5 May 2020

Assays completed for infill drilling of the Lake Giles Iron Project

Macarthur Minerals Limited (TSX-V: MMS) (ASX: MIO) (the "Company" or "Macarthur") has recenty received the final XRF and Davis Tube Recovery (DTR) assays for the infill drilling program completed at its Lake Giles Iron Project near Kalgoorlie in Western Australia. The DTR assays confirm signficant intersections of magnetite mineralisation with DTR concentrate grades up to 68.9% Fe.

Drilling at the Moonshine North deposit comprised 21 reverse circulation (RC) holes for 3379 metres and 9 diamond drill (DD) holes for 1676.2 metres, totalling 5055.2m. A total of 25 holes were submitted for XRF and DTR analysis.

Macarthur has now engaged CSA Global to complete an updated resource model and classification.

Highlights

- Weighted average DTR concentrate grade of 66.6% Fe and weighted average mass recovery of 31.2%.

- High grade DTR concentrate including the following intervals:

Hole	mFrom	mTo	DTR Mass Recovery %	Fe Concentrate %
LGRC_2165	52	110	39.9	68.88
LGRC_2160	96	179	41.3	68.78
LGRC_2147	139	199	42.4	67.17
Including	139	167	45.2	66.63
LGRC_2166	114	149	51.6	68.61

- High grade magnetite intervals:

Hole	mFrom	mTo	Fe%	SiO2%
LGRC_2160	131	168	50.28	12.64
Including	139	155	55.44	8.03
and	141	145	61.00	6.28
LGRC_2166	115	149	50.07	15.67
Including	127	150	55.45	9.49
and	129	148	60.03	7.02

Macarthur Minerals Executive Chairman Mr Cameron McCall said that "The assay results for the infill drilling confirmed good intersections of magnetite. This has been a successful program, and these intersections will form the basis of a revised mineral resource estimate that will underpin the Feasibility Study."

Mr McCall also said that "Macarthur has been working hard on progressing key components of the Lake Giles Iron Project, and is well underway in advancing discussions to achieve a contracted position with port and rail service providers.

We look forward to informing investors about the outcomes of the updated resource classification that is anticipated to include Indicated and Measured Mineral Resources, and to further advising on progress on the Company's march toward securing its route to market" Mr McCall said.

Drilling Results

The Moonshine magnetite deposit is currently defined by drill hole spacings of 200m x 200m and classified as an Inferred Mineral Resource of approximately 710 mt at 30.2% Fe[1]. The Company's infill drilling program targeted two discrete areas of the Moonshine and Moonshine North magnetite deposits as shown in Figure 1. Drilling was conducted at closer spacing to provide greater confidence in resource estimates with a plan to upgrade the resource classification to include Indicated and Measured Resources.

Ore grade XRF assays were previously released to the market on December 10, 2019 and January 17, 2020. Samples were subsequently submitted for DTR anaylsis to determine the magnetite fraction and concentrate grade.

DTR analysis has been completed for 25 holes intersecting magnetite mineralisation at the Moonshine and Moonshine North deposits. DTR assays were completed for sample composites ranging from 3m to 5m intervals based on head grade XRF assays and geological logging.

Average concentrate grades across holes ranged from 63.7% Fe to 68.9% Fe with mass recoveries ranging from 15.5% to 51.6% (Table 1). Weighted average ore grades across mineralised intervals approximated 30.4% Fe with weighted average DTR concentrate of 66.6% Fe with a mass recovery of 31.2%. These data are in accordance with the mineral resource estimate at 30.2% Fe and 31.4% mass recovery[1].

Several holes showed elevated mass recoveries including:

- LGRC_2166: 52 to 110m; DTR 39.9% and 68.9% Fe
- LGRC_2160: 96 to 179m; DTR 41.3% and 68.8% Fe
- LGRC_2147: 139 to 199m; DTR 42.4% and 67.2% Fe
- LGRC_2166: 114 to 149m; DTR 51.6% and 68.6% Fe

The following table details significant intervals of magnetite mineralisation confirmed by XRF and DTR anaylsis (Table 1). Note these intersections are not true widths. For completeness, the drill hole locations for all holes drilled in the infill program are presented in Table 2. Significant magnetite intervals and drill hole locations throughout the Moonshine deposit are shown in Figure 1.

