



Pure Minerals Limited

11 January 2018

ASX Announcement

POSITIVE INITIAL DRILL RESULTS FROM JULIA PROSPECT AT BATTERY HUB PROJECT

- **Drilling highlights shallow bulk tonnage potential at Julia Prospect:**
 - **43 significant primary intercepts from 42 holes**
 - **Up to 47m intercept thickness (average 8.9m)**
 - **Average maximum intercept depth 20.6m**
- **Reverse circulation drilling results from first 42 holes include:**
 - **BH0003: 5m @ 12.44% Mn from 3m, including 2m @ 26.77% Mn**
 - **BH0004: 9m @ 14.85% Mn from 0m, including 2m @ 28.80% Mn**
 - **BH0021: 5m @ 16.80% Mn from 1m**
 - **BH0030: 9m @ 13.55% Mn from 1m**
 - **BH0062: 8m @ 14.66% Mn from 3m, including 2m @ 30.13% Mn**
- **Drilling results (37 holes) from Pools, Isles and Steven Ridge prospects to be published in coming weeks.**

Pure Minerals Limited (ASX: PM1) (“Pure Minerals”, “the Company”) is pleased to announce initial drill results from its first phase of drilling at its 100%-owned Battery Hub manganese project, located in Western Australia’s Gascoyne region. The initial results come from 42 drill holes located at the Julia Prospect, located at the eastern end of tenement E09/2217 (Figure 1, below).

Prior to drilling, Pure Minerals identified the Julia area to have shallow bulk tonnage potential and the recently completed drill program has successfully highlighted this potential. Key statistical highlights of the drilling include:

- Out of the 42 holes drilled at Julia, Pure Minerals identified 43 significant intercepts of manganese mineralisation.
- The average intercept thickness was 8.9m with a weighted average intercept grade of 7.4% Mn.
- The average maximum depth of intercepts was a shallow 20.6m.
- 39 intercepts exceeding 5.0% Mn had an average intercept thickness of 7.6m and a weighted average grade of 8.3% Mn.
- 18 significant intercepts exceeded an average of 10% Mn with an average intercept thickness of 6.2m and a weighted average grade of 12.6% Mn.

