is pleased to advise that the first phase of manganese exploration drilling within the Bryah Basin in central Western Australia has been successfully completed.

The drilling programme is being managed by Bryah and funded by OM (Manganese) Limited (OMM) under the recently announced \$7.3 million agreement between Bryah and OMM, a wholly owned subsidiary of ASX-listed OM Holdings Limited (ASX:OMH) (*see ASX announcement dated 23 April 2019 "Manganese Farm-In and Joint Venture Agreement with OM Holdings Limited"*). Under the agreement, OMM is funding \$500,000 of manganese exploration within the project area (see Figure 1) by 30 June 2019.

A total of 122 holes for 3,062 metres of reverse circulation drilling was completed in this programme at four sites; the historic Horseshoe South Manganese mine, the Brumby Creek and Devils Hill Prospects and a nearby prospect named Black Cat (see Figure 2). From this programme a total of 1,354 one metre interval samples from the Horseshoe South Extended and Brumby Creek areas have been delivered to a laboratory in Perth for analysis. The Company expects the assay results for these samples to be available in June 2019. An additional consignment of samples from the Devils Hill and Black Cat Prospects will be sent to the laboratory shortly.

Tables 1-4 and Figures 3-6 contain details of the drill holes for each of the four prospects.

A follow-up drilling programme is currently planned to commence in June 2019.

#### Address

Level 1, 85 Havelock Street West Perth WA 6005 Tel: +61 8 9321 0001 Email: info@bryah.com.au ASX Code: BYH ABN: 59 616 795 245 Shares on issue: 63,790,505 Latest Share Price: \$0.074 Market Capitalisation: \$4.7M Projects

Bryah Basin – Copper, Gold, Manganese Gabanintha – Gold, Copper bryah.com.au



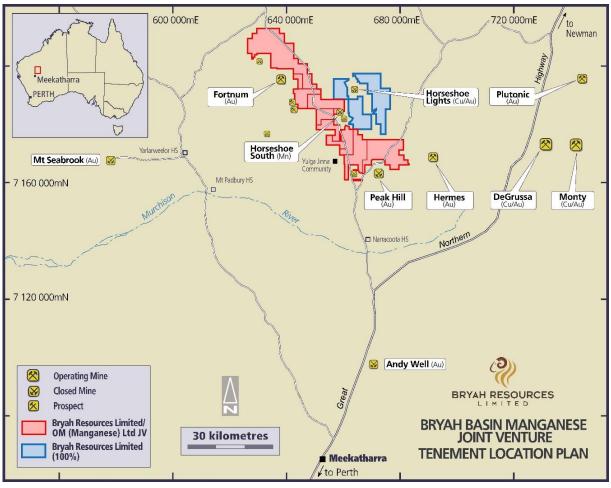


Figure 1 – Tenement Location Plan

#### Horseshoe South Manganese Mine

Horseshoe South is the largest historic manganese mine in the region, having produced approximately 1 million tonnes of high-grade manganese ore from 1948-1969 and 2008-2011.

The Horseshoe Range area has been the main manganese producing region within the Bryah and Padbury Basins, with production dominated by the Horseshoe South Mine, located on M52/806, and a smaller satellite deposit at the Horseshoe North Mine which is located on E52/1860 (see Figure 2). The first production period for these 2 deposits was from 1948 to 1969, when 490,000 tonnes of manganese ore was mined at a reported average grade of 42% Mn.

Between 2008 and 2011, a subsidiary of ASX-listed Mineral Resources Limited (ASX:MIN) processed historical stockpiles and completed open pit mining operations. Over 400,000 tonnes of manganese ore was reportedly produced and sold during this period.

In addition, shallow drilling completed in 2011 on the neighbouring tenement to the south of M52/806 has recorded an Indicated Mineral Resource of 437,000 tonnes @ 19.6% Mn (see Figure 3).



