

INFINITY MINING IPO SPIN-OUT UPDATE: Tenement transfer to secure future iron ore extension strategy in the Pilbara for Macarthur

Macarthur Minerals Limited (TSX-V: MMS) (ASX: MIO) (OTCQB: MMSDF) (the **Company** or **Macarthur**) is pleased to announce that the Company's Pilbara iron ore tenements, (currently held by wholly-owned subsidiary Infinity Mining Limited (**Infinity**), previously named Macarthur Lithium Pty Ltd), will remain in the Macarthur Group. An intra-group tenement transfer agreement to be finalised prior to the planned listing of Infinity later this year will preserve Macarthur's ability to pursue a future iron ore extension strategy in the Pilbara.

Highlights

- Tenement transfer agreement to keep Pilbara iron ore tenements within Macarthur Group.
- Infinity to retain non-iron ore rights in Pilbara tenements following completion of its planned ASX listing later this year.
- Transfer will allow all prospective tenements in the Pilbara to be appropriately resourced and drive value through exploration, back to shareholders.
- Transfer preserves a future Pilbara iron ore extension strategy for Macarthur, with potential to grow future value beyond on the Company's flagship Lake Giles Iron Project.
- Macarthur will seek to transact with a partner on the Pilbara tenements to enable it to maintain its current focus and resources on the development of its flagship Lake Giles hematite and magnetite projects.

Tenement Transfer Agreement

A tenement transfer agreement (**Agreement**), to be finalised prior to the planned Infinity ASX listing, will see the Company's Strelley Gorge and Tambourah tenements in the Pilbara transferred into Macarthur's wholly owned subsidiary, Macarthur Iron Ore Pty Ltd. The Agreement will enable the Company to pursue a future iron ore extension strategy in the Pilbara.

Whilst Macarthur Iron Ore Pty Ltd will become the registered holder of the tenements, as the Pilbara tenements are also prospective for copper, gold, nickel and lithium, following completion of the transfer, Infinity will retain all non-iron ore mineral rights in the tenements.

Background to Pilbara Iron Ore Tenements

The tenements that will be transferred under the Agreement are the Strelley Gorge (E45/4735) and Tambourah (E45/5324) tenements in the Pilbara region of Western Australia, covering a combined area of approximately 616km². The Strelley Gorge tenement is prospective for DSO iron ore and is located immediately adjacent to the Abydos iron ore project that has been mined by Atlas Iron Limited (**Atlas Iron**). The Tambourah tenement is also prospective for iron ore, with a 5km strike length of the



Pincunah banded iron member, that hosts Atlas Iron's Mt Webber mine approximately 10km to the north-east.

Macarthur considers both tenements prospective for iron ore and is seeking interested parties to further explore these assets.

Overview of Strelley Gorge (E45/4735)

The Strelley Gorge tenement lies within the Lalla Rookh syncline composed of mainly Euro Basalt (A-KEe-b) metamorphosed basalt, komatiitic basalt and serpentized peridotite. The tenement also contains two banded iron units prospective for DSO iron ore - the Paddy Market Formation on the eastern side and the Cleaverville formation on the west (see Figure 1 below). The latter hosts past iron ore mining operations of the Abydos project owned by Atlas Iron on the western edge of the tenement (see Figure 2 below).

Atlas Iron has also obtained EPA approval to commence the Sandtrax iron ore mine located in the BIF unit towards the north-eastern boundary (see Figure 2 below).