[1] NI43-101 Technical Report filed June 17, 2019, titled "Macarthur Minerals Limited, Preliminary Economic Assessment Lake Giles Iron Project, Western Australia", NI43-101 Technical Report – Preliminary Assessment

Table 1. XRF and DTR assay results for DD and RC drill samples from the Moonshine and Moonshine North deposits.

Hole ID	m From	m To	Interval	Fe%	SiO_2%	P%	S%	Al_2O_3%	LOI	Average DTR mass recovery %	DTR Conc. Fe %
LGDD_066	60	175	115	25.95	54.85	0.04	1.05	1.04	2.05	26.46	64.75
LGDD_067	69	137	68	31.61	48.99	0.05	0.42	0.84	0.06	38.41	67.97
LGDD_068	83	194	111	26.82	55.15	0.04	0.42	0.23	1.12	29.67	66.46
LGDD_069	64	115	51	31.96	47.89	0.05	1.16	0.58	2.00	29.31	66.35
GDD_070	88	174	86	27.64	56.00	0.05	0.54	0.17	1.99	30.91	66.71
LGDD_071	82	162	80	30.74	47.11	0.05	1.64	1.82	1.80	33.56	66.43
LGDD_072	56	130	74	28.19	53.12	0.04	0.41	0.18	0.59	32.65	67.42
LGDD_073	105	142	37	28.74	52.86	0.06	0.32	0.66	0.55	21.40	64.12
LGDD_073	199	269	70	30.12	46.02	0.05	2.00	1.74	0.63	35.35	64.90
LGDD_074	46	100	54	32.36	50.46	0.05	0.27	0.21	0.82	31.94	67.62
LGRC_2146	58	106	48	25.43	58.15	0.04	0.20	0.12	1.60	19.77	67.07
LGRC_2147	100	245	145	27.29	50.49	0.07	1.13	2.81	0.77	30.22	65.85
LGRC_2148	75	101	26	26.08	53.08	0.07	0.13	2.96	1.66	24.50	67.51
LGRC_2149	102	106	4	17.30	67.25	0.03	0.11	0.05	4.35	15.50	64.40
LGRC_2150	53	84	31	26.05	58.02	0.04	0.14	0.10	1.95	22.33	64.29
LGRC_2151	105	186	81	31.25	50.92	0.04	1.16	0.94	0.71	37.75	67.00
LGRC_2154	113	161	48	21.52	58.90	0.04	1.78	1.11	2.46	19.46	63.70
LGRC_2155	55	80	25	31.20	51.99	0.05	0.15	0.31	2.18	17.58	67.46
LGRC_2156	85	97	12	18.69	64.32	0.03	0.25	0.09	2.57	18.47	65.52
LGRC_2159	200	285	85	33.96	30.93	0.06	3.27	2.85	5.70	27.66	66.94
LGRC_2160	96	179	83	42.01	18.46	0.08	1.85	2.60	7.15	41.30	68.78
LGRC_2161	117	223	106	31.70	41.33	0.05	1.66	2.44	2.68	32.68	66.76
LGRC_2163	86	103	17	31.32	32.00	0.07	0.17	3.97	6.54	25.61	68.21
LGRC_2165	52	110	58	37.68	37.58	0.06	1.00	0.39	3.56	39.85	68.88
LGRC_2166	114	149	35	49.02	16.12	0.09	3.34	2.89	3.51	51.55	68.61

Table 2. Drill hole locations for the Moonshine Magnetite infill drilling program. Highlighted holes relate to assay data presented herein.