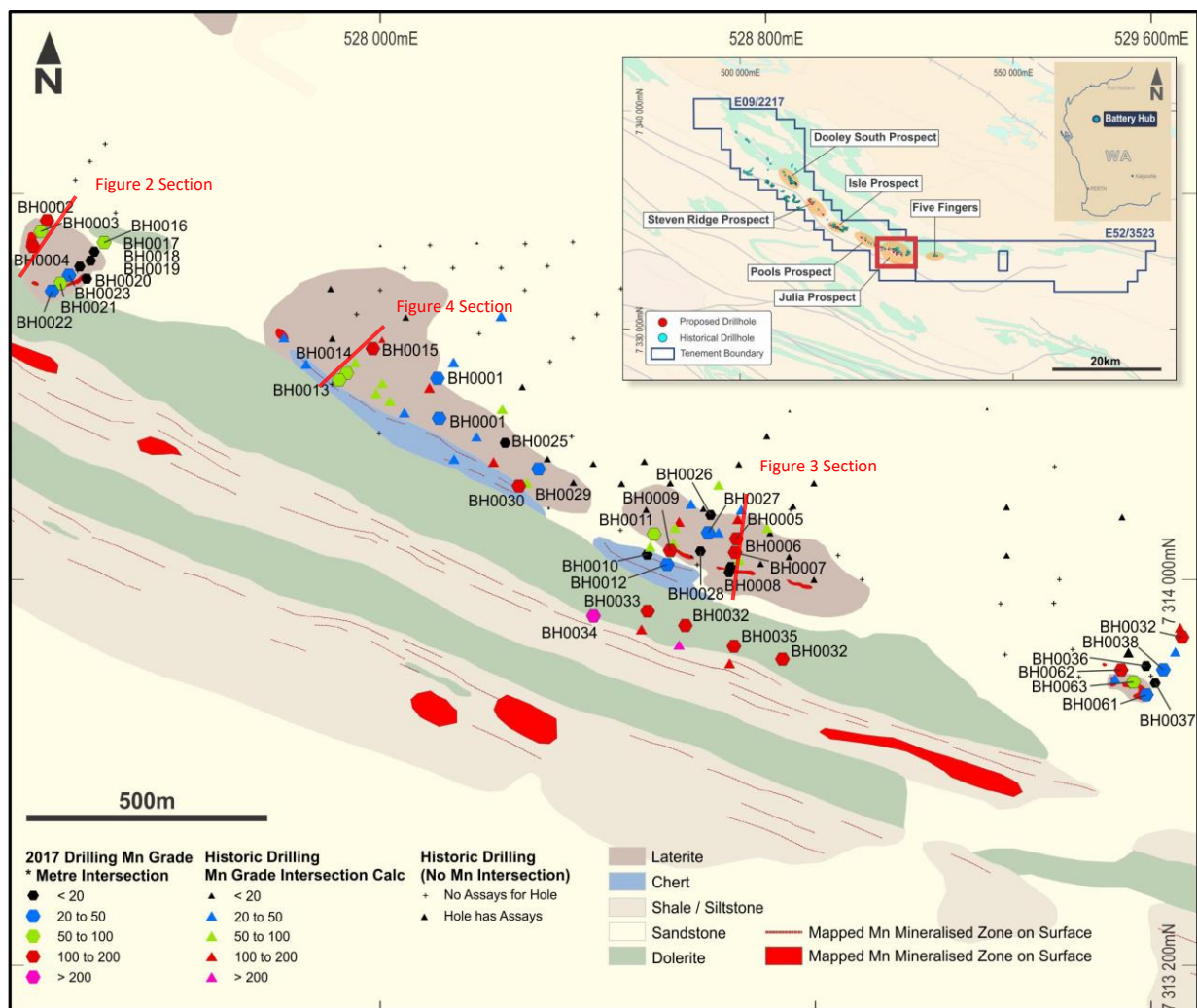


Figure 1: Drill Hole Collar Map of Julia, including mapped geology and outcropping manganese mineralisation

Moreover, the drill program has been successful in classifying different zones of shallow mineralisation at Julia over an approximate 2,500m strike length, including weathered lateritic mineralisation, together with higher-grade cap-rock mineralisation, and thick stratiform manganese mineralisation within the host siltstone formation.

Lateritic Mineralisation

Lateritic mineralisation is represented by nodular manganese mineralisation hosted within recemented manganese nodules near surface (“cap rock”) and at the base of a thick weathering horizon of saprolite clay.

Cap rock mineralisation represents a relatively thin (<10m) but high-grade zone occurring mostly at surface but occasionally covered by colluvium and other unconsolidated transported sediments. Within these zones, grades exceeding 30% Mn have been returned. Pure Minerals views this mineralisation to be potentially high-grade “starter” mineralisation requiring minimal pre-stripping and beneficiation prior to transporting to market.

Highlights from drilling in cap rock mineralisation include:

- BH0002: 8m @ 12.77% Mn from 7m, including 3m @ 19.88% Mn
- BH0003: 5m @ 12.44% Mn from 3m, including 2m @ 26.77% Mn
- BH0004: 9m @ 14.85% Mn from 0m, including 2m @ 28.80% Mn
- BH0016: 3m @ 21.39% Mn
- BH0062: 8m @ 14.66% Mn from 3m, including 2m @ 30.13% Mn

