20 May 2022

MINERAL RESOURCES UPDATE
McCALLS MINERAL SANDS PROJECT

Image Resources NL (ASX: IMA) ("Image" or "the Company") is pleased to provide a Mineral Resources update on two Mineral Resource Estimates (**MRE**) associated with the Company's recent strategic acquisition of the McCalls Mineral Sands Project located north-east of Gingin in the Dandaragan Trough.

Highlights:

- **5.8 billion tonnes total Mineral Resources at 1.4% total heavy minerals**
  - **1.6 billion tonnes (28%) in JORC Indicated category**
  - **Image's total Mineral Resources increased more than ten-fold to 6.4 billion tonnes**
- **84 million tonnes contained total heavy minerals**
  - **Image's total contained heavy minerals increase more than six-fold to 101 million tonnes**
  - **Image's current production of heavy mineral concentrate is approximately 0.3 million tonnes per annum**
- **90% valuable heavy minerals ("VHM") within mineral assemblage**
- **7.1% zircon plus rutile and 82% ilmenite plus leucoxene in total heavy minerals averaging 63% TiO_2**
- **Mineralisation located from surface in some places with low overall average strip ratio.**

In March 2022, the Company completed the strategic acquisition of the McCalls Mineral Sands Project (see ASX announcement "Strategic Acquisition of McCalls Mineral Sands Project" dated 14 March 2022) from Sheffield Resources Limited (Sheffield). The McCalls project is comprised of two separate deposits; McCalls and Mindarra Springs 10km to the south, and with Mindarra Springs located 10km to the east of Image's Boonanarring project (Figure 1).

The first order of business with new ownership of the McCalls Mineral Sands Project was verification and reporting of Mineral Resources on behalf of the Company by its JORC Competent Person Mrs Christine Standing of Optiro Pty Ltd (Snowden Optiro). The Mineral Resources estimate has been prepared and reported in accordance with the JORC Code 2012.

Total Mineral Resources reported for the McCalls project, as presented in Table 1, is **5.8 billion tonnes at 1.4% total heavy minerals ("THM") containing 84 million tonnes of heavy minerals**. Other positive attributes of the Mineral Resources include **90% valuable heavy minerals** in the mineral assemblage, a combined total of **7.1% zircon plus rutile and 82.5% ilmenite plus leucoxene** in the total heavy minerals **averaging 63% TiO_2.**

Preliminary ilmenite characterisation studies by Sheffield's consultants produced concentrates containing between **59% and 66% TiO_2,** indicating potential suitability for chloride processing or as a feedstock for synthetic rutile production. The studies also demonstrated that

mineralisation in the deposit has properties well suited to conventional mineral sands processing methods for the recovery of heavy minerals.

While the overall grades are low, the thickness, areal extent, continuous nature and low stripping ratios of both the McCalls and Mindarra Springs deposits are such that non-selective bulk mining methods can be considered. Potential mining methods include dry mining using dozer traps as well as potential (due to higher slimes content) for hydraulic mining methods using water cannons and slurry sumps.

These additional Mineral Resources have effectively increased the Company's contained heavy minerals in its total Mineral Resources by over six-fold, from 17 million tonnes (Table 2) to 101 million tonnes.

The project is located in the infrastructure-rich North Perth Basin, an area of historic and continuing mineral sands mining and processing, including ongoing operations by Tronox, Iluka and Image, and with local residents, business owners and governments being familiar with and receptive to mining in conjunction with continuing agricultural development.

Figure 1 – Location Map, McCalls Mineral Sands Project (McCalls and Mindarra Springs deposits)