Hole_ID	Hole Type	Prospect	Max Depth	NAT_RL	NAT_Grid	NAT_East	NAT_North	DIP	AZIMUTH
LGDD_066	DD	MOONSHINE	228.4	502.842	MGA94_50	790222.9	6672154.3	-60.37	244.97
LGDD_067	DD	MOONSHINE	138	499.512	MGA94_50	790050.1	6672396.3	-60.78	242.59
LGDD_068	DD	MOONSHINE	222	501.624	MGA94_50	790289.5	6672079.6	-59.64	236.29
LGDD_069	DD	MOONSHINE	145	501.338	MGA94_50	790492.9	6671732.0	-60.49	241.84
LGDD_070	DD	MOONSHINE	215.1	507.458	MGA94_50	790351.7	6671884.0	-60.5	240.94
LGDD_071	DD	MOONSHINE NORTH	223.4	480.941	MGA94_50	787935.2	6674890.6	-61.72	248.38
LGDD_072	DD	MOONSHINE	133.2	490.221	MGA94_50	789865.0	6672633.7	-60.03	246.21
LGDD_073	DD	MOONSHINE	270.8	498.521	MGA94_50	789956.5	6672801.8	-60.66	241.84
LGDD_074	DD	MOONSHINE NORTH	100.3	488.778	MGA94_50	787735.6	6675226.8	-60.66	255.25
LGRC_2146	RC	MOONSHINE	150	497.672	MGA94_50	790002.0	6672371.0	-59.64	241.61
LGRC_2147	RC	MOONSHINE	282	498.468	MGA94_50	790155.1	6672346.7	-59.64	241.18
LGRC_2148	RC	MOONSHINE	108	498.484	MGA94_50	790087.2	6672300.1	-60.13	240.53
LGRC_2149	RC	MOONSHINE	126	506.135	MGA94_50	790221.0	6672028.6	-60.14	230.83
LGRC_2150	RC	MOONSHINE	132	500.564	MGA94_50	790164.6	6672132.9	-60.33	227.21
LGRC_2151	RC	MOONSHINE	186	508.888	MGA94_50	790398.5	6671905.3	-60.61	245.79
LGRC_2152	RC	MOONSHINE	39	508.93	MGA94_50	790347.6	6671769.4	-59.96	247.61
LGRC_2153	RC	MOONSHINE	132	509.043	MGA94_50	790342.4	6671767.2	-59.96	247.61
LGRC_2154	RC	MOONSHINE	234	508.398	MGA94_50	790549.0	6671763.6	-59.82	238.13
LGRC_2155	RC	MOONSHINE	114	498.103	MGA94_50	790428.4	6671707.7	-60.5	221.8
LGRC_2156	RC	MOOSHINE	151	500.828	MGA94_50	789918.7	6672458.8	-60.2	213.48
LGRC_2157	RC	MOONSHINE	138	498.558	MGA94_50	789788.2	6672579.1	-60.24	237.28
LGRC_2158	RC	MOONSHINE	120	493.389	MGA94_50	789719.1	6672674.8	-60.16	259.02
LGRC_2159	RC	MOONSHINE NORTH	294	502.948	MGA94_50	787889.7	6675197.1	-60.36	234.16
LGRC_2160	RC	MOONSHINE NORTH	294	486.933	MGA94_50	787908.1	6674997.0	-60.28	222
LGRC_2161	RC	MOONSHINE NORTH	261	486.27	MGA94_50	787904.6	6674993.7	-77.35	229.3
LGRC_2162	RC	MOONSHINE NORTH	100	483.151	MGA94_50	787760.8	6675122.9	-60.51	240.45
LGRC_2163	RC	MOONSHINE NORTH	114	488.285	MGA94_50	787807.9	6675038.1	-60.59	244.4
LGRC_2164	RC	MOONSHINE NORTH	114	486.831	MGA94_50	787852.4	6674946.7	-59.52	239.31
LGRC_2165	RC	MOONSHINE NORTH	130	486.6	MGA94_50	787888.9	6674854.7	-60.23	244.79
LGRC_2166	RC	MOONSHINE NORTH	160	475.268	MGA94_50	788022.4	6674690.6	-60.61	245.02