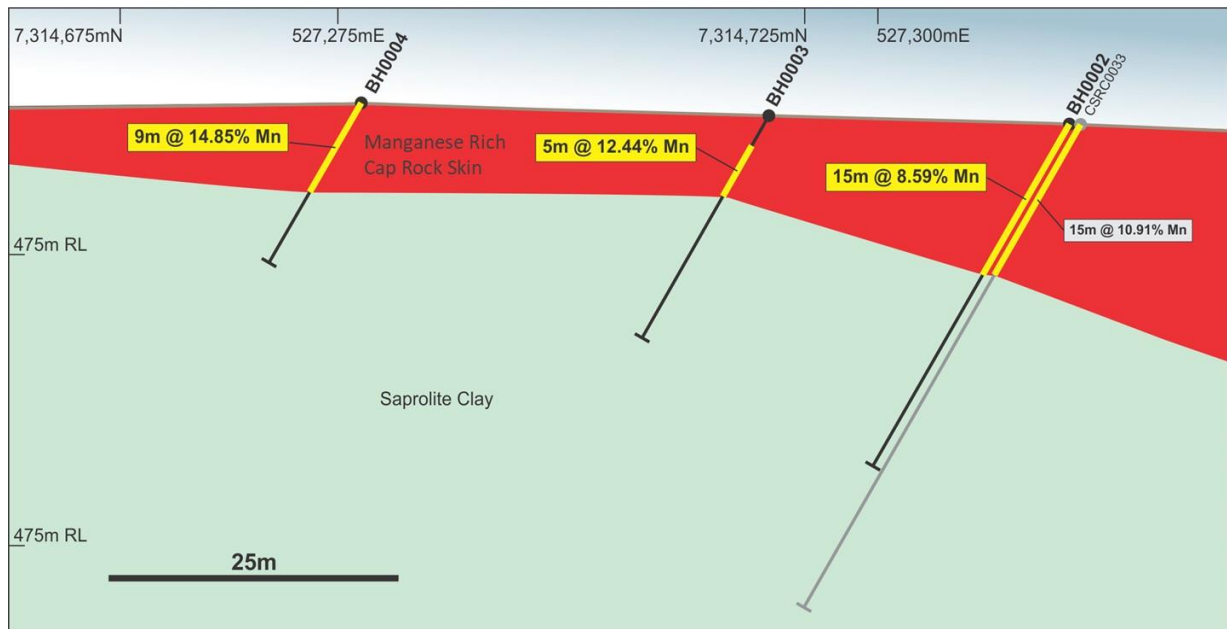


Figure 2: Near-surface cap-rock mineralisation at Julia Prospect

Mineralisation at the base of the laterite often dips shallowly to the NNE along a paleo-geographic weathering surface similar to the ridge lines observed in the area. A relatively high level of grade and geological continuity is observed. Key intercepts in this laterite mineralisation include:

- BH0005: 11m @ 11.77% Mn from 13m
- BH0006: 11m @ 9.58% Mn from 4m
- BH0009: 9m @ 11.19% Mn from 10m
- BH0015: 15m @ 9.52% Mn from 20m
- BH0021: 5m @ 16.80 Mn from 1m
- BH0030: 9m @ 13.55% Mn from 1m