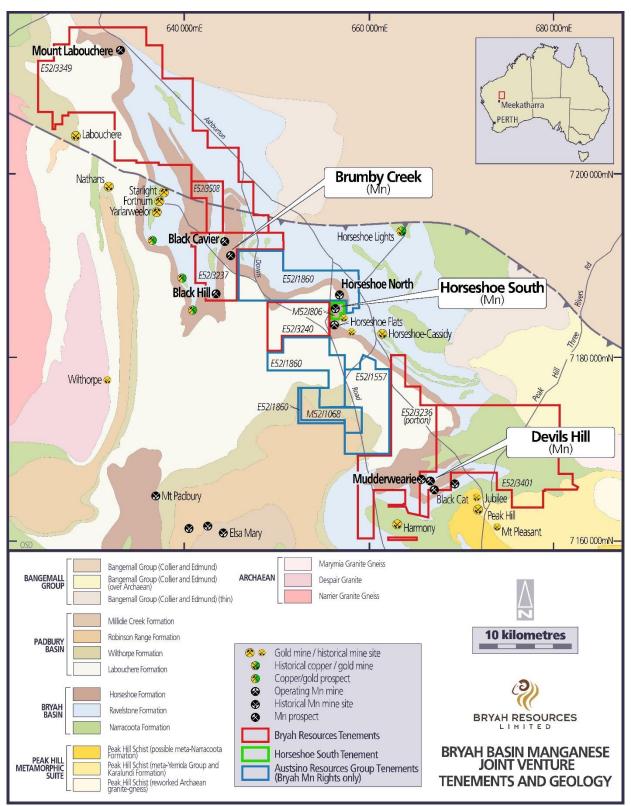
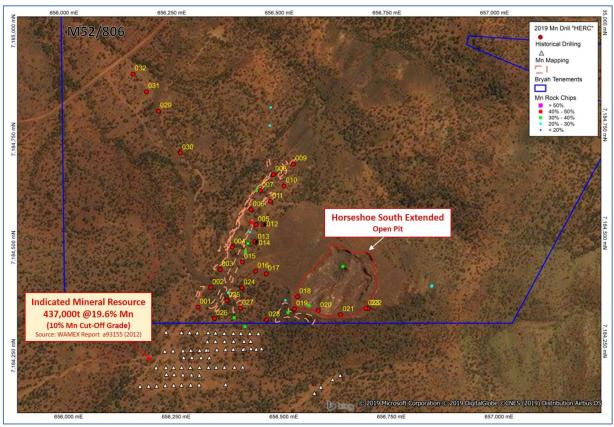
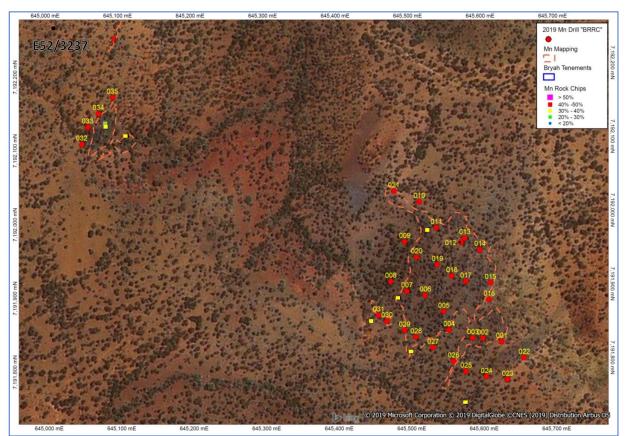


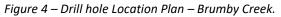
Figure 2 – Bryah Basin Tenements and Geology Plan





*Figure 3 – Drill hole Location Plan - Horseshoe South.* 





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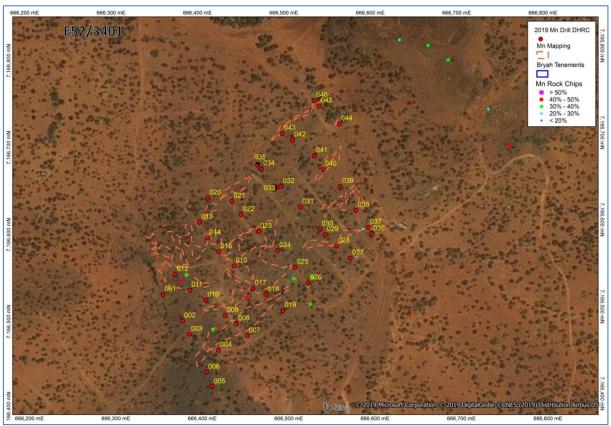


Figure 5 – Drill hole Location Plan – Devils Hill.