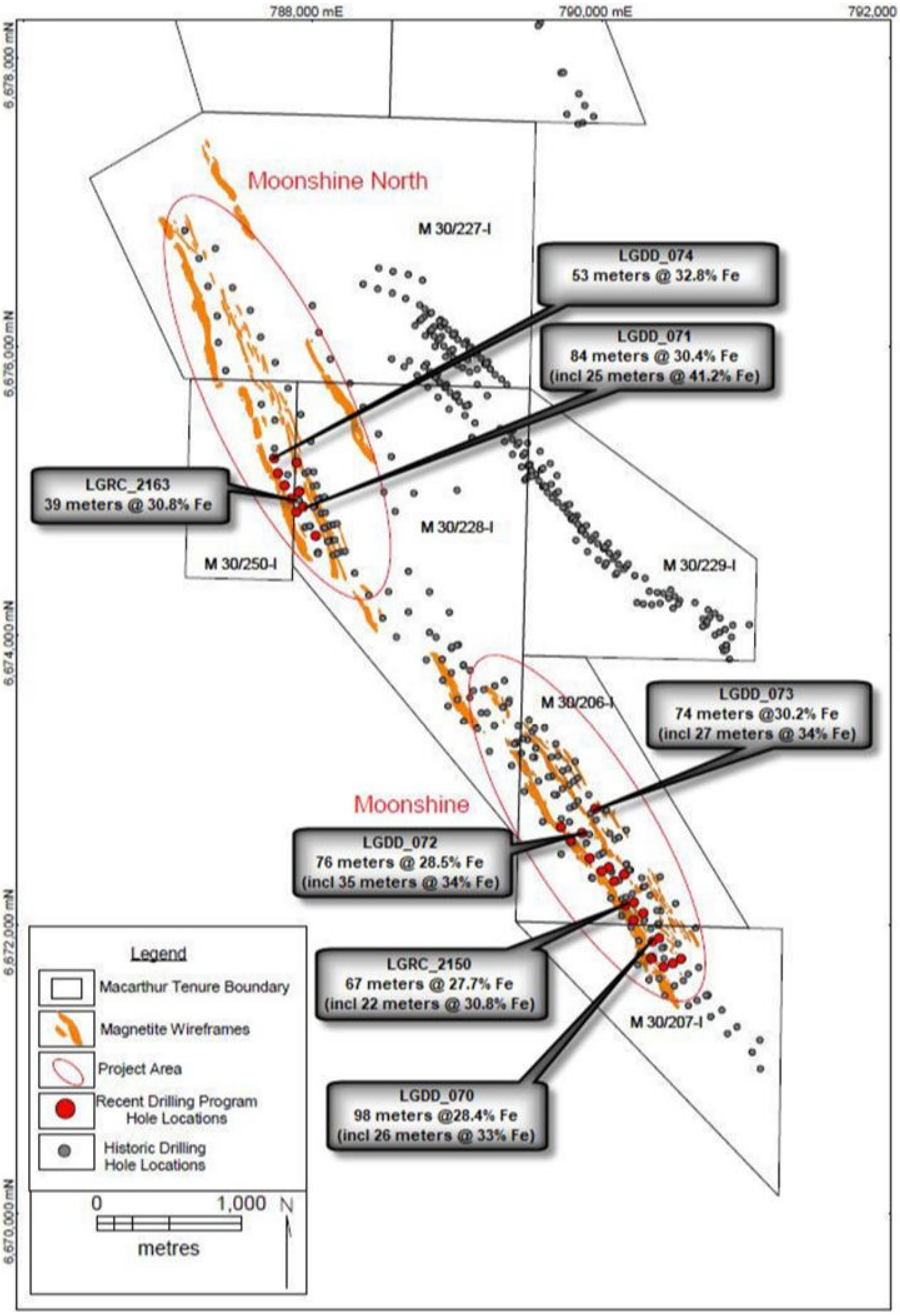

Figure 1. Drill hole locations for the Moonshine Magnetite infill drilling program showing signifcant magnetite intervals for the last seven holes drilled.

On behalf of the Board of Directors, Mr Cameron McCall, Executive Chairman

For more information please contact:

Joe Phillips
CEO & Director
M +61 (0)448 899 247
jphillips@macarthurminerals.com

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 person

The information in this press release that relates to Exploration Results and Mineral Resources estimates is based on information compiled by Mr Andrew Hawker, BSc. Geol, MAusIMM and MAIG. Mr Hawker is a member of the Australian Institute of Geoscientists, and has sufficient experience relevant to the style of mineralization and type of deposit under consideration and to the activity they are 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 (the "JORC Code"). Mr Hawker 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 Moonshine magnetite resource of 710 million tonnes (Inferred). Macarthur has prominent (~1,281 square kilometer 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.