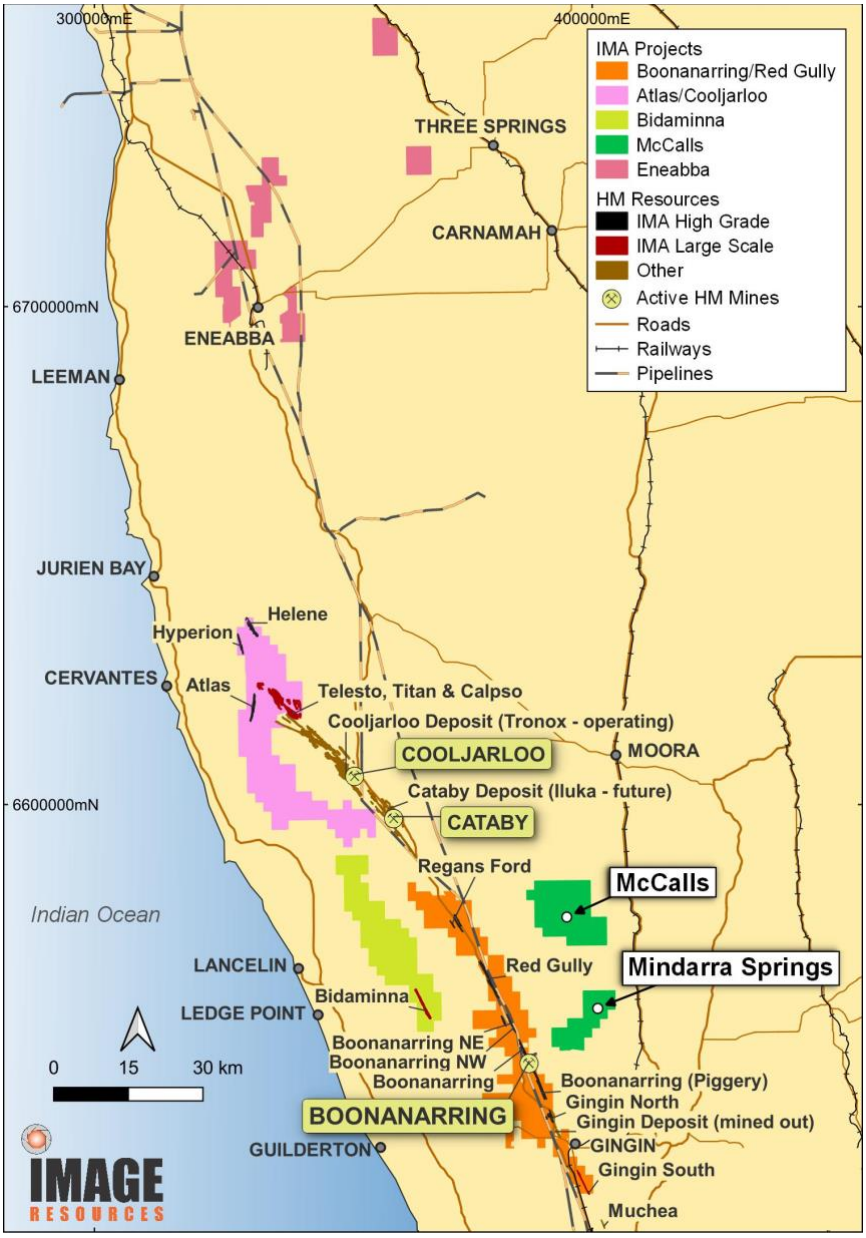

Table 1 – Summary of Mineral Resources for the McCalls Mineral Sands Project

Deposit	Mineral Resource Category	Cut-off (total HM%)	Tonnes (million)	In-situ HM Tonnes (millions)	Total HM grade (%)	HM Assemblage (% of total HM)				Slimes (%)	Oversize (%)
						Zircon	Rutile	Leuc.	Ilmenite		
McCalls	Indicated	1.1	1,600	23	1.4	5.2	3.3	2.8	77	21	1.1
	Inferred	1.1	2,000	24	1.2	5.0	3.8	3.2	81	26	1.1
	Sub Total	1.1	3,600	**48**	**1.3**	**5.1**	**3.6**	**3.0**	**79**	**24**	**1.1**
Mindarra Springs	Inferred	1.1	2,200	36	1.6	4.2	0.9	3.1	80	20	5.1
	Sub Total	1.1	2,200	**36**	**1.6**	**4.2**	**0.9**	**3.1**	**80**	**20**	**5.1**
	Total Indicated	1.1	1,600	**23**	**1.4**	**5.2**	**3.3**	**2.8**	**77**	**21**	1.1
	Total Inferred	1.1	4,200	**61**	**1.4**	**4.5**	**2.1**	**3.1**	**80**	**23**	**3.2**
	Grand Total	1.1	5,800	**84**	**1.4**	**4.7**	**2.4**	**3.0**	**79**	**22**	**2.6**

1. *The Mineral Resource estimates were prepared by Optiro Pty Ltd*
2. *All tonnages and grades have been rounded to reflect the relative uncertainty of the estimate, thus the sums of columns may not equal.*
3. *Estimates of mineral assemblage are presented as percentages of the total heavy mineral (THM) component of the deposit, as determined by QEMSCAN analysis.*

Table 2 – Global Total Resource Summary for Image Mineral Resources prior to the purchase of the McCalls Mineral Sands Project

	Deposit	Mineral Resource Category	Cut-off (total HM%)	Tonnes (million)	In-situ HM Tonnes (millions)	Total HM grade (%)	HM Assemblage (% of total HM)				Slimes (%)	Oversize (%)
							Zircon	Rutile	Leuc.	Ilmenite		
Dry Mining, JORC 2012 and 2004	Boonanarring	Meas Ind and Inf	2.0	10.2	0.6	5.6	15.1	3.7	6.1	49	15	4.8
	Atlas	Meas Ind and Inf	2.0	18.1	1.1	6.0	9.3	6.4	4.0	46	17	5.7
	Boonanarring North West	Ind and Inf	2.0	4.3	0.2	5.1	9.2	6.9	32	33	11	1.1
	Boonanarring North	Ind and Inf	2.0	2.7	0.3	11.2	16.4	2.7	11	41	17	7.2
	Gingin North	Ind and Inf	2.0	8.7	0.4	4.7	6.8	4.7	17	48	15	4.7
	Helene	Ind and Inf	2.0	13.1	0.6	4.8	7.4	5.2	14	47	18	1.4
	Hyperion	Ind and Inf	2.0	3.6	0.3	8.3	8.0	6.7	8.1	36	19	2.6
	Drummond Crossing	Ind and Inf	1.4	38.8	0.9	2.4	13.9	10.2	3.4	54	14	7.7
	Durack	Ind and Inf	1.4	26.3	0.7	2.8	13.8	2.9	4.4	70	14	15.5
	Ellengail	Ind and Inf	2.0	11.8	0.6	4.8	9.9	8.1	9.6	64	15	2.9
	Robbs Cross	Meas Ind and Inf	1.4	17.8	0.3	1.9	14.7	12.3	4.8	48	6	6.6
	Thomson	Inf	1.4	25.7	0.5	2.0	18.8	13.8	5.4	42	18	6.9
	Yandanooka	Meas Ind and Inf	1.4	60.8	1.8	3.0	12.1	3.5	3.6	70	15	11.5
	Corridor	Inf	2.0	18.1	0.6	3.1	6.7	5.5	0.4	47	14	4.8
	Gingin South *	Meas Ind and Inf	2.5	8.1	0.5	6.1	8.3	5.2	10.3	65	7	8.7
	Regans Ford *	Ind and Inf	2.5	9.9	1.0	9.6	10.0	4.3	9.8	70	17	0.0
	Red Gully *	Ind and Inf	2.5	6.0	0.5	7.7	12.4	3.1	8.3	66	11	0.0
		Total Measured Dry		17.9	1.2	6.9	12.0	5.7	4.3	51	14	5.9
		Total Indicated Dry		192	7	3.9	11.3	5.4	7.8	59	14	8.0
		Total Inferred Dry		74	2	3.0	11.5	7.5	6.5	51	15	6.6
		Sub Total Dry		284	11	3.8	11.4	5.8	7.1	57	15	7.5
Dredge Mining, JORC 2012	Bidaminna	Ind and Inf	0.5	101.6	2.2	2.2	5.1	4.4	36.3	48	3	2.2
	Titan	Ind and Inf	1.0	136.6	2.6	1.9	9.5	3.1	1.5	72	19	0.0
	Telesto	Ind	1.0	3.5	0.1	3.8	9.5	5.6	0.7	67	17	0.0
	Calypso	Inf	1.0	51.5	0.9	1.7	10.8	5.1	1.6	68	14	0.0
		Total Indicated Dredge		42.1	1.1	2.5	7.2	4.4	16.3	61	14	0.6
		Total Inferred Dredge		251.0	4.7	1.9	8.2	3.8	14.5	62	13	0.8
		Sub Total Dredge		293.2	5.8	2.0	8.0	4.0	14.8	62	13	0.8
Total Combined Resources		Total Measured		18	1	6.9	12.0	5.7	4.3	51	14	5.9
		Total Indicated		234	9	3.6	10.8	5.2	8.9	60	14	6.7
		Total Inferred		325	7	2.1	9.2	5.0	11.9	59	13	2.1
		Grand Total		577	16.7	2.9	10.2	5.2	9.8	59	14	4.1

* Reported in accordance with JORC 2004

Summary of JORC 2012 Table 1

A summary of the JORC 2012 Table 1 (included as Appendix 1) is provided below in compliance with the requirements of ASX listing rule 5.8.1.

Geology and Mineralisation Interpretation

The McCalls Mineral Sands Project is located north of Gingin in the North Perth Basin. Mineralisation is hosted in unconsolidated Cainozoic sediments covering the Cretaceous sedimentary rocks of the Dandaragan Trough. The Dandaragan Trough is a half-graben formed within the Proterozoic siliciclastic sedimentary rocks of the North Perth Basin. The Perth Basin is a major sedimentary basin bounded to the east by the Darling Fault which separates the Archaean cratonic rocks of the Yilgarn Block from the sediments of the Perth Basin.

The project contains two separate deposits, McCalls to the north (east of Gillingarra) and Mindarra Springs to the south (southeast of Mogumber).