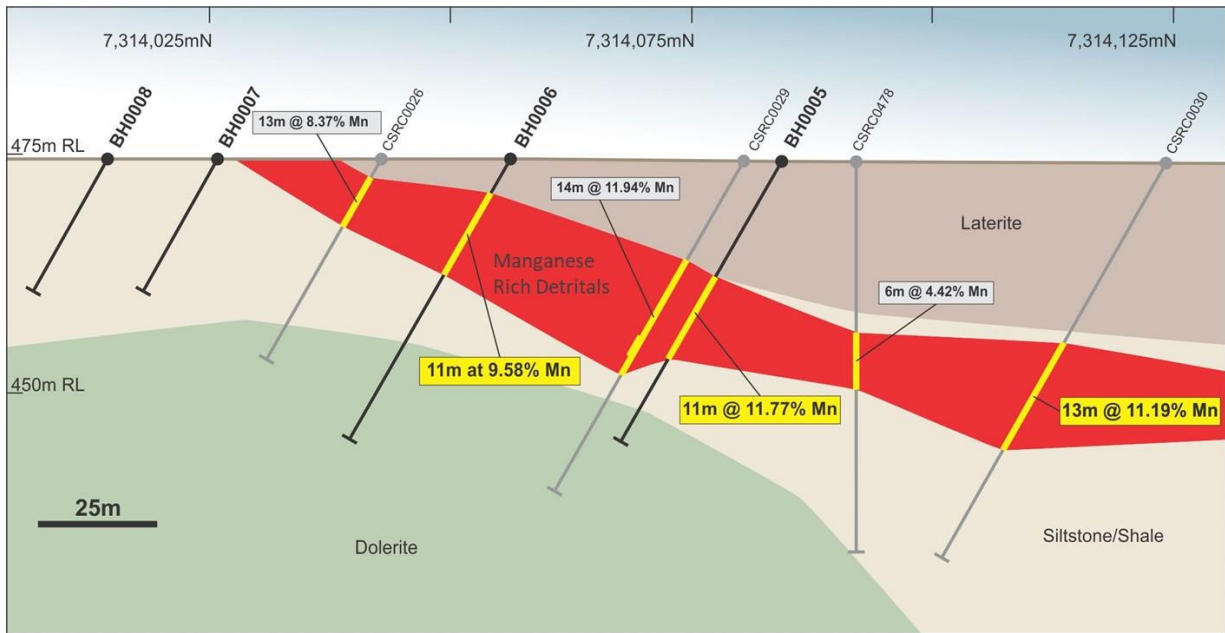


Figure 3: Weathered manganese mineralisation at base of laterite

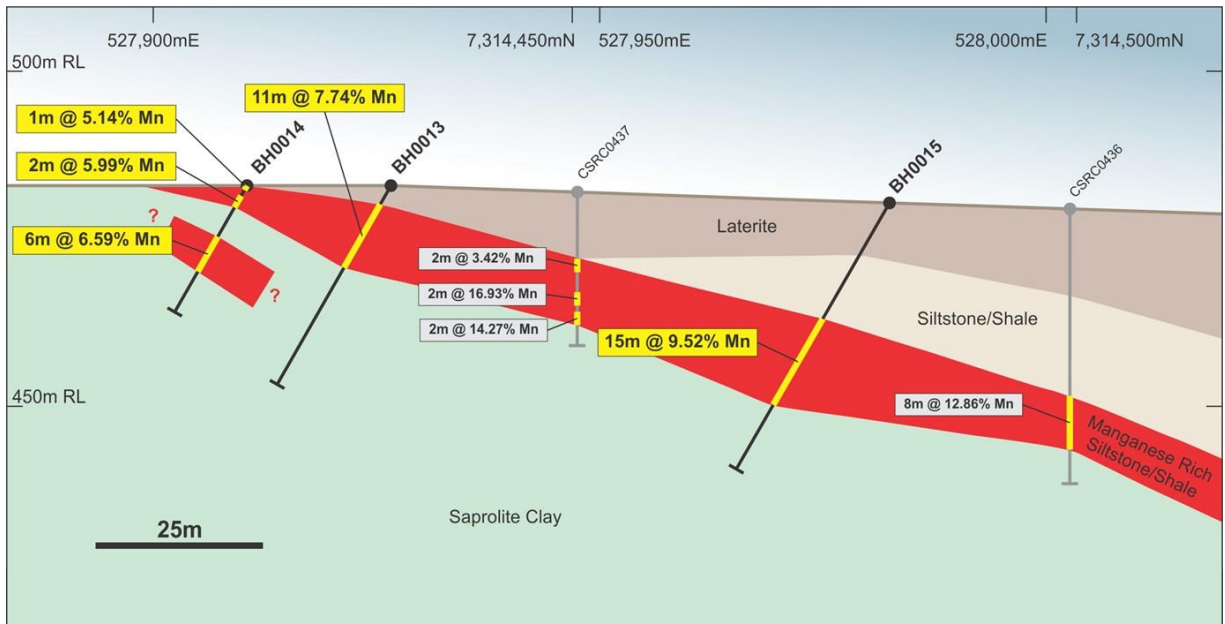


Figure 4: Weathered manganese mineralisation at base of laterite

Stratiform Mineralisation

Stratiform mineralisation occurs as manganese-enriched laminae typically over a >25m thickness within the siltstone host-rock. Grade continuity is very high. Mineralisation occurs from surface and dips shallowly to the NNE. Pure Minerals tested down-dip extensions to known surface mineralisation. Pure Minerals anticipated this style of mineralisation to have the greatest bulk-tonnage potential at the Battery Hub prospect, albeit not the primary target at Julia as it is elsewhere at BatteryHub. Key drill hole intercepts include:

- BH0031: 47m @ 4.38% Mn from 29m
- BH0032: 26m @ 5.88% Mn from 38m, including 4m @ 8.47% Mn
- BH0033: 26m @ 5.50% Mn from 44m
- BH0034: 38m @ 6.04% Mn from 14m

Upcoming Results and Test Work

Pure Minerals intends to release results from an additional 37 holes from the First Phase drilling programs at Pools, Isles and Steven Ridge in coming weeks. These results will be used to plan additional Phase 2 drilling within the E09/2217 tenement at Battery Hub, which Pure Minerals expects to initiate in early 2018. In conjunction with this drilling, Pure Minerals will drill RC holes within the E52/3523 tenement, which contains the prospective Five Fingers prospect.