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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 limited to statements regarding: the proposed strategy regarding core mining, road and rail inputs at the Project; anticipated increases in annual production at the Project; anticipated decreases in Project costs; the possible reclassification of current inferred mineral resources on the Project as indicated mineral resources in the future; expected completion of the FS on the Project containing a new reserve calculation and a new economic assessment; the granting of a license for the Menzies rail siding; the status of the MRRT; and plans to secure mining approvals under the Mining Act, 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. With respect to forward-looking statements contained in this press release, assumptions have been made regarding, among other things, the reliability of information prepared and/or published by third parties that are referenced in this press release or was otherwise relied upon by the Company in preparing this press release. 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; future changes in strategy regarding core mining, road and rail inputs with respect to the Project; final Project costs varying from those determined from the EOI program; failure to successfully negotiate a BOO arrangement for the Project; failure to complete the FS; failure of the FS to reflect currently anticipated increases annual production and decreases in expected costs at the Project; the results of infill drilling being insufficient to reclassify current inferred mineral resources on the Project as indicated mineral resources; failure to receive a license for the Menzies rail siding; failure to repeal the MRRT; and failure to obtain mining approvals under the Mining Act. 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 1

- Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.*	Macarthur's Moonshine Magnetite Project was sampled using diamond core and reverse circulation percussion drilling from surface. A total of 213 historic holes have been drilled at this prospect. During the recent program a further 30 holes were completed. Diamond (DD) (9 holes) and Reverse Circulation (RCP) (21 holes) were drilled at Moonshine in the recent program. DD samples were predominantly HQ2 and were either cut in half longitudinally or quarter using an Almonte Core saw. Core samples varied from 0.3m to 1m samples. RCP chip recovery method was practiced as before. Some compositing of samples is used to reduce costs of DTR analysis, whereby composites of between 1m and 5m are used, depending on the continuity and metre scale head grade decided by a geologist.
Drilling techniques	• *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).*	RCP drill holes were drilled by iDrilling using a Hydco 350 mounted on a 2008 Tatra 8x8 truck
Drill sample recovery	• *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.*	Diamond core recoveries were recorded by measuring the length of drill core retrieved per metre of drill penetration. RCP samples were weighed and a recovery (%) was estimated per metre of drill penetration. If sample recoveries were observed becoming sub-optimal by the project geologist, the information was relayed to the driller who adjusted the drilling penetration rate, or other sample recovery drill rig characteristics such as air compression, in order to improve sample recovery. A geologist was present at the drill rigs at all times whilst drilling procedures were under way, and who logged all drill samples. In heavily fractured zones with strong groundwater flow recovery can suffer with appropriate measures being taken.

Logging	• *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.*	All holes have been logged in detail for lithology, alteration, mineralization, oxidation state, structure and veining. RCP cuttings were logged for various geological attributes including rock type by the mineral composition, mineralization by veining and visible minerals, and alteration including oxidation. Logging is considered sufficient to support geologic modelling and Mineral Resource estimates. Rock, Quality Designation (RQD) and Rock Mass Quality (RMQ) logs were kept for geotechnical purposes to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. DD core was logged similar to RCP however in more detail and photographed at the Macarthur Camp.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Diamond core was cut using an Almonte electric core saw in competent ground and hand split in clay at either 1 m intervals or to geological contacts. RCP samples were collected at the rig using riffle splitters. Samples were generally dry with some areas wet due to perched water tables. Industry standard diamond and RC drilling techniques were used and are considered appropriate for use in Mineral Resource estimation. For RC drilling, sample quality was maintained by monitoring sample volume and by cleaning the splitters on a regular basis. Field duplicates were taken every 20 meters for RC drilling. Quarter splits of core have been taken and recorded as duplicates in the database. Sample sizes are considered appropriate for the style of mineralization based on the style of mineralization, the thickness and consistency of the intersections, the sampling methodology, and assay value ranges for Iron Ore. RCP and core samples were securely delivered to SGS (the lab). RCP and Diamond core sample preparation technique was Coarse crush, Dry, Pulverised. Core was prepared by drying, crushing, pulverising to a nominal 85% and 45um then all were analysed using Borate Fusion with XRF finish (XRF78L).
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	All samples were dispatched to SGS. Pulp samples were analysed using Borate Fusion with XRF finish (XRF78L), considered the industry standard practice for iron ore. All DTR work was also performed by SGS. Industry standard certified reference materials (CRMs) and blanks were utilized in order to check laboratory assay quality control. The insertion rate for CRMs is a nominal 1 in 20. Different CRMs have been selected for use at varying Iron grades over the life of the project. The combined insertion rate of pulp blanks and CRMs is a nominal 1 in 20 samples. The QA/QC program includes CRMs, blanks, preparation duplicates and field duplicates and is acceptable according to industry standards.