In both deposits, mineralisation occurs as broad, flat, and extensive concentrations of heavy minerals (HM) within fine sands with a relatively high slimes (clay and fines) component. Total HM grades throughout the deposits display a degree of stratification and this feature, together with the consistent medium grainsize, good rounding and good sorting throughout, suggests an estuarine-lagoonal depositional environment.

Four key geological and mineralisation domains were defined for the McCalls Mineral Resources estimate as follows:

- An upper, extensive but discontinuous domain of indurated material with logged lateritic material and/or a >10% oversize component at or close to the surface.
- An upper clayey-sand HM domain, lighter in colour, based on a nominal cut-off of 0.7% total HM.
- A lower sandy-clay HM domain, based on a nominal cut-off of 0.7% total HM. This domain is significantly less extensive than the upper HM domain and often darker in colour due to carbonaceous and sulphide-rich material and higher clay content.
- A high slimes domain based on a nominal cut-off grade of 35% slimes at the base of the sequence.

The difference in environment between the upper and lower domains of the McCalls deposit may be a factor of oxidation and reduction above and below a palaeo-water table, or it may represent the preservation of an organic-rich sediment unit (lower domain) by a rapid influx of sediment into an estuarine environment. The upper and lower domains also have different heavy mineral assemblages, with a relatively higher content of valuable heavy minerals (VHM) in the upper domain.

A single mineralised domain was interpreted for the Mindarra Springs deposit based on >0.7% total HM cut off and a minimum thickness of 3m. The interpretation excluded intervals with high concentrations of rock and/or non-valuable heavy minerals from the mineralised domain.

Drilling Techniques

All of the drilling data used in the Mineral Resource estimations are based on an NQ diameter aircore system using a blade (face sampling) drill bit. There are two distinct generations of data: drilling undertaken by BHP Minerals in the 1990s (First Generation) and drilling undertaken by Sheffield Resources Limited between 2010 and 2021 (Second Generation). Both deposits contain a mixture of both generations of data.

Both generations of data have used what is considered industry-standard drilling techniques.

Sampling Techniques

The First Generation data is based on a 1kg sample collected from a 1.5m sample interval using a rotary splitter. The Second Generation data is based on a 1kg to 3kg sample collected from a 1.5m interval using a rotary splitter. Both generations of data have used industry-standard sampling techniques.

Sampling Analysis Method

Assay methods and laboratory procedures used across both generations of data are industry standard although method specifics and heavy liquid compositions vary slightly. For total HM determination, the First Generation samples were analysed using a heavy liquid TBE 2.9 g/ml and Second Generation samples used a heavy liquid TBE 2.96 g/ml. Both generations of data used a screen size of <45μm to define slimes and a screen size of >1mm to define oversize.

Heavy Mineral Concentrate (HMC), from individual samples, was combined according to total HM grade to generate composite samples for mineral assemblage determination. The mineral assemblage for both deposits was analysed using Quantitative Evaluation of Minerals by Scanning electron microscopy (QEMSCAN™) by Bureau Veritas Mineral Laboratories to determine the percentage of ilmenite, leucoxene, rutile and zircon within the total HM fraction. The following breakpoints were used to distinguish between the TiO_2 minerals: rutile (>95% TiO_2), leucoxene (85-95% TiO_2) and ilmenite (<55-85% TiO_2).

Mineral Resources Estimate

Grade estimations for total HM, slimes and oversize have been carried out using ordinary kriging for both deposits. Grade estimations of mineral assemblage (zircon, rutile, leucoxene and ilmenite) have been carried out using inverse distance cubed for both deposits.

The McCalls Mineral Resources estimate has been classified according to the guidelines of the JORC Code (2012), into Indicated and Inferred Resources considering the confidence in geological and grade continuity and taking into account data quality (in particular the historical nature of the BHP data), data density and confidence in estimation of heavy mineral content, and the location of the mineral assemblage data. In plan, a polygon was used to define the areas of Indicated and Inferred Mineral Resources.

The Mindarra Springs Mineral Resources estimate has been classified as Inferred Resources according to the guidelines of the JORC Code (2012), considering the confidence in geological and grade continuity and taking into account data quality (in particular the historical nature of the BHP data), data density and confidence in estimation of heavy mineral content, and the location of the mineral assemblage data.

The assigned classification of Indicated and Inferred at both the McCalls deposit and the Mindarra Springs deposit reflects the Competent Person's assessment of the accuracy and confidence levels in the Mineral Resources estimates.

Cut-off Grade

Optiro selected cut-off grades to represent the Mineral Resources that may be considered for eventual economic extraction, based on the Company's experience as a mineral sands consultancy. Both Mineral Resources estimates were reported above a total HM cut-off grade of 1.1% and below a slimes cut-off grade of 35%.

Mining Factors

In determining the criteria for reasonable prospects for eventual economic extraction, potential mining methods considered were wet dredge mining or dry dozer-trap operations, similar to those commonly and currently in use in HM mining operations both in Australia and globally. It is considered that the deposits within McCalls Mineral Sand Project have a reasonable prospect of eventual economic extraction when considered in the context of the deposit location and existing infrastructure and taking into consideration the depth, thickness and grades of the deposits.

Metallurgical Factors

Metallurgical characterisation test work on samples from McCalls has confirmed that the deposit is amenable to typical mineral sands processing methodologies using standard mineral sands separation equipment.

Ilmenite characterisation studies conducted on a sample composited from Second Generation drill samples at McCalls produced concentrates containing between 59% and 66% TiO_2, indicating potential suitability for chloride processing or as a feedstock for synthetic rutile production.

Image Resources is not aware of any other material modifying factors that would prevent the eventual economic extraction of these deposits.

This document is authorised for release to the market by:

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COMPETENT PERSON STATEMENT

The information in this report that relates to the McCalls and Mindarra Springs Mineral Resource estimates is based on, and fairly reflects, information and supporting documentation prepared by Mrs Christine Standing, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). Mrs Standing is a full-time employee of Optiro Pty Ltd (Snowden Optiro) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mrs Standing has provided her prior written consent to the inclusion in this report of the matters based on her information in the form and context in which it appears.