A heritage survey was completed in December 2017 for the second phase of drilling.

In addition, Company geologists have identified and sampled specific zones of mineralisation for preliminary metallurgical testwork aimed at determining the ability to beneficiate the mineralised material and assess its suitability to produce Electrolytic Manganese Dioxide (EMD) or Electrolytic Manganese Metal (EMM) – a key ingredient in the electric vehicle battery market.

About the First Phase Drilling Program

The 79 hole, 2,880m reverse circulation drilling program, completed in early December 2017, tested for shallow (less than 60m depth) manganese mineralisation with bulk tonnage potential at the Julia, Pools, Isles and Steven Ridge prospects, all located within tenement E09/2217. An additional objective was to confirm historic drilling for which no physical records remain.

More than 1,500 samples, comprising 413 composite samples and 1,125 one-metre split samples, were submitted to ALS Global laboratory in Wangara, Western Australia, for assay testwork in December 2017.

The Company intends to utilise this drill data, plus the historic database of more than 500 drill holes, in the calculation of a maiden JORC resource.

For and on behalf of the Board,

Mauro Piccini
Company Secretary

Competent Persons Statement

The information in this report that relates to Exploration Results complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled and assessed under the supervision of Mr Kell Nielsen BSc (Geol.), MSc (Mineral Econ.), a consultant to Pure Minerals Limited and director of Mannika Resources Group Pty Ltd. Mr Nielsen is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Nielsen consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. The Exploration Results are based on standard industry practises for drilling, logging, sampling, assay methods including quality assurance and quality control measures as detailed in Appendix B.