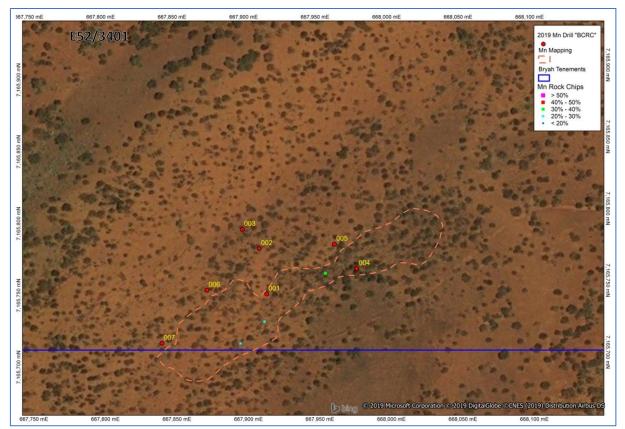


Figure 6 – Drill hole Location Plan – Black Cat.

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#### About Bryah Resources Limited

Bryah Resources Limited is a copper-gold-manganese focused explorer with 2 projects located in central Western Australia, being the 880 km<sup>2</sup> Bryah Basin Project and the 200km<sup>2</sup> Gabanintha Project. The Bryah Basin is host to the high-grade copper-gold mines at DeGrussa, discovered by Sandfire Resources NL in 2009, and at Horseshoe Lights, which was mined until 1994. The Bryah Basin also has several historical and current manganese mines including the recently acquired Horseshoe South mine.

The Company has secured a farm-in and joint venture agreement with OM (Manganese) Limited in respect to its manganese rights only.

At Gabanintha, Bryah holds the rights to all minerals except Vanadium/Uranium/Cobalt/Chromium/ Titanium/Lithium/Tantalum/Manganese & Iron Ore (Excluded Minerals). Australian Vanadium Limited retains 100% rights in the Excluded Minerals on the Gabanintha Project.

#### **Competent Persons Statement**

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

#### Forward-Looking Statements

This report may contain certain "forward-looking statements" which may not have been based solely on historical facts, but rather may be based on the Company's current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward looking statements are subject to risks, uncertainties, assumptions and other factors which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Readers should not place undue reliance on forward looking information. The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement" to reflect events or circumstances after the date of this report, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.