COMPLIANCE STATEMENTS

The information in this report that relates to the Boonanarring, Boonanarring North West, Boonanarring North Extension, Hyperion, Helene, Gingin North, Atlas, Drummond Crossing, Durack, Ellengail, Robbs Cross, Thomson, Yandanooka and Corridor Mineral Resource estimates is based on and fairly represents, information which has been prepared by Mrs Christine Standing, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). Mrs Standing is a full-time employee of Optiro Pty Ltd (Snowden Optiro) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

The information in this report that relates to the Titan, Telesto and Calypso Mineral Resource estimates is based on and fairly represents, information which has been prepared by Mr Lynn Widenbar BSc, MSc, DIC MAusIMM MAIG employed by Widenbar & Associates who is a consultant to the Company. Lynn Widenbar has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

The information in this report that relates to the Gingin South and Red Gully Mineral Resource estimates (not part of the Company's material mining projects) is based on and fairly represents, information which has been prepared by Mr Lynn Widenbar BSc, MSc, DIC MAusIMM MAIG employed by Widenbar & Associates who is a consultant to the Company. Lynn Widenbar has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. *This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.*

The information in this table that relates to tonnes, grades and mineral assemblage for Regans Ford Deposit (not part of the Company's material mining projects) is based on historic information published by Iluka Resources Limited and indicating the Mineral Resources

were compiled in accordance with the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. *This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.*

This report includes information that relates to Ore Reserves and Mineral Resources which were prepared and first disclosed under JORC Code 2012. The information was extracted from the Company's previous ASX announcements as follows:

- Boonanarring Mineral Resources and Ore Reserves: 11 March 2022
- Bidaminna Mineral Resource: 31 March 2021 – "102 Million Tonnes Inaugural Dredge Mining Mineral Resource Estimate for Bidaminna Mineral Sands Project"
- Gingin North Mineral Resource: 31 March 2021 – "Project MORE Update Boonanarring Atlas Projects"
- Boonanarring North Extension Mineral Resource: 31 March 2021 – "Project MORE Update Boonanarring Atlas Projects"
- Boonanarring North West Mineral Resource: 31 March 2021 – "Project MORE Update Boonanarring Atlas Projects"
- Helene Mineral Resources: 31 March 2021 – "Project MORE Update Boonanarring Atlas Projects"
- Hyperion Mineral Resources: 31 March 2021 – "Project MORE Update Boonanarring Atlas Projects"
- Atlas Mineral Resources: 8 May 2017 – "68% increase in Mineral Resources for Atlas Project"
- Titan Mineral Resources: 31 October 2019
- Telesto South Mineral Resources: 31 October 2019
- Calypso Mineral Resources: 31 October 2019.
- Mineral Resources Update - Eneabba Tenements: 11 March 2022

The Company confirms it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of reporting of Ore Reserves and Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcement.

This report includes information that relates to Ore Reserves and Mineral Resources for non-material mining projects of the Company which were prepared and first disclosed under JORC Code 2004. The information was extracted from the Company's previous ASX announcements as follows:

- Regans Ford Mineral Resources: 20 February 2017
- Gingin South Mineral Resources: 21 July 2011
- Red Gully Mineral Resources: 9 March 2011

The Company confirms it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of reporting of Ore Reserves and Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcement. *This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.*

Appendix 1
JORC Code Table 1 criteria, combined summary for McCalls Mineral Sands Project (McCalls, Mindarra Springs)

The table below summaries the assessment and reporting criteria used for the McCalls and Mindarra Springs Mineral Resource estimates within the McCalls Project and reflects the guidelines in Table 1 of *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the JORC Code, 2012).

SECTION 1 SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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.*	Historic BHP Minerals • Historic data reported in mineral Exploration reports by BHP- Minerals circa 1990s captured digitally by Sheffield Resources. • NQ diameter aircore drilling used to collect 1 kg samples at 1.5 m intervals down-hole. • Rotary splitter used. • Mineral sands industry-standard drilling and sampling techniques employed. Sheffield • NQ (70mm) diameter air core drilling used to collect a at source rotary split 1-3 kg samples at 1.5 m intervals down-hole. • Mineral sands industry-standard drilling technique. • See below for sample and assay QAQC procedures and analysis. • At McCalls Sheffield drilled (101 holes) (41.7% of total) for 6,076 m, of which (30) holes/1,713 m were drilled in 2011 and (71) holes/4,363 m were drilled in 2012. • At Mindarra Springs 6 holes out of 279 (2%) were drilled by Sheffield in 2015. • At McCalls some samples from the BHP data were composited to 3m intervals for assaying. 4,176 m (30%) sampled at 3.0 m, 9,631.5m (70%) sampled at 1.5 m.
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).*	Historic BHP Minerals • Historic data reported in mineral exploration reports by BHP- Minerals circa 1990s. • NQ diameter aircore. Sheffield • Air core system using a blade (face sampling) drill bit (NQ diameter). • System used is an industry standard for HMS deposits.
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*	• Sheffield used a rotary splitter beneath the cyclone to collect a 1-3 kg sub-sample from 1.5 m intervals. • Sample weight was recorded at the laboratory. • Duplicate samples for Sheffield holes are collected at the drill site (see below) to enable analysis of

Criteria	JORC Code explanation	Commentary
	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.*	data precision. • Sample condition of Sheffield holes (wet to dry and good to poor qualitative recovery) was logged at the drill site for 21.6% of samples. No record is available for 78.4% of Sheffield samples. • Sample condition and qualitative recovery was not logged for historic BHP holes • Three bulk samples were collected by Sheffield for characterisation work by CPG Resources. Further testing was carried out by Robbins Metallurgical to assess processing of upper and lower zone material. • The sample quality is considered appropriate for the Mineral Resource estimation and classification applied.
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.*	Sheffield • For the Sheffield drillholes, every drill sample is washed and panned, then geologically logged on-site in 1.5 m intervals. • Sheffield recorded in 2011 lithology, shade and colour, grainsize, stratigraphy. • Sheffield recorded in 2012 primary and oversize lithology, shade and colour, qualitative hardness, rounding grainsize, visual estimates of HM% and OS%. • Heavy mineral sachets were physically examined under a microscope following heavy medium separation by laboratory and assessed to whether sand or rock. • The entire length of the drillhole is logged; minimum (nominal) interval length is 1.5 m. BHP • Historic data reported in mineral Exploration reports by BHP Minerals circa 1990s. • Each drill sample was washed and panned, then geologically logged recording colour, grainsize, rounding, hardness and sorting and visual estimates of total HM% and slimes%. • The entire length of the drillhole was logged; minimum (nominal) interval length is 1.5 m. • Logging is suitable such that interpretations of grade and deposit geology can be used to support the Mineral Resource estimation and classification applied.
Sub-sampling techniques and sample preparation	• *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.*	**<u>Total HM%, SL% OS% Determination</u>** Drill site • A 1-3 kg sample was collected at 1.5 m intervals in numbered bags at the drill site via rotary splitter at the cyclone discharge point. Sheffield drillholes • Duplicate samples (field duplicates) collected at drill site for holes 1 in every 56 samples totalling 322 duplicate samples.