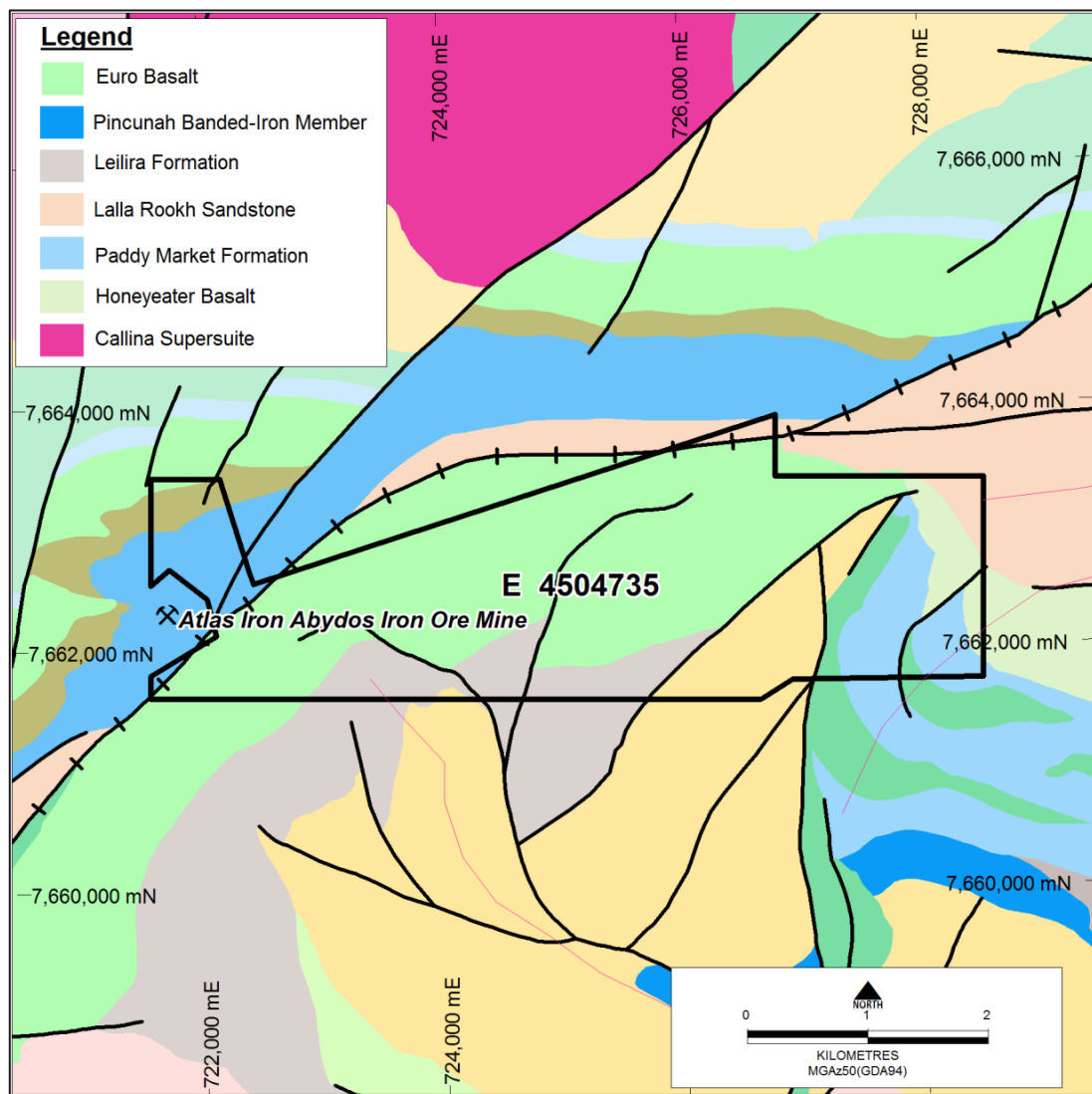


Figure 1: 1:500k Geology of the Strelley Gorge project

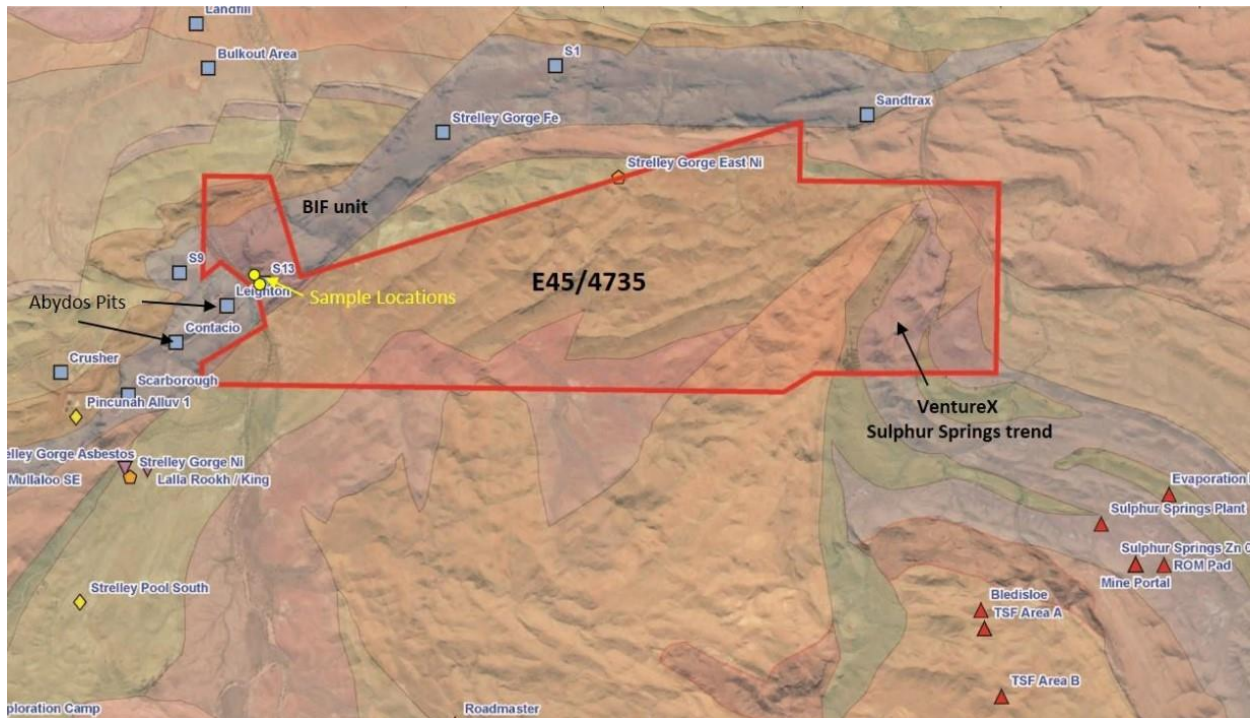


Figure 2. Strelley Gorge tenement proximity in relation to Atlas Iron mine site, showing outcropping BIF found continuing along strike from the previously mined Atlas Agydos project and approximate location of iron rock chip samples (Source: FE Ltd ASX announcement 5 September 2019)

Reconnaissance rock sampling completed by Fe Limited (ASX:FEL) on the outcropping BIF along strike from the previously mined Atlas Agydos project returned high iron grades (61.3% and 58.11% Fe). The results, summarised in Table 1 below, were previously reported by FE Limited to the market in an ASX announcement dated 5 September 2019 (see announcement [here](#)).

Table 1: Reconnaissance rock sample results at Strelley Gorge (Source: FE Ltd ASX announcement 5 September 2019)

STRELLEY										
Rock Chip Assay Results										
SAMPLE	Latitude	Longitude	Al ₂ O ₃	Fe	MgO	Mn	P	S	SiO ₂	LOI
			%	%	%	%	%	%	%	%
ST002	21° 7'33.02"S	119° 8'14.99"E	0.72	61.3	0.01	0.047	0.012	0.034	3.97	7.39
ST003	21° 7'30.83"S	119° 8'15.50"E	1.38	58.11	0.05	0.099	0.152	0.008	3.6	11.21

Overview of Tambourah (E45/5324)

The Tambourah tenement lies within the Shaw Batholith comprised of the Callina Supersuite (A-CL-mg) - metadiorite to metasyenogranite; massive to gneissic rocks and the Tambina Supersuite (A-TA-mg) - metatonalite and metagranodiorite (see Figure 3 below).

The tenement also encompasses approximately 5.5km strike length of the Pincunah Banded Iron member. The Pincunah BIF hosts the iron ore deposits previously mined as part of Atlas Iron's Mt Webber project 10km to the north east.