		Pulp duplicates were also analysed to test for analytical accuracy.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	A total of 9 diamond holes and 21 reverse circulation holes were drilled to develop the Moonshine Magnetite deposit. As some assay results are still pending, these have yet to be verified by an independent or alternative company personnel.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Macarthur contracted ABIMS to carry out a DGPS survey of all the holes drilled at Moonshine for the recent program. Down-hole surveys of core holes were performed by the drilling contractor using a Reflex EZ-Giro tool. Measurements were taken every 10 metres down the holes.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	Drill holes were closely spaced at 100 to 200 metres apart. N/A as Exploration data is being reported No compositing of samples for XRF assay was undertaken.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	Holes were generally angled at 60^{o} across the strike of mineralisation, targeting strata typically dipping at 70^{o} to 90^{o} towards the angle of drilling. Some bias of sampling was anticipated based upon the angle of drill hole interception against the dip of haematite bearing strata, however this bias is not considered detrimental to the Mineral Resource estimate.
Sample security	• *The measures taken to ensure sample security.*	On completion of each hole the calico sample bags were placed in polyweave bags and transferred to the Ularring exploration compound where they were securely stored. The polyweave bags were placed in large bulka bags and transported to the assay laboratory depot in Kalgoorlie and then Perth using a contracted freight company. At all times the samples were under the security of either Macarthur or the transport company personnel, and then under the security of the assay laboratory. Rip tie security tags were used to secure all samples.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	The CP reviewed sampling procedures during the program. Any problems observed were discussed with the geological staff on roster, and the problems were quickly corrected.

- 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	• *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.*	At present Macarthur manages 15 contiguous and Mining Leases covering a total area of approximately 62.4 km². Macarthur, through its wholly owned subsidiary Macarthur Iron Ore Pty Ltd, is the registered holder for the Tenements.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	The property was previously explored for nickel (1968 to 1972) and gold (Aztec, Battle Mountain, 1993 to 1998) with limited success. Internickel Australia undertook a detailed evaluation of previous exploration from 2001 to 2005. Macarthur Minerals took over the tenements in 2005 and actively explored until 2014.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The outcropping geology of the project area is comprised of a combination of un-altered silica rich banded iron formations (BIFs) and altered, enriched haematite / goethite BIFs. Weathering has resulted in the leaching of the majority of the silica from the BIFs, thus producing a rock rich in iron and low in silica, near surface. These enriched bands vary from 1m to 30m in true thickness and are largely steeply dipping at 70º-90º.
Drill hole Information	• *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:* ○ *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* ○ *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.*	Refer to the table in the news release for the list of holes and assays received to date for the current infill drilling program. The Moonshine Magnetite Project consists of 294 drill holes that were used to support the Mineral Resource estimate previously disclosed. The exclusion of this information is justified on the basis that the information has been previously released to the ASX with supporting JORC Tables.

Data aggregation methods	• *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.*	RCP and DD drill samples were obtained at 1 m intervals with no sample compositing. Assays of intervals presented are length weighted averages.
Relationship between mineralisation widths and intercept lengths	• *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').*	True width of mineralisation is derived from detailed three-dimensional geological rock models. Various ore bodies are intercepted at varying degrees of obliqueness, therefore a simple conversion to true thickness from down hole intercepts is not possible. General geometry of ore bodies is reported as sub vertical tabular bodies generally dipping between 60° and 90° with true thickness of mineralisation between several metres to 140 m
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.*	This news release is not reporting a new discovery.
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.*	The accompanying news release is considered to be a balanced report with suitable cautionary notes.
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.*	All substantive data is reported.
Further work	• *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.*	Further work involves updating the resource model with the data presented herein. Additional metallurgical testwork including DTR assays will be undertaken to confirm the ability to obtain an economical iron concentrate.