### Table 1

# Drilling Information – Horseshoe South

Hole ID	Northing mN	Easting mE	RL(m)	Azimuth & Dip (planned)	Total Depth (m)	Depth From (m)	Depth To (m)	Interval Width (m)	Mn %	
HERC001	656296.1	7184348.0	576.0	300 <sup>0</sup> /-60 <sup>0</sup>	30					
HERC002	656326.1	7184393.0	581.1	300 <sup>0</sup> /-60 <sup>0</sup>	30					
HERC003	656348.5	7184434.0	581.1	300 <sup>0</sup> /-60 <sup>0</sup>	30					
HERC004	656377.5	7184486.0	578.3	300 <sup>0</sup> /-60 <sup>0</sup>	30					
HERC005	656433.4	7184537.0	532.5	300 <sup>0</sup> /-60 <sup>0</sup>	48					
HERC006	656421.8	7184572.0	567.7	300 <sup>0</sup> /-60 <sup>0</sup>	18					
HERC007	656444.1	7184616.0	582.6	300 <sup>0</sup> /-60 <sup>0</sup>	54					
HERC008	656475.0	7184652.0	585.4	300 <sup>0</sup> /-60 <sup>0</sup>	18					
HERC009	656521.7	7184676.0	584.1	300 <sup>0</sup> /-60 <sup>0</sup>	15					
HERC010	656499.2	7184625.0	592.3	300 <sup>0</sup> /-60 <sup>0</sup>	54					
HERC011	656467.2	7184590.0	592.3	300 <sup>0</sup> /-60 <sup>0</sup>	54					
HERC012	656449.5	7184537.0	594.5	300°/-60°	54					
HERC013	656432.7	7184496.5	590.1	300°/-60°	6					
HERC014	656430.1	7184498.6	591.6	300°/-60°	48					
HERC015	656400.4	7184451.7	587.2	300°/-60°	54					
HERC016	656431.2	7184430.1	598.2	VERTICAL	78					
HERC017	656455.7	7184423.7	591.6	300°/-60°	24		Assays F	Pending		
HERC018	656527.7	7184369.9	604.9	300 <sup>0</sup> /-60 <sup>0</sup>	39					
HERC019	656520.0	7184341.7	605.6	270 <sup>0</sup> /-60 <sup>0</sup>	19					
HERC020	656575.5	7184337.4	613.5	270 <sup>0</sup> /-60 <sup>0</sup>	24					
HERC021	656627.5	7184327.5	641.5	270 <sup>0</sup> /-60 <sup>0</sup>	24					
HERC022	656691.7	7184340.6	641.0	270 <sup>0</sup> /-60 <sup>0</sup>	7					
HERC023	656686.2	7184341.3	629.4	270 <sup>0</sup> /-60 <sup>0</sup>	36					
HERC024	656398.5	7184391.8	595.4	300°/-60°	30					
HERC025	656363.5	7184363.1	582.8	300°/-60°	42					
HERC026	656334.0	7184322.0	578.0	300°/-60°	42					
HERC027	656394.6	7184345.4	587.9	300 <sup>0</sup> /-60 <sup>0</sup>	84					
HERC028	656455.3	7184317.4	592.7	300°/-60°	54					
HERC029	656209.6	7184802.3	539.2	300 <sup>0</sup> /-60 <sup>0</sup>	36					
HERC030	656259.4	7184705.1	556.7	VERTICAL	18					
HERC031	656182.5	7184847.3	555.9	300 <sup>0</sup> /-60 <sup>0</sup>	18					
HERC032	656151.7	7184888.4	553.4	300 <sup>0</sup> /-60 <sup>0</sup>	6					
	-			TOTAL	1,124					