Criteria	JORC Code explanation	Commentary
	• *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.*	• Reference standard and blank material samples inserted 1 each in every 28 samples totalling 217 in total. • Samples submitted to an external laboratory for heavy liquid separation (HLS) determination of weight per cent heavy mineral (THM%), slimes (SL%) and oversize (OS%) at a screen split of -45µm, +45µm and +1mm. • THM determination TBE 2.96 g/ml bromoform separation. BHP historic drillholes • Samples submitted to an external laboratory for heavy liquid separation (HLS) determination of weight per cent heavy mineral (THM%), slimes (SL%) and oversize (OS%) at a screen split of -45µm, +45µm and +1mm. • HM determination TBE 2.9 g/ml bromoform separation. <u>Sheffield (external) Laboratory</u> Diamantina (2011) • The 1-3 kg drill sample is sub-sampled via a rotary splitter to approx. 200 g for analysis. • The 200 g sub-sample is soaked overnight in water then screened and weighed. • Total HM%, SL% and OS% calculated as percentage of total sample weight (see below). Laboratory repeats are conducted 1 in 18 samples. Western Geolabs (2012) • The 1-3 kg drill sample is sub-sampled via a rotary splitter 100 g to 120 g for analysis. • The sub-sample is soaked overnight in water then screened and weighed. • Total HM%, SL% and OS% calculated as percentage of total sample weight (see below). Laboratory repeats are conducted 1 in every 19 samples. All Sheffield • Laboratory internal standard and blanks were not used. • Laboratory repeats are conducted 1 in every 19 samples for averaged across 2011 and 2012 • Laboratory provides a sachet containing the Heavy Mineral Concentrate (HMC) for each sample – this is used in HM assemblage determination (see below). All • Visual estimates of total HM%, SL% and OS% logged at the drill site are compared against laboratory results to identify significant errors. • Spacing of duplicate, standard, blank and laboratory repeat samples for Sheffield holes are designed to identify sample misplacement or misallocation during sample collection and laboratory analysis.

Criteria	JORC Code explanation	Commentary
		• Analysis of field duplicate samples and laboratory repeats for Sheffield data, are sufficient to show the data has acceptable precision, indicating the sub-sampling and sample preparation techniques are appropriate for the deposit style and the Mineral Resource estimation and classification applied. **HM Assemblage Determination** • Heavy Mineral Concentrate (HMC) from individual samples is combined according to total HM grade and weight into (nominal) >20 g composite samples for HM assemblage determination. • Weighed HMC composite is split via a micro-riffle to ensure total HM%, SL% and OS% of the final composite sample can be correctly calculated. • HM assemblage determination was by QEMSCAN™ to determine the component mineralogy. This method has rigorous (laboratory) internal quality control measures and is considered sufficient to show the data has acceptable precision, indicating the sub-sampling and sample preparation techniques are appropriate for the deposit style and the Mineral Resource estimation and classification applied.
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.* • *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.*	Historic BHP Minerals • Historic data reported in mineral Exploration reports by BHP-Minerals circa 1990s.BHP. • Assay and laboratory procedures used are industry standard. • SL% was determined using a 45µm screen. • OS% was determined using a +1mm screen. • Total HM% was determined using heavy liquid TBE (2.9g/ml). • The method produces a total grade as weight per cent of the primary sample. • HM assemblage determination was by magnetic separation and observation (grain-counting). • No record of assay QAQC is reported. Sheffield **Total HM%, SL% and OS% Determination** • Assay and laboratory procedures are industry standard, although method specifics and heavy liquid composition can vary. • Sheffield drillholes contributed 43.9% of the assay database and BHP 56.1% used for block grade estimation. • SL% was determined using a 45 µm screen for Sheffield and BHP. • OS% was determined using a 1 mm screen for Sheffield and BHP. • Total HM% was determined using heavy liquid TBE 2.96 g/ml for Sheffield and 2.90g/ml for BHP. • The method produces a total grade as weight per

Criteria	JORC Code explanation	Commentary
		cent of the primary sample. • Method does not determine the relative amounts of valuable (saleable or marketable) and non-valuable heavy mineral species. See below for details of HM assemblage determination. • Reference blank material samples inserted at the drill site 1 each in every 56.2 samples (Sheffield). Standards were used one in every 55.7 samples (Sheffield) • The blank material used was locally sourced sand (BNK001). The standard HMSS003 was composed of homogenised locally sourced Eneabba HM bearing sands. • Reference blanks are examined for performance over time and within laboratory batches. Batches or sub-batches are re-analysed if unacceptable QAQC data are returned. • 56 umpire samples were assayed. • In total QAQC samples represent 12% of the Sheffield data, no QAQC data was sourced from BHP data. Total QAQC data including historic data equates to 4.6% of the assay database. • Analysis of reference blanks and laboratory standards, repeats show the data to be of acceptable accuracy and precision for the Mineral Resource estimation and classification applied. **HM Assemblage Determination** • HM assemblage was determined from Sheffield drillholes. • Heavy Mineral Concentrate (HMC) from individual samples is combined according to total HM grade and weight into (nominal) >20 g composite samples for HM assemblage determination. • Weighed HMC is split via a micro-riffle to ensure total HM%, SL% and OS% of the final homogenised composite sample can be correctly calculated. • HM assemblage determination was by the QEMSCAN™ process which uses observed mass and chemistry to classify particles according to their average chemistry, and then report mineral abundance by % mass. • For the TiO_2 minerals specific breakpoints are used to distinguish between rutile (>95% TiO_2), leucoxene (85-95% TiO_2) and ilmenite (<55-85% TiO_2). • Reference material is not used, other measures of accuracy and the method design are considered sufficient to establish acceptable accuracy of the data for the Mineral Resource estimation and classification applied.

Criteria	JORC Code explanation	Commentary
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.*	BHP • Historic data reported in mineral Exploration reports by BHP- Minerals circa 1990s captured digitally by Sheffield. • Accuracy of data entry was confirmed via several validation protocols both manual and electronic. Sheffield • Data was logged electronically using "validation at point of entry" systems prior to storage in the Sheffield's drillhole database, which was managed by Sheffield personnel and an external consultancy. • Documentation related to data custody and validation was maintained by Sheffield. • A copy ("snapshot") of the Mineral Resource database is retained separately from the primary drillhole database. • All drillholes were included in the drill database. • Six of the Sheffield drillholes twinned the BHP drillholes. Statistical comparison of the data indicates no bias and the Sheffield data has verified the historic BHP data. • The verification and treatment of the data is considered sufficient for the Mineral Resource estimation and classification applied.
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.*	McCalls • One hundred Sheffield drillholes collar locations were surveyed by registered Surveyors Heyhoe Surveys Pty Ltd using RTK-GPS. • One Sheffield drillhole MCAC009 has a planned location as it was not surveyed. • Historic holes are from BHP are from the plan location. These were not surveyed • BHP original plan location was in AMG84 zone 50. • Sheffield and historic easting and northing coordinate system is MGA Zone 50 (GDA94) Drillhole collar elevation for resource estimation is determined by projection of surveyed drillhole collars to a regional (Landgate) SRTM Digital Elevation Model (DEM) for both Sheffield and historic drill collars. • The Mineral Resource estimate uses this model as surface topography. The DEM model provides a consistent spatial topography over the project area. • The quality and accuracy of the topographic control is considered sufficient for the Mineral Resource estimation and classification applied. Mindarra Springs Historic BHP Minerals • Historic data reported in mineral Exploration reports by BHP-Minerals circa 1990s captured digitally by Sheffield.