Appendix A: Drill Hole Data

Drill Hole ID	Collar Co-Ordinates			Hole Depth <i>m</i>	Dip <i>deg.</i>	Azim <i>deg.</i>	Depth From <i>m</i>	Depth To <i>m</i>	Thickness <i>m</i>	Mn <i>%</i>	MnO <i>%</i>
	East	North	RL								
	<i>m</i>	<i>m</i>	<i>m</i>								
BH0001	528,119	7,314,417	479.3	64	-60°	210°	15	16	1	5.92	7.64
<i>and</i>							23	24	1	8.02	10.36
BH0002	527,308	7,314,745	486.8	34	-60°	210°	0	15	15	8.59	11.09
<i>incl.</i>							1	3	2	9.26	11.96
<i>and</i>							7	15	8	12.77	16.48
<i>incl.</i>							10	13	3	19.88	25.66
BH0003	527,296	7,314,722	488.2	22	-60°	210°	3	8	5	12.44	16.06
<i>incl.</i>							5	7	2	26.77	34.56
BH0004	527,279	7,314,691	490.0	16	-60°	210°	0	9	9	14.85	19.17
<i>Incl.</i>							6	8	2	28.80	37.12
BH0005	528,739	7,314,084	474.9	34	-60°	180°	13	24	11	11.77	15.20
BH0006	528,737	7,314,056	474.6	34	-60°	200°	4	15	11	9.58	12.37
<i>incl.</i>							5	14	9	10.94	14.12
BH0007	528,728	7,314,026	474.9	16	-60°	200°					
BH0008	528,724	7,314,015	475.2	16	-60°	200°					
BH0009	528,602	7,314,060	476.4	34	-60°	200°	10	19	9	11.19	14.45
BH0010	528,596	7,314,031	477.0	22	-60°	200°	0	4	4	9.46	12.21
BH0011	528,568	7,314,094	475.9	34	-60°	200°	6	21	15	6.20	8.00
<i>incl.</i>							6	10	4	5.27	6.81
<i>and</i>							14	21	7	9.61	12.41
BH0012	528,554	7,314,052	476.6	22	-60°	200°					
BH0013	527,930	7,314,428	483.3	34	-60°	225°	3	14	11	7.74	9.99
BH0014	527,914	7,314,414	483.8	22	-60°	225°	0	1	1	5.14	6.63
<i>and</i>							2	4	2	5.99	7.73
<i>and</i>							9	15	6	6.59	8.51
<i>incl.</i>							9	10	1	12.90	16.66
<i>and</i>							10	15	5	5.33	6.88
BH0015	527,985	7,314,479	481.2	46	-60°	225°	20	35	15	9.52	12.29
<i>incl.</i>							20	32	12	10.74	13.87
BH0016	527,427	7,314,699	487.0	40	-60°	210°	0	3	3	21.39	27.61
BH0017	527,407	7,314,680	488.2	22	-60°	225°					
BH0018	527,399	7,314,661	489.0	28	-60°	225°					
BH0019	527,376	7,314,650	490.1	28	-60°	225°					
BH0020	527,354	7,314,631	490.0	34	-60°	225°	1	6	5	8.00	10.32
BH0021	527,336	7,314,614	489.3	16	-60°	225°	0	5	5	16.80	21.69
BH0022	527,319	7,314,598	488.6	16	-60°	225°	0	5	5	9.06	11.70
BH0023	527,391	7,314,624	490.1	16	-60°	120°					
BH0024	528,122	7,314,334	480.7	28	-60°	220°	14	17	3	9.06	11.69
<i>incl.</i>							14	16	2	12.08	15.60
BH0025	528,259	7,314,283	478.8	34	-60°	220°	18	19	1	4.58	5.91
BH0026	528,686	7,314,134	474.5	52	-60°	200°	25	29	4	4.55	5.87
BH0027	528,681	7,314,097	475.0	46	-60°	200°	16	18	2	6.51	8.41
<i>and</i>							37	38	1	18.52	23.91
BH0028	528,665	7,314,059	475.4	34	-60°	200°	6	8	2	4.22	5.44
BH0029	528,332	7,314,232	477.1	28	-60°	220°	10	12	2	10.56	13.63
BH0030	528,288	7,314,194	478.1	28	-60°	200°	1	10	9	13.55	17.50
<i>and</i>							20	28	8	3.80	4.90
BH0031	528,835	7,313,835	476.4	76	-60°	200°	29	76	47	4.38	5.65
<i>incl.</i>							29	31	2	5.52	7.12
<i>and</i>							36	39	3	6.49	8.38
<i>and</i>							41	44	3	5.26	6.79
<i>and</i>							47	64	17	4.67	6.03
<i>and</i>							65	76	11	6.15	7.95
BH0032	528,633	7,313,905	478.9	82	-60°	200°	38	64	26	5.88	7.59
<i>incl.</i>							38	50	12	6.19	8.00
<i>and</i>							50	60	10	4.47	5.77
<i>and</i>							60	64	4	8.47	10.94
<i>and</i>							75	82	7	5.40	6.97
BH0033	528,555	7,313,934	478.8	70	-60°	200°	44	70	26	5.50	7.10
<i>incl.</i>							44	48	4	8.19	10.58
<i>and</i>							60	70	10	7.34	9.47
BH0034	528,443	7,313,924	479.6	52	-60°	200°	14	52	38	6.04	7.80
<i>incl.</i>							14	25	11	6.71	8.66
<i>and</i>							25	52	27	5.77	7.45
BH0035	528,734	7,313,862	477.8	58	-60°	208°	21	58	37	3.38	4.36
<i>incl.</i>							21	23	2	4.90	6.32
<i>and</i>							26	28	2	8.46	10.92
<i>and</i>							49	55	6	6.05	7.81
<i>and</i>							55	58	3	8.72	11.26
BH0036	529,590	7,313,821	467.0	34	-60°	210°	6	8	2	4.26	5.50
BH0037	529,609	7,313,785	466.7	22	-60°	210°					
BH0038	529,626	7,313,813	467.0	28	-60°	210°	5	10	5	4.69	6.06
<i>and</i>							17	19	2	12.90	16.65
BH0039	529,664	7,313,880	467.4	34	-60°	210°	15	27	12	10.28	13.27
<i>and</i>							30	34	4	3.79	4.89
BH0061	529,590	7,313,761	466.5	16	-60°	210°	5	9	4	8.25	10.65
BH0062	529,538	7,313,813	467.0	22	-60°	210°	0	8	8	14.66	18.92
<i>incl.</i>							5	7	2	30.13	38.90
<i>and</i>							14	16	2	6.51	8.40
BH0063	529,563	7,313,787	466.8	22	-60°	210°	0	4	4	11.80	15.23
<i>and</i>							8	9	1	6.06	7.82