### Table 2

# Drilling Information – Brumby Creek Prospect

Hole ID	Northing mN	Easting mE	RL(m)	Azimuth & Dip (planned)	Total Depth	Depth From (m)	Depth To (m)	Interval Width (m)	Mn %
BRRC001	645620.5	7191828.9	575.9	290 <sup>0</sup> /-60 <sup>0</sup>	42				
BRRC002	645594.6	7191833.7	581.6	290 <sup>0</sup> /-60 <sup>0</sup>	24				
BRRC003	645580.9	7191834.2	581.0	290 <sup>0</sup> /-60 <sup>0</sup>	54				
BRRC004	645548.2	7191845.5	545.0	290 <sup>0</sup> /-60 <sup>0</sup>	54				
BRRC005	645541.1	7191870.5	565.0	290 <sup>0</sup> /-60 <sup>0</sup>	42				
BRRC006	645516.0	7191892.7	558.5	290 <sup>0</sup> /-60 <sup>0</sup>	30				
BRRC007	645490.6	7191898.4	552.3	290 <sup>0</sup> /-60 <sup>0</sup>	30				
BRRC008	645468.7	7191911.8	548.9	290 <sup>0</sup> /-60 <sup>0</sup>	24				
BRRC009	645488.3	7191965.7	551.4	290 <sup>0</sup> /-60 <sup>0</sup>	36				
BRRC010	645508.9	7192019.5	544.4	290 <sup>0</sup> /-60 <sup>0</sup>	36				
BRRC011	645532.1	7191984.0	553.8	290 <sup>0</sup> /-60 <sup>0</sup>	24				
BRRC012	645566.0	7191964.0	560.0	290 <sup>0</sup> /-60 <sup>0</sup>	30				
BRRC013	645571.1	7191969.8	555.6	290 <sup>0</sup> /-60 <sup>0</sup>	24				
BRRC014	645591.8	7191953.7	560.8	290 <sup>0</sup> /-60 <sup>0</sup>	24				
BRRC015	645605.8	7191908.8	569.1	290 <sup>0</sup> /-60 <sup>0</sup>	42				
BRRC016	645603.8	7191886.1	576.4	290 <sup>0</sup> /-60 <sup>0</sup>	36				
BRRC017	645572.0	7191911.2	564.6	290 <sup>0</sup> /-60 <sup>0</sup>	24				
BRRC018	645552.7	7191918.6	569.3	290 <sup>0</sup> /-60 <sup>0</sup>	30		Assays P	ending	
BRRC019	645527.6	7191932.3	556.7	290 <sup>0</sup> /-60 <sup>0</sup>	24				
BRRC020	645504.6	7191944.7	553.4	290 <sup>0</sup> /-60 <sup>0</sup>	36				
BRRC021	645474.0	7192034.4	549.3	290 <sup>0</sup> /-60 <sup>0</sup>	24				
BRRC022	645651.3	7191806.7	574.4	290 <sup>0</sup> /-60 <sup>0</sup>	36				
BRRC023	645628.0	7191777.4	579.9	290 <sup>0</sup> /-60 <sup>0</sup>	42				
BRRC024	645599.0	7191781.4	577.1	290 <sup>0</sup> /-60 <sup>0</sup>	30				
BRRC025	645571.0	7191789.0	571.7	290 <sup>0</sup> /-60 <sup>0</sup>	30				
BRRC026	645553.9	7191803.0	571.0	290 <sup>0</sup> /-60 <sup>0</sup>	12				
BRRC027	645525.8	7191821.6	565.2	290 <sup>0</sup> /-60 <sup>0</sup>	36				
BRRC028	645502.7	7191836.3	557.6	290 <sup>0</sup> /-60 <sup>0</sup>	42				
BRRC029	645486.9	7191845.4	553.4	290 <sup>0</sup> /-60 <sup>0</sup>	24				
BRRC030	645462.6	7191858.5	551.9	290 <sup>0</sup> /-60 <sup>0</sup>	12				
BRRC031	645451.2	7191866.4	539.7	290 <sup>0</sup> /-60 <sup>0</sup>	24				
BRRC032	645044.7	7192102.3	556.6	115 <sup>0</sup> /-60 <sup>0</sup>	36				
BRRC033	645053.1	7192125.5	557.2	115 <sup>0</sup> /-60 <sup>0</sup>	30				
BRRC034	645067.9	7192143.6	557.6	115 <sup>0</sup> /-60 <sup>0</sup>	30				
BRRC035	645087.7	7192165.4	557.4	115 <sup>0</sup> /-60 <sup>0</sup>	18				
				TOTAL	1,092				_