Criteria	JORC Code explanation	Commentary
		• Drillhole collar locations were digitised from maps supplied with historic exploration reports. • Coordinates were referenced to the Map Grid of Australia (MGA) zone 50 on the Geographic Datum of Australia (GDA94) • Vertical datum geoid model is AUSGEOID09 (Australia). • Drillhole RL for Resource estimation is determined by projection of hole collars to a regional (Landgate) DTM model. • Hole locations are reported as being "unsurveyed" and are therefore considered approximate. • Given the wide drill spacing, and large size of the deposit on which the Resource is based, it is considered that any difference between actual and approximate drillhole location will not have a material effect on the results of the reported Resource. Sheffield • For six (Sheffield) drillholes collar locations were surveyed by Sheffield employees using a handheld Garmin GPS system with expected accuracy of +/- 5m horizontal. • Easting and Northing coordinate system is MGA Zone 50 (GDA94). Drillhole collar elevation for Resource estimation is determined by projection of surveyed drillhole collars to a regional (Landgate) SRTM Digital Elevation Model (DEM). • The Mineral Resource estimate uses this model as surface topography. RL by handled GPS units has poor accuracy and the DEM model a consistent spatial topography over the project area. • The quality and accuracy of the topographic control is considered sufficient for the Mineral Resource estimation and classification applied.
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.*	McCalls • Sheffield drillholes are located in E70/3929 (36 holes) and E70/3967 (65 holes). • BHP holes are located in E70/3929 (123 holes), E70/4922 (43 holes) and E70/3967 (43 holes). BHP also drilled 67 holes outside the current Image Resources tenure. • Sheffield drillhole spacing of 100 m by 100 m, up to a spacing of 800 m by 800 m. BHP drillhole spacing of 400 m by 800 m, up to a spacing of 1,000 m by 1,000 m. • The drill database used in the resource estimate comprises 377 holes, totalling 14,572.5 m, with 8,239 samples assayed. 101 holes totalling 6,076 m for 4,376 assays (inc QAQC) have been drilled by Sheffield, 276 holes totalling 8,496.5 m for 3,863 assays by BHP. • Samples for HM assemblage determination are

Criteria	JORC Code explanation	Commentary
		composited on intervals according to a combination of grade and geology appropriate to reflect resource estimation domains. Samples have been composited from individual holes, or when not possible based on geological and grade constraints, holes that are proximal. • 28 composites from 30 holes were produced from Sheffield drillholes. Four composites from 2011 split by Diamantina laboratories using 8 holes and 24 composites from Western Geolabs from 22 holes in 2012. • The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation and classification applied. Mindarra Springs BHP • Drilling was restricted to public access roads and farm tracks. The majority of holes are spaced at between 2 km and 500 m. • Drillhole samples spaced at 1.5 m intervals downhole. Sheffield • Drillholes are in E70/4584 (totalling 6 holes) Spacing of 450 m to 600 m along the southern edge of tenement. • Sheffield drillholes used in the resource estimate comprises 6 holes, totalling 219 m, with 146 samples assayed. • Samples for HM assemblage determination are composited on intervals according to a combination of grade and geology appropriate to reflect resource estimation domains. • The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation and classification applied.
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.*	• All drilling is vertical making it normal to the horizontal orientation of geology and mineralisation.

Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	Historic BHP Minerals • No methods relating to sample security were reported, however it is considered unlikely that this poses a material risk to the reporting of the Resource. Sheffield • Sample security is not considered a significant risk given the location of the deposit and bulk-nature of mineralisation. • Nevertheless, the use of recognised transport providers, sample dispatch procedures directly from the field to the laboratory, and the large number of samples are considered sufficient to ensure appropriate sample security.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• All data has been validated by at least two Sheffield geologists and was reviewed by the Competent Person for the Mineral Resource estimate.

SECTION 2 REPORTING OF EXPLORATION RESULTS

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.*	McCalls • Exploration results are within 100% Image Resources held Exploration Licences • E70/3929 granted on the 26/10/2011 and is due to expire on the 25/10/2023. E70/3967 granted on the 10/11/2010 and due to expire on the 09/11/2022. E70/4922 granted on the 05/07/2017 and due to expire on the 04/07/2022. • These Exploration Licences are within Image's McCalls Project and are centred along the Brand Highway in the Midwest region of Western Australia. • There are no known or expected impediments to obtaining a licence to operate in the area. • Image Resources has been operating successfully in the region for over 10 years. Mindarra Springs • The Mineral Resource reported is entirely within Exploration Licence E70/4584, located about 5 km west of Mogumber in the mid-west region of Western Australia. • E70/4584 was granted on 01/04/2014 and is due to expire on 31/03/2024. • This Exploration Licence is within Image's McCalls Project centred along the Brand Highway in the Midwest region of Western Australia. • There are no known or expected impediments to obtaining a licence to operate in the area. • Image Resources has been operating successfully in the region for over 10 years.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• BHP carried out initial drilling in 1991 outlining the McCalls deposit and Mindarra Springs deposit. • The Mineral Resources are estimated from drilling information reported by BHP and Sheffield • Historic drilling activities are listed elsewhere within JORC 2012 Table 1.

Geology	• *Deposit type, geological setting and style of mineralisation.*	McCalls
		• The McCalls heavy mineral sands project is hosted within unconsolidated Cainozoic sediments covering Cretaceous sedimentary rocks of the Dandaragan Trough. The Dandaragan Trough is a half-graben formed within the Proterozoic siliciclastic sedimentary rocks of the North Perth Basin. The Perth Basin is a major sedimentary basin bounded to the east by the Darling Fault which separates the Archaean cratonic rocks of the Yilgarn Block from the sediments of the Perth Basin.
		• Surficial geology is predominantly undifferentiated Cainozoic laterite, lateritic sands and sands of alluvial, colluvial and aeolian nature, with patchy Holocene lagoonal and swamp deposits.
		• Mineralisation occurs as broad, flat and extensive concentrations of heavy minerals within fine sands and a relatively high clay (slimes) component. HM grades throughout the deposit display a degree of stratification and this feature, together with the consistent fine grainsize, good rounding and good sorting throughout, suggests an estuarine-lagoonal origin to the deposit.
		• Four key domains were defined for use in the estimate as follows:
		  ○ An upper, extensive but discontinuous domain of indurated material with logged lateritic material and/or a high OS component (>10%) at or close to the surface
		  ○ An upper clayey-sand HM domain, lighter in colour, based on a nominal cut-off of 0.7% total HM
		  ○ A lower sandy-clay HM domain, based on a nominal cut-off of 0.7% total HM. This domain is significantly less extensive than the upper HM domain and often darker in colour due to carbonaceous and sulphide material and higher clay content,
		  ○ A high slimes domain based on a nominal cut-off grade of 35% slimes.
		• The depositional environment of both the upper and lower domains is interpreted as estuarine-lagoonal. The difference in environment between the upper and lower domains may be a factor of oxidation and reduction above and below a palaeo-water table, or it may represent the preservation of an organic-rich sediment unit (lower domain) by a

Criteria	JORC Code explanation	Commentary
		rapid influx of sediment into an estuarine environment. The upper and lower domains are also reflected in the heavy mineral assemblage, with a relative increase in valuable heavy minerals (VHM) zircon, rutile, leucoxene and ilmenite in the upper domain. This difference is due to an increase in non-VHM in the lower domain (pyrite), with the proportions of each VHM to total VHM similar in both domains. Mindarra Springs • The Mindarra Springs heavy mineral sands project is hosted within unconsolidated Cainozoic sediments covering Cretaceous sedimentary rocks of the Dandaragan Trough. • The Dandaragan Trough is a half-graben formed within the Proterozoic siliciclastic sedimentary rocks of the North Perth Basin. The Perth Basin is a major sedimentary basin bounded to the east by the Darling Fault which separates the Archaean cratonic rocks of the Yilgarn Block from the sediments of the Perth Basin. • The size of the deposit and character of the heavy mineral, are indicative of deposition in a low-energy, estuarine environment.