Appendix B: JORC Tables

JORC Code, 2012 Edition – Table 1 report template**Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <i>Nature and quality of sampling (eg 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> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</i> 	<p>Drilling was conducted using Reverse Circulation (RC) Drilling utilising a face sampling hammer. Samples were collected over one metre intervals as measured by the progress of the drill pipe in comparison with the mast. Samples were split on the rig into a smaller split sample contained within a sealed bag and a larger bulk sample that was either stored in a plastic bag or bucketed onto the ground using a rotary cone splitter attached to the rig</p> <p>Sampling equipment was cleaned at regular intervals and the end of each rod to maintain clean and representative samples.</p> <p>No tools were used</p> <p>Each metre was geological logged and where manganese was logged within the hole, the one metre split samples were collected and sent for analysis. From the remaining samples parts of the hole where one metre splits were not collected, smaller samples were collected from up to 5 individual metres of the bulk samples using a scoop and composited to form a new sample.</p> <p>Routine QAQC samples were inserted in the RC sample strings at the rate of 4 samples for every 100, comprising Mn standards (CRM's or Certified Reference Materials). RC field duplicate samples were taken at a rate of one every fifty samples.</p> <p>In regard to drilling completed prior to Pure Minerals involvement in the project, no information regarding the practices and quality of sampling, assaying and drilling completed by the previous operator of the project has yet to be verified or assessed by Pure Minerals.</p>
Drilling techniques	<ul style="list-style-type: none"> <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type,</i> 	<p>Drilling was completed by Reverse Circulation (RC) drilling using a face sampling hammer bit.</p> <p>Drilling was conducted by a modern truck mounted rig (Schramm 660WS) utilising <2250cfm 1000psi of onboard air capacity</p>

Criteria	JORC Code explanation	Commentary
	<i>whether core is oriented and if so, by what method, etc).</i>	that was increased and boosted when required using a Sullair 1350cfm 350psi / 1150cfm 500psi auxiliary compressor and a Hurricane 1000psi Booster In regards to drilling completed prior to Pure Minerals involvement in the project, no information regarding the practices and quality of sampling, assaying and drilling completed by the previous operator of the project has yet to be verified or assessed by Pure Minerals.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <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> 	<p>Drill samples were logged for poor recovery and moisture</p> <p>Water injection was used as required to maximise recovery and maintain sample integrity</p> <p>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred has not been assessed at this stage</p>
<i>Logging</i>	<ul style="list-style-type: none"> <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> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i> 	<p>All RC chips were geologically logged. Lithology, veining, oxidation and weathering are recorded in the geology table of the drill hole database.</p> <p>RC logging is qualitative and descriptive in nature, the geologists collected chip trays and these were photographed at the completion of the hole</p>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>Measures taken to ensure that</i> 	<p>No drill core collected, not applicable</p> <p>One Metre RC samples were sub-sampled using a rig mounted cone splitter to produce original split samples of approximately 3kg weight, a standard industry practice. Composite samples using a scoop of up to 5m were taken from parts of the holes where one metre split samples were not submitted for assay</p> <p>The splitter was routinely cleaned at the end of each drill rod (6m) or as needed if damp material clung to the splitter.</p> <p>Duplicate samples were collected using a scoop from the RC bulk samples to assess the sampling precision</p>

Criteria	JORC Code explanation	Commentary
	<p><i>the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <ul style="list-style-type: none"> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<p>Sample size assessment was not conducted, though the sampling method and size used was typical for this type of mineralisation</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <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> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<p>RC samples were prepared and assayed at NATA accredited ALS Minerals laboratory in Perth.</p> <p>RC samples were weighed, dried, and pulverized in total to nominal 85% passing 75 micron (Method PUL23), then a portion was collected for analysis by fused disc XRF using lab method ME-XRF26s a Manganese ore speciality analysis</p> <p>No testing of the ore was completed by PM1 in the field</p> <p>In addition to the Company QAQC samples included within the batches, the laboratory includes its own CRM's, blanks and duplicates with every batch.</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<p>Drill assays were documented by external consultants to Pure Minerals from Mannika Resources Group Pty Ltd and Omni GeoX Pty Ltd on behalf of Pure Minerals</p> <p>Three historic holes were twinned in order to assess their suitability in defining a JORC compliant resource</p> <p>All assay data were received in electronic format from ALS, checked and verified by Pure Minerals and merged into a proprietary database.</p> <p>Assay results were reported as oxides, in the case of Mn, MnO was divided by 1.291 to obtain the compound value (Mn)</p>
Location of data points	<ul style="list-style-type: none"> • <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> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of</i> 	<p>All collars were located using a handheld GPS for easting and northing. An elevation was assigned to the collar using SRTM data obtained from Geoscience Australia</p> <p>All work has been conducted in UTM grid (MGA94 Zone 50).</p> <p>The accuracy of the collar locations is approximately +/- 5m</p>