### Table 3

# Drilling Information – Devils Hill/Mudderwearie Prospect

Hole ID	Northing mN	Easting mE	RL(m)	Azimuth & Dip (planned)	Total Depth	Depth From (m)	Depth To (m)	Interval Width (m)	Mn %
DHRC001	666352.5	7166524.7	609.7	315 <sup>0</sup> /-60 <sup>0</sup>	6				
DHRC002	666374.8	7166493.9	614.6	315 <sup>0</sup> /-60 <sup>0</sup>	18				
DHRC003	666382.5	7166478.5	614.7	315 <sup>0</sup> /-60 <sup>0</sup>	30				
DHRC004	666416.0	7166459.8	617.6	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC005	666408.0	7166418.0	610.7	315 <sup>0</sup> /-60 <sup>0</sup>	18				
DHRC006	666401.8	7166434.7	623.4	315 <sup>0</sup> /-60 <sup>0</sup>	24				
DHRC007	666449.4	7166476.0	613.7	315 <sup>0</sup> /-60 <sup>0</sup>	36				
DHRC008	666437.1	7166490.0	620.1	315 <sup>0</sup> /-60 <sup>0</sup>	18				
DHRC009	666424.4	7166499.5	624.9	315 <sup>0</sup> /-60 <sup>0</sup>	24				
DHRC010	666402.2	7166517.5	623.5	315 <sup>0</sup> /-60 <sup>0</sup>	18				
DHRC011	666383.7	7166529.3	626.3	315 <sup>0</sup> /-60 <sup>0</sup>	6				
DHRC012	666366.9	7166547.6	629.5	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC013	666395.8	7166607.1	621.6	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC014	666405.1	7166589.2	613.4	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC015	666417.8	7166573.1	612.5	315 <sup>0</sup> /-60 <sup>0</sup>	24				
DHRC016	666435.3	7166556.4	608.3	315 <sup>0</sup> /-60 <sup>0</sup>	18				
DHRC017	666457.0	7166530.4	604.7	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC018	666471.8	7166523.2	607.6	315 <sup>0</sup> /-60 <sup>0</sup>	18			londing	
DHRC019	666491.2	7166504.5	608.4	315 <sup>0</sup> /-60 <sup>0</sup>	18		Assays P	renaing	
DHRC020	666405.8	7166634.7	589.6	315 <sup>0</sup> /-60 <sup>0</sup>	6				
DHRC021	666433.6	7166630.7	610.2	315 <sup>0</sup> /-60 <sup>0</sup>	30				
DHRC022	666444.3	7166615.2	609.2	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC023	666464.1	7166595.6	610.4	315 <sup>0</sup> /-60 <sup>0</sup>	18				
DHRC024	666485.8	7166573.5	610.7	315 <sup>0</sup> /-60 <sup>0</sup>	24				
DHRC025	666506.0	7166553.8	609.0	315 <sup>0</sup> /-60 <sup>0</sup>	18				
DHRC026	666520.8	7166535.9	608.5	315 <sup>0</sup> /-60 <sup>0</sup>	24				
DHRC027	666570.0	7166563.8	597.4	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC028	666553.9	7166577.9	600.7	315 <sup>0</sup> /-60 <sup>0</sup>	24				
DHRC029	666541.0	7166591.0	601.4	315 <sup>0</sup> /-60 <sup>0</sup>	24				
DHRC030	666535.1	7166597.3	597.0	315 <sup>0</sup> /-60 <sup>0</sup>	18				
DHRC031	666513.1	7166623.1	596.4	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC032	666491.0	7166646.9	608.1	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC033	666486.5	7166646.5	610.6	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC034	666468.4	7166667.6	602.4	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC035	666463.9	7166672.2	609.6	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC036	666594.6	7166591.3	566.4	315 <sup>0</sup> /-60 <sup>0</sup>	12				



### Table 3 (continued)

Hole ID	Northing mN	Easting mE	RL(m)	Azimuth & Dip (planned)	Total Depth	Depth From (m)	Depth To (m)	Interval Width (m)	Mn %
DHRC037	666591.1	7166598.9	588.2	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC038	666577.2	7166618.6	587.4	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC039	666559.2	7166646.2	592.7	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC040	666539.8	7166666.3	593.1	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC041	666529.7	7166681.8	591.6	315 <sup>0</sup> /-60 <sup>0</sup>	6				
DHRC042	666514.0	7166695.0	595.0	315 <sup>0</sup> /-60 <sup>0</sup>	6		Assays P	renaing	
DHRC043	666492.9	7166707.9	598.8	315 <sup>0</sup> /-60 <sup>0</sup>	6				
DHRC044	666559.1	7166718.0	592.2	315 <sup>0</sup> /-60 <sup>0</sup>	12				
DHRC045	666536.1	7166739.1	594.8	315 <sup>0</sup> /-60 <sup>0</sup>	6				
DHRC046	666530.6	7166745.4	595.3	315 <sup>0</sup> /-60 <sup>0</sup>	5				
MPRC001	665714.1	7166964.9	582.4	270 <sup>0</sup> /-60 <sup>0</sup>	7		Hole aba	ndoned	
MPRC002	665717.9	7166972.8	582.6	VERTICAL	6		Hole Aba	ndoned	
				TOTAL	720				