Drillhole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:*
	  • easting and northing of the drillhole collar
	  • elevation or RL (elevation above sea level in metres) of the drillhole collar
	  • dip and azimuth of the hole
	  • down hole length and interception depth
	  • hole length.
		• Not applicable – exploration results are not being reported as Mineral Resources have been defined.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	• Not relevant – Mineral Resources are defined.
Relationship between mineralisation widths and intercept lengths	• *If the geometry of the mineralisation with respect to the drillhole 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 (e.g. 'down hole length, true width not known').*	• Not relevant – Mineral Resources are defined.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should*	• Not relevant – Mineral Resources are defined.

Criteria	JORC Code explanation	Commentary
	include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
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.*	• Not relevant – Mineral Resources are defined.
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.*	• Where relevant this information has been included or referred to elsewhere in this Table.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• At this stage no additional exploration work is planned.

SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	JORC Code explanation	Commentary
Database integrity	• *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.*	• Drillhole data was extracted directly from Sheffield's drillhole database which includes internal data validation protocols. • Validation of the exported data was confirmed using mining software (Micromine) validation protocols, and visually in plan and section views. • Compilation of data external to the drill database (e.g. HM assemblage source data) was cross-checked manually, and through statistical comparison. • A copy ("snapshot") of the Mineral Resource database is retained separately to the primary drillhole database. • Data was further validated by Optiro upon receipt, and prior to use in the estimation.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	• Mrs Standing has not visited the McCalls site or Mindarra Springs site, but has visited mineral sands deposits within the Midwest region of the Perth Basin.
Geological interpretation	• *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*	McCalls • The indurated (rock) and mineralised domains were interpreted on a cross-sectional basis by Sheffield geologists using Micromine software based on the logging and grade information according to the deposit geology described above. These interpretations were used by Optiro to revise the

Criteria	JORC Code explanation	Commentary
	estimation. • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	sectional interpretation and to 'snap' to drillhole intersections using Datamine software. • The layer of indurated material was interpreted on a cross-sectional basis by Optiro using the logging and grade information according to the deposit geology described above. • An upper clayey-sand HM domain, lighter in colour, based on a nominal cut-off of 0.7% total HM and an increase in VHMs relative to the lower HM domain was interpreted. • A lower sandy-clay HM domain, significantly less extensive than the upper HM domain and often darker in colour due to carbonaceous and sulphide material and higher clay content; and with a decrease in VHMs relative to the upper HM domain was interpreted. • The high slimes domain was interpreted using a nominal cut-off grade of 35% slimes. • The confidence in the geological interpretation is reflected by the assigned resource classification. Mindarra Springs • Mineralisation was interpreted on a cross-sectional basis by Sheffield geologists using Micromine software based on the logging and grade information according to the deposit geology described above. • Domains were depicted using microscope analysis to assess shape and composition of the heavy mineral. • The mineralised domain was interpreted at a nominal >0.7 total HM cut-off with a minimum width of 3 m. • Interpretation excluded intervals with high concentrations of rock or non-valuable heavy minerals. • The confidence in the geological is reflected by the assigned resource classification.
Dimensions	• *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.*	McCalls • The McCalls deposit covers an area of up to 16 km east-west (including 2 km which is to the west and outside of Image's tenements) and up to 12 km north-south. Mineralisation occurs from surface to depths of up to 96 m, with an average thickness of 33 m. Mindarra Springs • The Mindarra Springs mineralisation covers an area of up to 20 km east-west and up to 15 km north south. The mineralisation extends outside of Image's tenement which includes mineralisation over an area of 6.5 km east-west by 12 km north south. • Mineralisation occurs from surface to depths of up to 19 m, with an average thickness of 9.5 m. The

Criteria	JORC Code explanation	Commentary
		average overburden thickness is 7.6 m.
Estimation and modelling techniques	• *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 (e.g. 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.* • *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.*	• At McCalls total HM, slimes and oversize quantities were estimated using ordinary kriging (OK) into blocks of 400 mE by 200 mN by 1.5 mRL. Zircon, rutile, leucoxene and ilmenite percentages were estimated using inverse distance (ID) cubed into the parent blocks. • At Mindarra Springs total HM, slimes and oversize quantities were estimated using ordinary kriging (OK) into blocks of 200 mE by 200 mN by 1.5 mRL. Zircon, rutile, leucoxene and ilmenite percentages were estimated using inverse distance (ID) cubed into the parent blocks. • At McCalls block dimensions were selected from kriging neighbourhood analysis and reflect the variability of the deposit and the model's practicality for future mine planning. Sub-cells to a minimum dimension of 40 mE by 20 mN by 0.5 mRL were used to represent volume. For the definition of the topographical surface and soil horizon (of 15 cm) sub-celling was reduced to 40 mE by 20 mN by 0.15 mRL. • At Mindarra Springs Block dimensions were selected from kriging neighbourhood analysis and reflect the variability of the deposit and the model's practicality for future mine planning. Sub-cells to a minimum dimension of 25 mE by 25 mN by 0.5 mRL were used to represent volume. For the definition of the topographical surface and soil horizon (of 15 cm) sub-celling was reduced to 25 mE by 25 mN by 0.15 mRL. • At McCalls Sheffield drillhole spacing of 100 m by 100 m, up to a spacing of 800 m by 800 m. BHP drillhole spacing of 400 m by 800 m, up to a spacing of 1,000 m by 1,000 m. The majority of the drilling is at a spacing of 400 mE by 200 mN. • At Mindarra Springs the historic BHP drilling was restricted to public access roads and farm tracks. The majority of holes are spaced at between 2,000 m and 500 m. The six Sheffield holes are along one section at a spacing of 450 m to 600 m. • A maximum extrapolation distance of 400 m was applied at McCalls and 300 m at Mindarra Springs. • Data analysis and estimation was undertaken using Snowden Supervisor and Datamine software. • At McCalls over 87% of the samples used for the resource estimate have been taken over intervals of 1.5 m, 12% were taken over intervals of 3 m and the remaining samples (<1%) were taken over intervals of 0.5 m, 1 m and 4.5 m. The data was composited to 1.5 m intervals for analysis and resource estimation. • At Mindarra Springs almost 93% of the samples