Criteria	JORC Code explanation	Commentary
	<i>topographic control.</i>	The dip of the hole was set by the driller using a protractor attached to the drill mast, with the azimuth of the hole being set by the geologist utilising a compass. The holes are of yet to be surveyed downhole. The quality and adequacy of topographic control is not known.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <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> • <i>Whether sample compositing has been applied.</i> 	Drilling has been based on varying section lines to gain an understanding of the requirements for a resource estimation Data spacing and distribution of the holes has yet to be determined if sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure. Sample compositing has been completed outside of the logged mineralisation; Where the composite samples are found to contain elevated levels of Mn, the one metre RC splits shall be collected for analysis
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> • <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> • <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> 	Where possible drill lines are oriented approximately at right angles to the currently interpreted strike of known mineralisation. No bias is considered to have been introduced by the existing sampling orientation.
<i>Sample security</i>	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	Samples were collected, secured and sent in closed polyweave sacks via either a registered transport company, or where hand delivered directly to the laboratory.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	As this is part of a first pass programme for Pure Minerals, no audits or reviews have been conducted at this stage

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land</i>	<ul style="list-style-type: none"> • <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint</i> 	Results reported are from the Julia Prospect which is wholly located with E09/2217

Criteria	JORC Code explanation	Commentary
<i>tenure status</i>	<p><i>ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></p> <ul style="list-style-type: none"> <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> 	<p>The Battery Hub Project is comprised of two exploration licences E09/2217 and E52/3523 that are wholly owned by Pure Manganese Pty Ltd, a wholly owned subsidiary of Pure Minerals Limited with a total combined area of 724.43 km². There are no joint ventures or other agreements in place.</p> <p>Exploration licences 09/2217 and 52/3523 fall wholly within the Wajarri Yamatji (WC2004/010) Native Title Claimant (NTC) group. The Yamatji Marlpa Aboriginal Corporation (YMAC) is the Native Title Representative Body (NTRB) for the NTC..</p>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<p>The Battery Hub Project has had previous exploration completed by Aztec Mining Company, Rio Tinto Exploration BHP and Aurora Minerals. The majority of exploration was completed by Aurora Minerals which included soil and rock chip assays and 509 holes of reverse circulation drilling.</p>
<i>Geology</i>	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<p>The primary exploration target at the Battery Hub Project is manganese mineralisation associated with specific stratigraphic units and laterites with other targeted minerals including graphite, copper, zinc and other base metals.</p> <p>Geological information is included in the attachment.</p>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is</i> 	<p>All information is included in Appendix 1.</p>

Criteria	JORC Code explanation	Commentary
	<i>the case.</i>	
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i> <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<p>Weighted average techniques were used for the calculation of intersections</p> <p>Intersections were calculated using a low-grade cut-off or trigger value of 3% Mn with internal waste included to report a greater than 5% Mn intersection</p> <p>No metal equivalents have been used</p>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i> 	<p>Drilling was inclined at -60 degrees to assess the ridge lines and the results may not represent a true thickness of the material.</p> <p>Due to this only the down hole length of the mineralisation and not the true width of the material has been reported</p>
<i>Diagrams</i>	<ul style="list-style-type: none"> <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<p>Maps and appropriate sections are included in this announcement.</p>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<p>All results are tabulated in Appendix 1 and shown on figures in this announcement.</p>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and</i> 	<p>Substantive historical data is summarised in previous announcements by Pure Minerals (and Aurora Minerals) and is being reviewed as part of the exploration of the Battery Hub Project. These include historical drilling results, an XTEM survey</p>

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	<p><i>method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></p>	<p>and preliminary metallurgical test results of samples</p>
<p><i>Further work</i></p>	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <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> 	<p>As detailed in the Report.</p>