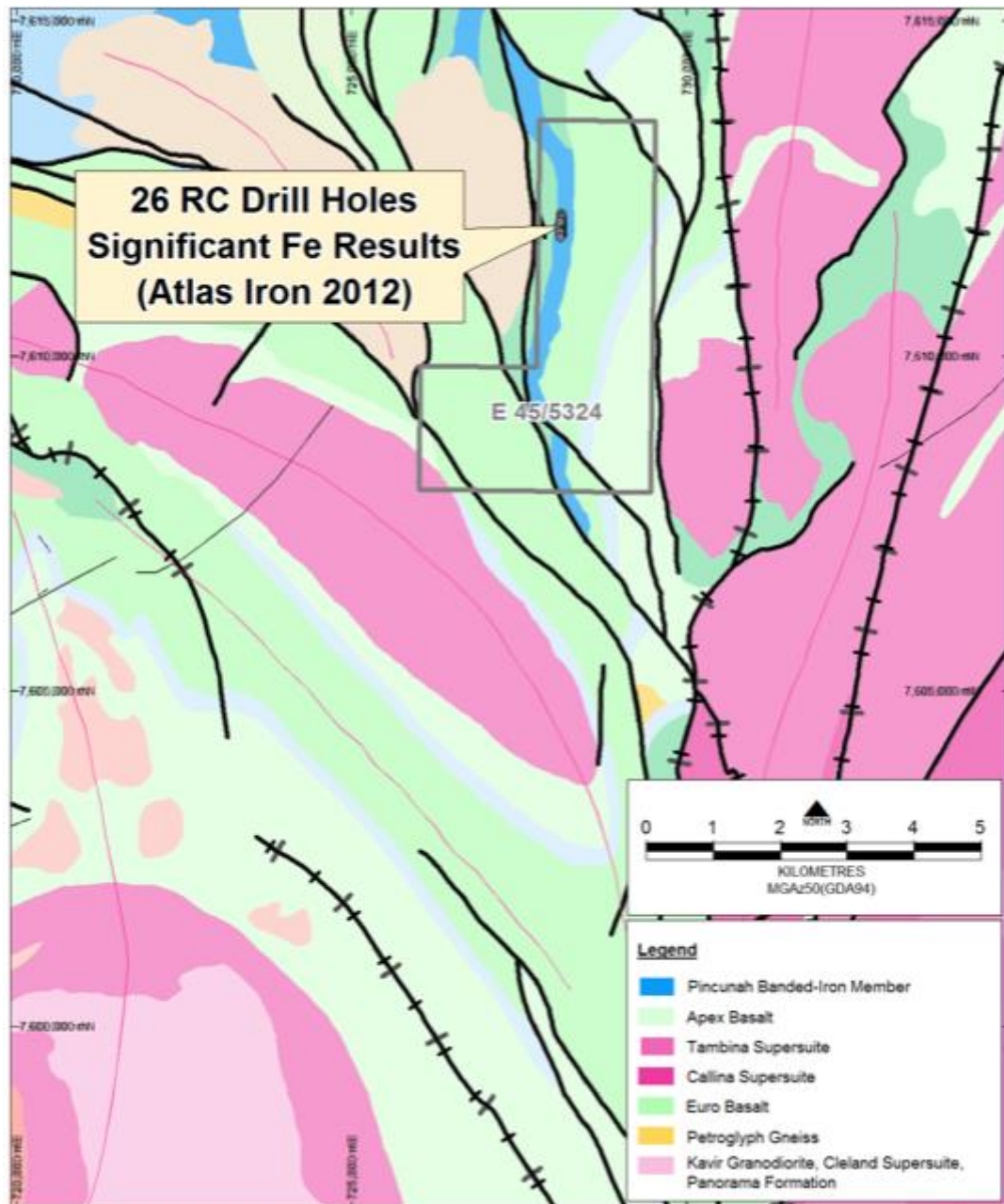


Figure 3. 1:500k Geology of the Tambourah project area

Historical reporting by Atlas Iron Ltd in 2012 (see Tables 2 and 3) highlighted the iron potential of the Pincunah Banded Iron formation within the tenement. Their drilling of the MW08 Prospect reported in an annual report to the Department of Mines and Petroleum prepared on behalf of Atlas Iron Ltd, and accessible on Wamex (Report Number A095162. Report titled: *Mt Webber Project Annual Technical Report*, dated 28 September 2012) returned significant iron results over the 400 metres of strike that was tested with RC drilling. That drilling recorded significant intercepts in fourteen (14) of the twenty-six (26) drillholes drilled on the MW08 prospect predominantly within goethite and goethitic haematite (see Figures 4 and 5).



Table 2: Atlas Iron significant intercepts from MW08 prospect, RC drilling 2012 reported in an annual report to the Department of Mines and Petroleum prepared on behalf of Atlas Iron Ltd, and accessible on Wamex (Report Number A095162. Report titled: Mt Webber Project Annual Technical Report, dated 28 September 2012)

HoleID	MGA94_50 East	MGA94_50 North	Depth From	Depth To	Fe_ %	SiO2 %	Al2O3 %	P %	LOI %	S %
MWRC878	728140.21	7611820.69	6	20	14m @ 53.7	9.13	3.11	0.241	9.8	0.007
			32	46	14m @ 51.4	16.69	0.5	0.18	8.41	0.006
MWRC883	728140.63	7611975.43	0	8	8m @ 54.66	7.81	1.1	0.175	10.23	0.009
MWRC884	728123.37	7611974.76	30	38	8m @ 53.56	11.84	1.12	0.123	9.55	0.006
MWRC886	728142.51	7612052.14	2	38	36m @ 55.55	8.65	1.24	0.143	9.71	0.006
			50	56	6m @ 54.52	12.69	0.49	0.103	8.33	0.004
MWRC887	728135.59	7612051.24	12	80	68m @ 57.85	5.46	0.74	0.148	10.14	0.004
MWRC889	728138.2	7612096.52	18	28	10m @ 54.25	10.53	1.09	0.118	9.81	0.01
			34	40	6m @ 56.39	8.36	0.71	0.138	9.74	0.007
MWRC890	728131.31	7612051.25	2	14	12m @ 54.82	9.4	1.38	0.162	9.96	0.01
MWRC891	728147.97	7611931.53	28	36	8m @ 51.24	18.24	0.26	0.152	7.64	0.008
MWRC892	728127.73	7611935.69	18	24	6m @ 54.9	10.81	0.45	0.232	9.43	0.005
MWRC893	728109.19	7611935.67	0	8	8m @ 52.16	8.26	4.08	0.084	10.81	0.016
MWRC895	728133.82	7612005.38	0	16	16m @ 54.88	7.75	1.54	0.151	10.63	0.011
			20	26	6m @ 51.54	10.57	0.52	0.081	11.59	0.01
			30	36	6m @ 60.65	1.74	0.47	0.107	10.48	0.009
			54	60	6m @ 53.82	14.15	0.34	0.161	7.91	0.007
			70	76	6m @ 56.93	8.37	0.41	0.179	9.03	0.007
MWRC896	728124.54	7612007.52	18	42	24m @ 56.85	7.48	0.51	0.122	9.95	0.008
			48	58	10m @ 56.26	9.1	0.35	0.09	9.5	0.008
MWRC898	728144.81	7611853.32	14	26	12m @ 55.62	6.75	1.88	0.248	10.48	0.015
MWRC902	728110.93	7611772.22	0	38	38m @ 56.84	6.41	2.51	0.23	8.82	0.007