# Drilling Information – Devils Hill/Mudderwearie Prospect

### Table 4

# Drilling Information – Black Cat Prospect

Hole ID	Northing mN	Easting mE	RL(m)	Azimuth & Dip (planned)	Total Depth	Depth From (m)	Depth To (m)	Interval Width (m)	Mn %
BCRC001	667911.7	7165746.1	609.3	145 <sup>0</sup> /-60 <sup>0</sup>	24				
BCRC002	667906.9	7165777.9	606.5	145 <sup>0</sup> /-60 <sup>0</sup>	18				
BCRC003	667895.2	7165791.3	608.3	145 <sup>0</sup> /-60 <sup>0</sup>	18				
BCRC004	667974.9	7165763.0	596.7	145 <sup>0</sup> /-60 <sup>0</sup>	18		Assays P	ending	
BCRC005	667959.5	7165780.2	598.4	145 <sup>0</sup> /-60 <sup>0</sup>	12				
BCRC006	667870.0	7165749.3	601.4	145 <sup>0</sup> /-60 <sup>0</sup>	24				
BCRC007	667838.1	7165712.8	599.7	145 <sup>0</sup> /-60 <sup>0</sup>	12				
				TOTAL	126				



# Manganese Exploration and Sampling

# JORC Code, 2012 Edition – Table 1 Exploration Results

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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 programme Bryah Resources Limited (Bryah Resources) utilised predominantly angled Reverse Circulation (RC) drill holes with some vertical holes included.</li> <li>RC drilling was to generally accepted industry standard producing 1m samples of approximately 3kg weight which were collected beneath a cyclone and then passed through a rotary cone splitter.</li> <li>The splitter reject sample was collected into green plastic bags which were numbered and laid into 10m rows.</li> <li>The holes were sampled as 1m samples from the splitter and placed into pre-numbered calico bags with the drawsting tied up and then placed inside the green plastic bag for later collection and despatch.</li> <li>The full length of each hole drilled was sampled.</li> <li>Selected samples collected were submitted to a contract commercial laboratory for sorting, drying, crushing, splitting and pulverising.</li> <li>A prepared sample is then fused in a lithium borate flux with lithium nitrate additive. The resultant glass bead is analysed via X-Ray Fluorescence (XRF). XRF is suitable analysis for a wide range of geological ores.</li> </ul>
Drilling techniques	• 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).	<ul> <li>Bryah Resources' RC holes were drilled with a contract RC drilling rig.</li> <li>All RC holes were drilled using a 140mm face sampling drilling bit.</li> </ul>
Drill sample recovery	<ul> <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 at a later date.</li> <li>To ensure maximum sample recovery and the representivity of the samples, an experienced Company</li> </ul>



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		<ul> <li>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. At this stage no investigations have been made into whether there is a relationship between sample recovery and grade.</li> </ul>
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 of the 1m RC samples were sieved and collected into 20m chip trays for geological logging of colour, weathering, lithology, alteration and mineralisation for potential Mineral Resource estimation and mining studies.</li> <li>RC logging is both qualitative and quantitative in nature.</li> <li>The total length of the RC holes were logged. Where no sample was returned due to cavities/voids it was recorded as such.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <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 from the RC rig and were collected beneath the cyclone and then passed through the cone splitter.</li> <li>The samples were generally dry and all attempts were made to ensure the collected samples were dry.</li> <li>The cyclone and cone splitter were cleaned with compressed air at the end of every 6m RC drill rod.</li> <li>The sample sizes were appropriate to correctly represent the mineralisation based on the style of mineralisation, the thickness and consistency of intersections, the sampling methodology and percent value assay ranges for the primary elements.</li> </ul> </li> </ul>



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		<ul> <li>Quality Control Procedures were:         <ul> <li>A duplicated sample was collected every 50 samples.</li> <li>Certified Reference Material (CRM) samples were inserted in the field every 50 samples containing a range of manganese values.</li> <li>Overall QAQC insertion rate of 1:30 samples</li> <li>Laboratory repeats taken and standards inserted at pre-determined level specified by the laboratory.</li> <li>Sample preparation at the laboratory: The samples are weighed and dried at 105°C, then coarsely crushed to -6.3mm using a jaw crusher. If the sample size is greater than 2.5kg the samples are then riffle split. Samples are then pulverised by LM5 or disc pulveriser to 80% passing -75 microns</li> <li>The sample sizes are considered appropriate to correctly represent the mineralisation based on the style of mineralisation, the thickness and consistency of intersections, the sampling methodology and the assay value ranges expected for manganese and its impurities.</li> </ul> </li> </ul>
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 and samples containing 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</li> </ul>