Criteria	JORC Code explanation	Commentary
		have been taken over intervals of 1.5 m, 0.3% were taken over intervals of • Wireframe interpretations of mineralisation were made by Optiro and Sheffield geologists based on geological logging and total HM content, using a threshold of ~0.7% total HM to define the mineralised horizons. • Optiro assessed the robustness of the domains by critically examining the geological interpretation and by using a variety of measures, including statistical and geostatistical analysis. The mineralised domains are considered geologically robust in the context of the resource classification applied to the estimate. • All variables were estimated separately and independently. • Grade capping was applied to slimes (SL)% and oversize (OS)% on both deposits and total HM on McCalls. The top-cut levels were determined using a combination of top cut analysis tools, including grade histograms, log probability plots and the coefficient of variation. • Variogram analysis was undertaken to determine the kriging estimation parameters used for OK estimation of total HM, slimes and oversize. • For McCalls total HM mineralisation continuity was interpreted from variogram analyses to have an along strike range of 2,150 m and an across strike range of 1,600 m within the upper domain and an along strike range of 1,450 m and an across strike range of 810 m within the lower domain. • For Mindarra Springs total HM mineralisation continuity was interpreted from variogram analyses to have an along strike range of 670 m and an across strike range of 400 m • Kriging neighbourhood analysis was performed in order to determine the block size, sample numbers and discretisation levels. • For McCalls two estimation passes were used for total HM; the first search was based upon the variogram ranges; the second search was two times the initial search. The second search had reduced sample numbers required for estimation. The majority of blocks (over 99%) were estimated in the first pass. • For Mindarra Springs three estimation passes were used for total HM; the first search was based upon the variogram ranges; the second search was two times the initial search and the third search was six times the initial search. The second search and third searches had reduced sample numbers required for estimation. Almost 32% of the total HM block grades were estimated in the first search,

Criteria	JORC Code explanation	Commentary
		65% in the second search and the remaining 3% in the third search pass. • The total HM, slimes and oversize estimated block model grades were visually validated against the input drillhole data and comparisons were carried out against the declustered drillhole data and by northing, easting and elevation slices. • The VHM estimated block model grades were visually validated against the input drillhole data and comparisons were carried out against the drillhole data and by northing and easting slices. • The Mineral Resource was estimated for McCalls by QG Australia Pty Ltd in 2016. The total tonnage of the 2018 model is 1% less than the 2016 model and the HM grade of the 2018 model (1.3% HM) is 5% lower than the 2016 model (1.4% HM). In addition, only Inferred Resources have been defined for the 2018 model within the area tested only by historical drilling.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Mineral Resource estimate for the McCalls and Mindarra Springs deposits have been reported above a cut-off grade of 1.1% total HM to represent the resource that may be extracted under current market conditions. An upper cut-off grade of 35% slimes has also been applied. • The McCalls Mineral Resource has been reported within Image's tenements (only within tenements E70/3929, E70/3967 and E70/4922). • The Mindarra Springs Mineral Resource has been reported within Image's tenement (only within tenement E70/4584). • At McCalls the reported Mineral Resource excludes the Mogumber Reserve area. • These cut-off parameters have been selected in consultation with Optiro based on current experience and preliminary economic assessments carried out for HM deposits elsewhere in Western Australia. They represent that proportion of the deposit considered to have reasonable prospects of eventual economic extraction.
Mining factors or assumptions	• *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*	• In determining the criteria for reasonable prospects for eventual economic extraction, potential mining methods considered are wet, dredge mining or dry dozer-trap operations, similar to those commonly and currently in use in HM mining operations both in Australia and globally. • The thickness, areal extent, and continuous nature of the mineralisation at both McCalls and Mindarra Springs are such that non-selective bulk mining

Criteria	JORC Code explanation	Commentary
	methods and parameters when estimating Mineral Resources may not always be rigorous.	methods can be appropriately considered. • These assumptions were also considered when determining resource block sizes, and resource classification. • On the basis of these assumptions, Image and the Competent Person consider there are no mining factors which are likely to affect the assumption that the deposit has reasonable prospects for eventual economic extraction.
Metallurgical factors or assumptions	• *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.*	• Sheffield conducted scoping-level mineral characterisation test work on samples from McCalls. It is assumed that the mineralisation at Mindarra Springs is similar. • At McCalls these studies have identified Ilmenite characterisation studies conducted on a single sample composited from Sheffield's drilling produced concentrates containing between 59% and 66% TiO_2, indicating potential suitability for chloride-route or synthetic rutile processing. The work also demonstrated the heavy mineral has properties well suited to conventional mineral processing methods. • On the basis of these studies, the Image and the Competent Person consider there are no metallurgical factors which are likely to significantly affect the assumption that the deposit has reasonable prospects for eventual economic extraction.
Environmental factors or assumptions	• *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.*	• Sheffield completed a scoping-level environmental review of the McCalls project area in 2011. • The reported McCalls Mineral Resource excludes the Mogumber Reserve area. • Image Resources considers there are no environmental factors which are likely to affect the assumption that the McCalls deposit or Mindarra Springs deposit have reasonable prospects for eventual economic extraction.
Bulk density	• *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 account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• No direct measurements of bulk density have been taken. • Bulk density is assumed from an industry-standard formula which accounts for the total HM and slimes content of sand deposits. The resultant values are considered to be consistent with observations of the material compared with other similar HM deposits with known bulk density values. • A recommendation for future work is that confirmatory bulk density information is acquired.

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Classification	• *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.*	• The estimates have been classified according to the guidelines of the JORC Code (2012), into Indicated and Inferred Resources taking into account of confidence in geological and grade continuity and taking into account data quality (in particular the historical nature of the BHP data), data density and confidence in estimation of heavy mineral content, and the location of the mineral assemblage data. In plan, a polygon was used to define the areas of Indicated and Inferred Mineral Resources within the McCalls MRE. All of Mindarra Springs has been classified as inferred • At McCalls Indicated Mineral Resources have been defined where the Sheffield drilling is at a spacing of 400 mE by 400 mN or closer and there is mineral assemblage data. • At McCalls Inferred Mineral Resources are defined where the drill spacing is up to 1,000 mE by 1,000 mN and where no mineral assemblage data has been extrapolated. • The assigned classification of Indicated and Inferred reflects the Competent Person's assessment of the accuracy and confidence levels in the Mineral Resource estimate.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource has been reviewed internally as part of normal validation processes by Optiro. • No external audit or review of the current Mineral Resource has been conducted.
Discussion of relative accuracy/ confidence	• *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.* • *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.*	• At McCalls the assigned classification of Indicated and Inferred reflects the Competent Person's assessment of the accuracy and confidence levels in the Mineral Resource estimate. • At Mindarra Springs the assigned classification of Inferred reflects the Competent Person's assessment of the accuracy and confidence levels in the Mineral Resource estimate. • The estimates are suitable for input into long term planning studies. • No production has occurred from the deposits.