Table 3: Atlas Iron MW08 prospect, RC drilling 2012, Drill Hole Survey Data

Hole_ID	GRIDNAME	BEST_X	BEST_Y	BEST_Z	TD	Dip	Azimuth	STARTDATE	HOLE_TYPE
		metres	metres	metres	metres	degrees	degrees		
		0.01	0.01	0.1	1				
MWRC878	MGA94_Z50	728140.21	7611820.69	375.6	66	-60	90	30-Nov-11	RC
MWRC879	MGA94_Z50	728128.86	7611820.98	376.2	30	-60	90	1-Dec-11	RC
MWRC880	MGA94_Z50	728118.03	7611821.27	376.24	18	-60	270	1-Dec-11	RC
MWRC881	MGA94_Z50	728129.18	7611894.35	376.4	30	-60	90	1-Dec-11	RC
MWRC882	MGA94_Z50	728112.66	7611894.3	378.04	24	-60	90	2-Dec-11	RC
MWRC883	MGA94_Z50	728140.63	7611975.43	373	48	-61.58	90.11	2-Dec-11	RC
MWRC884	MGA94_Z50	728123.37	7611974.76	373.62	60	-60	90	2-Dec-11	RC
MWRC885	MGA94_Z50	728101.4	7611974.06	374.16	24	-60	90	2-Dec-11	RC
MWRC886	MGA94_Z50	728142.51	7612052.14	379.63	78	-60	90	3-Dec-11	RC
MWRC887	MGA94_Z50	728135.59	7612051.24	379.52	90	-90	0	3-Dec-11	RC
MWRC888	MGA94_Z50	728135.35	7612129.4	381.39	36	-90	0	5-Dec-11	RC
MWRC889	MGA94_Z50	728138.2	7612096.52	380.87	60	-90	0	5-Dec-11	RC
MWRC890	MGA94_Z50	728131.31	7612051.25	379.39	31	-60	270	9-Dec-11	RC
MWRC891	MGA94_Z50	728147.97	7611931.53	377.39	60	-60	90	10-Dec-11	RC
MWRC892	MGA94_Z50	728127.73	7611935.69	377.28	61	-60	90	10-Dec-11	RC
MWRC893	MGA94_Z50	728109.19	7611935.67	376.74	22	-60	90	10-Dec-11	RC
MWRC894	MGA94_Z50	728093.2	7611935.91	376.37	13	-60	90	11-Dec-11	RC
MWRC895	MGA94_Z50	728133.82	7612005.38	376.22	91	-60	90	11-Dec-11	RC
MWRC896	MGA94_Z50	728124.54	7612007.52	375.69	97	-60	90	11-Dec-11	RC
MWRC897	MGA94_Z50	728111.76	7612007.56	374.72	9	-90	0	12-Dec-11	RC
MWRC898	MGA94_Z50	728144.81	7611853.32	375.07	55	-60	90	12-Dec-11	RC
MWRC899	MGA94_Z50	728128.96	7611853	375.86	13	-90	0	12-Dec-11	RC
MWRC900	MGA94_Z50	728131.19	7611853.13	375.72	19	-60	90	12-Dec-11	RC
MWRC901	MGA94_Z50	728112.22	7611854.8	376.65	13	-60	270	12-Dec-11	RC
MWRC902	MGA94_Z50	728110.93	7611772.22	382.72	67	-90	0	12-Dec-11	RC
MWRC903	MGA94_Z50	728122.62	7612006.16	375.45	37	-90	0	13-Dec-11	RC



No new information

To the extent that this announcement contains references to prior exploration results and Mineral Resource estimates, which have been cross referenced to previous market announcements (including supporting JORC reporting tables) made by the Company, unless explicitly stated, no new information is contained in accordance with Table 1 checklist in the JORC Code. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of Mineral Resources that all assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

Competent persons

The information in this press release that relates to Exploration Results is based on information reviewed by Mr Ian S Cooper, B.Sc., A.R.S.M., F.G.S. FAusIMM. Mr Cooper is a Fellow of the Australasian Institute of Mining (AusIMM) and as such qualifies as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr Cooper is a consultant to the Company and consents to the inclusion of the Exploration Results in the form and context in which they appear.