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		<ul> <li>supervised all the drilling and sampling process in the field.</li> <li>All primary data related to logging and sampling are captured using palmtops into Excel templates.</li> <li>All data is sent to Perth and stored in the centralised Access database with a Data Shed front end which is managed by company geologists.</li> <li>No adjustments or calibrations have been made to any assay data, apart from resetting below detection values to half positive detection.</li> </ul>
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 were initially located by a Geologist using a conventional hand-held GPS.</li> <li>Following completion of the drilling of the hole collars will be independently surveyed by surveyors using a differential GPS for accurate collar location and RL with the digital data entered directly into the company Access database.</li> <li>Downhole surveys have been completed on all the RC drill holes by the drillers. They used a Reflex EZ-Shot downhole multi-shot tool to collect the surveys every 30m down the hole.</li> <li>The grid system for the Bryah Basin prospect is MGA_GDA94 Zone 50.</li> <li>Topographic data is collected by a hand-held GPS.</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 programme was a reconnaissance programme there was considerable variation in the drill spacing and drillhole orientation.</li> <li>The drill spacing is generally not sufficient to establish the degree of geological and grade continuity applied under the 2012 JORC code.</li> <li>No sample compositing was been applied to this drilling with all samples collected at 1m intervals.</li> </ul>



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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. At Horseshoe South Extended the strike of the stratigraphy is approximately 030° so the drilling was conducted on an azimuth of 300° to intersect the lithological units orthogonally. At Brumby Creek the regional stratigraphy is mapped at 020° and dipping to the South East therefore the azimuth drilled there on the Main Hill is at an azimuth of 290° whilst at Brumby Creek West the structure appears overturned and is dipping to the West. The Brumby Creek West holes are therefore drilled with an azimuth of 115°. At Devil's Hill the regional stratigraphy is aligned in a 045° orientation and the holes are therefore drilled at an azimuth of 315° to intersect the structures orthogonally.</li> <li>Some holes will be drilled in other orientations to intersect specific mineralised structures, but always with an attempt to drill orthogonal to the strike of the interpreted structure. Due to locally varying intersection angles between drillholes and lithological units all results are defined as downhole widths.</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>
Sample security	The measures taken to ensure sample security.	<ul> <li>The samples collected were placed in calico bags and transported to the relevant Perth laboratory by company personnel.</li> <li>Sample security was not considered a significant risk.</li> </ul>
Audits or reviews	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 are 100% owned by Bryah Resources Limited</li> <li>At the time of reporting, there are no known impediments to obtaining a licence to operate in the area and the 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 large portion of the Bryah and Padbury Basins in the period after 2000, identifying numerous manganese anomalies from satellite imagery and aerial photography. Only limited on-ground exploration of many of these anomalies was undertaken.</li> </ul>
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 palaeochannels. Although detailed surveys have not been completed, the location of most manganese deposits appears to be at about the elevation of the former palaeosurface. These deposits are now left as hilltop mesas or cappings (inverted relief).</li> </ul>



Criteria	JORC Code explanation	Commentary
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 metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	Refer to Tables 1-4 of this ASX Announcement for details of sample locations, etc.
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>As this programme was a First Pass programme there was some variation in the drill spacing and hole orientation.</li> <li>Due to locally varying intersection angles between drill holes and lithological units all results are defined as downhole widths.</li> <li>This drill spacing is also not sufficient to establish the degree of geological and grade continuity applied under the 2012 JORC Code.</li> </ul>
Diagrams	• 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.	See attached figures within this announcement.
Balanced reporting	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.	Refer to Tables 1 to 4 of this ASX Announcement.
Other substantive exploration data	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.	No other exploration data available.



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 drilling is being planned by the Company to commence in June 2019.</li> </ul>