Company profile

Macarthur is an iron ore development, gold and lithium exploration company that is focused on bringing to production its Western Australia iron ore projects. The Lake Giles Iron Project mineral resources include the Ularring hematite resource (approved for development) comprising Indicated resources of 54.5 million tonnes at 47.2% Fe and Inferred resources of 26 million tonnes at 45.4% Fe; and the Lake Giles magnetite resource of 53.9 million tonnes (Measured), 218.7 million tonnes (Indicated) and 997 million tonnes (Inferred). The JORC reporting tables and Competent Person statement for the magnetite and hematite mineral resources have previously been disclosed in ASX market announcements dated 12 August 2020 and 5 December 2019. Macarthur has prominent (~721 square kilometre tenement area) gold, lithium and copper exploration interests in Pilbara region of Western Australia. In addition, Macarthur has lithium brine Claims in the emerging Railroad Valley region in Nevada, USA.

This news release is not for distribution to United States services or for dissemination in the United States

Caution Regarding Forward Looking Statements

Certain of the statements made and information contained in this press release may constitute forward-looking information and forward-looking statements (collectively, "forward-looking statements") within the meaning of applicable securities laws. All statements herein, other than statements of historical fact, that address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future, including but not limited to statements regarding expected completion of the Feasibility Study; conversion of Mineral Resources to Mineral Reserves or the eventual mining of the Project, are forward-looking statements. The forward-looking statements in this press release reflect the current expectations, assumptions or beliefs of the Company based upon information currently available to the Company. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and no assurance can be given that these expectations will prove to be correct as actual results or developments may differ materially from those projected in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include but are not limited to: unforeseen technology changes that results in a reduction in iron or magnetite demand or substitution by other metals or materials; the discovery of new large low cost deposits of iron magnetite; the general level of global economic activity; failure to complete the FS; inability to demonstrate economic viability of Mineral Resources; and failure to obtain mining approvals. Readers are cautioned not to place undue reliance on forward-looking statements due to the inherent uncertainty thereof. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. The forward-looking statements contained in this press release are made as of the date of this press release and except as may otherwise be required pursuant to applicable laws, the Company does not assume any obligation to update or revise these forward-looking statements, whether as a result of new information, future events or otherwise.



JORC Code, 2012 Edition – Table 3

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"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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. 	<ul style="list-style-type: none"> Technical information in this report is of an historical nature and has been sourced from an open file report submitted to the West Australian Department of Mines and Petroleum titled: Mt Webber Project E45/2312-1, Annual Technical Report for the period ending 28 September 2012. The open file report number being A095162. The historical report does not include a section on sampling techniques. The historical report does include as txt files: drill collars and down hole survey data indicating drilling method was by reverse circulation drilling, assay and QAQC data, geology and magnetic property logging.
Drilling techniques	<ul style="list-style-type: none"> 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, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> The historical report indicates the drilling was by reverse circulation method
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	<ul style="list-style-type: none"> The historical report does not report on sample recovery
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> The historical report indicates the drilling was logged geologically No mineral resource has been quoted



Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<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 the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • The historical report does not report on sub-sampling
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> 	<ul style="list-style-type: none"> • Not verified by QP as technical aspects of the news release rely on the historical report.
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> 	<ul style="list-style-type: none"> • Not verified by QP as technical aspects of the news release rely on the historical report.
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 topographic control.</i> 	<ul style="list-style-type: none"> • Not verified by QP as technical aspects of the news release rely on the historical report however the QP visited the site in February 2021 and observed the sites of the historical drill hole collars. The QP used the drill hole file from the Historical report to navigate to selected drill collars via use of a handheld GPS instrument.
Data spacing and distribution	<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> 	<ul style="list-style-type: none"> • Not verified by QP as technical aspects of the news release rely on the historical report.
Orientation of data in relation to geological structure	<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</i> 	<ul style="list-style-type: none"> • Not verified by QP as technical aspects of the news release rely on the historical report.



Criteria	JORC Code explanation	Commentary
	<i>mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Not verified by QP as technical aspects of the news release rely on the historical report.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Not verified by QP as technical aspects of the news release rely on the historical report.

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 style="list-style-type: none"> 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. 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. 	<ul style="list-style-type: none"> The tenements that will be transferred under the Agreement are the Strelley Gorge (E45/4735) and Tambourah (E45/5324) tenements in the Pilbara region of Western Australia E45/4735 overlaps L45/189 held by Venturex Sulphur Springs Pty Ltd (4.55%). Based on the lawyer Searches, there are no ILUAs to which Macarthur is party which relate to the Tenements. The following Heritage Agreement apply to the Tenement: <ul style="list-style-type: none"> the Aboriginal Heritage Agreement dated 23 November 2017 between the Registered Applicants for the Njamal Claimant Group and Macarthur in relation to E45/4708, E45/4709, E45/4732, E45/4735, E45/4779 and E45/4824. The tenements are secured under the provisions of the relevant legislation of the state of Western Australia
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Technical information in this report is of an historical nature and has been sourced from an open file report submitted to the West Australian Department of Mines and Petroleum titled: Mt Webber Project E45/2312-1, Annual Technical Report for the period ending 28 September 2012. The open file report number being A095162.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Not Applicable
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole 	<ul style="list-style-type: none"> Refer to statement on the historical report The historical report does include as txt files: drill collars and down hole survey data indicating drilling method was by reverse circulation drilling, assay and QAQC data, geology and magnetic property logging.



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> ○ down hole length and interception depth ○ hole length. ● 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. 	
Data aggregation methods	<ul style="list-style-type: none"> ● 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. ● 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. ● The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> ● Not Applicable
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> ● These relationships are particularly important in the reporting of Exploration Results. ● If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. ● 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'). 	<ul style="list-style-type: none"> ● Not Applicable
Diagrams	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● Not Applicable
Balanced reporting	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● Not Applicable
Other substantive exploration data	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● Not Applicable
Further work	<ul style="list-style-type: none"> ● The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). ● Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> ● Not Applicable



Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> No resources are quoted or reported
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> Not Applicable
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> Not Applicable
Dimensions	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<ul style="list-style-type: none"> Not Applicable
Estimation and modelling techniques	<ul style="list-style-type: none"> The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. 	<ul style="list-style-type: none"> Not Applicable



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Not Applicable
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> Not Applicable
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> Not Applicable
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<ul style="list-style-type: none"> Not Applicable
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<ul style="list-style-type: none"> Not Applicable
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately 	<ul style="list-style-type: none"> Not Applicable



Criteria	JORC Code explanation	Commentary
	<p>account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</p> <ul style="list-style-type: none"> Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> Not Applicable
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> Not Applicable
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<ul style="list-style-type: none"> Not Applicable

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul style="list-style-type: none"> Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. 	<ul style="list-style-type: none"> No resources are quoted or reported
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> Not Applicable
Study status	<ul style="list-style-type: none"> The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least 	<ul style="list-style-type: none"> Not Applicable



Criteria	JORC Code explanation	Commentary
	<i>Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i>	
Cut-off parameters	<ul style="list-style-type: none"> The basis of the cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> Not Applicable
Mining factors or assumptions	<ul style="list-style-type: none"> The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining dilution factors used. The mining recovery factors used. Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. The infrastructure requirements of the selected mining methods. 	<ul style="list-style-type: none"> Not Applicable
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	<ul style="list-style-type: none"> Not Applicable
Environmental	<ul style="list-style-type: none"> The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status 	<ul style="list-style-type: none"> Not Applicable



Criteria	JORC Code explanation	Commentary
	<i>of approvals for process residue storage and waste dumps should be reported.</i>	
Infrastructure	<ul style="list-style-type: none"> The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed. 	<ul style="list-style-type: none"> Not Applicable
Costs	<ul style="list-style-type: none"> The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	<ul style="list-style-type: none"> Not Applicable
Revenue factors	<ul style="list-style-type: none"> The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	<ul style="list-style-type: none"> Not Applicable
Market assessment	<ul style="list-style-type: none"> The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	<ul style="list-style-type: none"> Not Applicable
Economic	<ul style="list-style-type: none"> The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs. 	<ul style="list-style-type: none"> Not Applicable
Social	<ul style="list-style-type: none"> The status of agreements with key stakeholders and matters leading to social licence to operate. 	<ul style="list-style-type: none"> Not Applicable
Other	<ul style="list-style-type: none"> To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. 	<ul style="list-style-type: none"> Not Applicable



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i> 	
Classification	<ul style="list-style-type: none"> <i>The basis for the classification of the Ore Reserves into varying confidence categories.</i> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> <i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i> 	<ul style="list-style-type: none"> Not Applicable
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of Ore Reserve estimates.</i> 	<ul style="list-style-type: none"> Not Applicable
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <i>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</i> <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i> <i>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i> <i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<ul style="list-style-type: none"> Not Applicable



Section 5 Estimation and Reporting of Diamonds and Other Gemstones

(Criteria listed in other relevant sections also apply to this section. Additional guidelines are available in the 'Guidelines for the Reporting of Diamond Exploration Results' issued by the Diamond Exploration Best Practices Committee established by the Canadian Institute of Mining, Metallurgy and Petroleum.)

Criteria	JORC Code explanation	Commentary
Indicator minerals	<ul style="list-style-type: none"> Reports of indicator minerals, such as chemically/physically distinctive garnet, ilmenite, chrome spinel and chrome diopside, should be prepared by a suitably qualified laboratory. 	<ul style="list-style-type: none"> Not Applicable
Source of diamonds	<ul style="list-style-type: none"> Details of the form, shape, size and colour of the diamonds and the nature of the source of diamonds (primary or secondary) including the rock type and geological environment. 	<ul style="list-style-type: none"> Not Applicable
Sample collection	<ul style="list-style-type: none"> Type of sample, whether outcrop, boulders, drill core, reverse circulation drill cuttings, gravel, stream sediment or soil, and purpose (eg large diameter drilling to establish stones per unit of volume or bulk samples to establish stone size distribution). Sample size, distribution and representivity. 	<ul style="list-style-type: none"> Not Applicable
Sample treatment	<ul style="list-style-type: none"> Type of facility, treatment rate, and accreditation. Sample size reduction. Bottom screen size, top screen size and re-crush. Processes (dense media separation, grease, X-ray, hand-sorting, etc). Process efficiency, tailings auditing and granulometry. Laboratory used, type of process for micro diamonds and accreditation. 	<ul style="list-style-type: none"> Not Applicable
Carat	<ul style="list-style-type: none"> One fifth (0.2) of a gram (often defined as a metric carat or MC). 	<ul style="list-style-type: none"> Not Applicable
Sample grade	<ul style="list-style-type: none"> Sample grade in this section of Table 1 is used in the context of carats per units of mass, area or volume. The sample grade above the specified lower cut-off sieve size should be reported as carats per dry metric tonne and/or carats per 100 dry metric tonnes. For alluvial deposits, sample grades quoted in carats per square metre or carats per cubic metre are acceptable if accompanied by a volume to weight basis for calculation. In addition to general requirements to assess volume and density there is a need to relate stone frequency (stones per cubic metre or tonne) to stone size (carats per stone) to derive sample grade (carats per tonne). 	<ul style="list-style-type: none"> Not Applicable



Criteria	JORC Code explanation	Commentary
Reporting of Exploration Results	<ul style="list-style-type: none"> • Complete set of sieve data using a standard progression of sieve sizes per facies. Bulk sampling results, global sample grade per facies. Spatial structure analysis and grade distribution. Stone size and number distribution. Sample head feed and tailings particle granulometry. • Sample density determination. • Per cent concentrate and undersize per sample. • Sample grade with change in bottom cut-off screen size. • Adjustments made to size distribution for sample plant performance and performance on a commercial scale. • If appropriate or employed, geostatistical techniques applied to model stone size, distribution or frequency from size distribution of exploration diamond samples. • The weight of diamonds may only be omitted from the report when the diamonds are considered too small to be of commercial significance. This lower cut-off size should be stated. 	<ul style="list-style-type: none"> • Not Applicable
Grade estimation for reporting Mineral Resources and Ore Reserves	<ul style="list-style-type: none"> • Description of the sample type and the spatial arrangement of drilling or sampling designed for grade estimation. • The sample crush size and its relationship to that achievable in a commercial treatment plant. • Total number of diamonds greater than the specified and reported lower cut-off sieve size. • Total weight of diamonds greater than the specified and reported lower cut-off sieve size. • The sample grade above the specified lower cut-off sieve size. 	<ul style="list-style-type: none"> • Not Applicable
Value estimation	<ul style="list-style-type: none"> • Valuations should not be reported for samples of diamonds processed using total liberation method, which is commonly used for processing exploration samples. • To the extent that such information is not deemed commercially sensitive, Public Reports should include: <ul style="list-style-type: none"> ○ diamonds quantities by appropriate screen size per facies or depth. ○ details of parcel valued. ○ number of stones, carats, lower size cut-off per facies or depth. • The average \$/carat and \$/tonne value at the selected bottom cut-off should be reported in US Dollars. The value per carat is of critical importance in demonstrating project value. • The basis for the price (eg dealer buying price, dealer selling price, etc). • An assessment of diamond breakage. 	<ul style="list-style-type: none"> • Not Applicable



Criteria	JORC Code explanation	Commentary
Security and integrity	<ul style="list-style-type: none"> • <i>Accredited process audit.</i> • <i>Whether samples were sealed after excavation.</i> • <i>Valuer location, escort, delivery, cleaning losses, reconciliation with recorded sample carats and number of stones.</i> • <i>Core samples washed prior to treatment for micro diamonds.</i> • <i>Audit samples treated at alternative facility.</i> • <i>Results of tailings checks.</i> • <i>Recovery of tracer monitors used in sampling and treatment.</i> • <i>Geophysical (logged) density and particle density.</i> • <i>Cross validation of sample weights, wet and dry, with hole volume and density, moisture factor.</i> 	<ul style="list-style-type: none"> • Not Applicable
Classification	<ul style="list-style-type: none"> • <i>In addition to general requirements to assess volume and density there is a need to relate stone frequency (stones per cubic metre or tonne) to stone size (carats per stone) to derive grade (carats per tonne). The elements of uncertainty in these estimates should be considered, and classification developed accordingly.</i> 	<ul style="list-style-type: none"> • Not Applicable