

14 December 2023

## MINERAL RESOURCES UPDATES GINGIN SOUTH, RED GULLY, and REGANS FORD

## Highlights:

- Updates of three previously reported Mineral Resources estimates under JORC Code 2004 to JORC Code 2012
- > Total Mineral Resources for these three projects unchanged
- Mineral Resources for all Image Resources projects now reported in accordance with the JORC Code 2012

**Image Resources NL (ASX: IMA) (Image** or the **Company)** advises it has updated the Mineral Resources estimates for three of its mineral sands projects that had previously been reported under JORC Code 2004, to JORC Code 2012. The three projects are the Company's 100%-owned Gingin South, Red Gully and Regans Ford, all located in the North Perth Basin.

All three Mineral Resources estimates had been previously disclosed to the ASX by Image as part of its non-material project Mineral Resources under the JORC Code 2004 with Gingin South reported 21 July 2011, Red Gully reported 9 March 2011, and Regans Ford reported 20 February 2017).

The Mineral Resource Estimates (MRE) for each deposit are unchanged. The MREs have now been prepared and reported in accordance with the JORC Code 2012. The updated MREs are set out in the tables below.

		Cut-off		In-situ HM		HM	Assemblag	e (% of tot	al HM)		
Deposit	Mineral Resource Category	(total HM%)	Tonnes (million)	Tonnes (millions)	Total HM grade (%)	Zircon	Rutile	Leuc.	Ilmenite	Slimes (%)	Oversize (%)
	Measured	2.5	1.5	0.1	4.4	7.8	5.6	15.3	51	7	0.0
Gingin South	Indicated	2.5	5.8	0.4	6.5	8.1	5.1	9.8	68	7	11.0
	Inferred	2.5	0.7	0.0	6.5	10.9	5.8	7.5	67	8	8.7
	Total	2.5	8.1	0.5	6.1	8.3	5.2	10.3	65	7	8.7

## Table 2 – Regans Ford Mineral Resource reported above a cut-off grade of 4.0% total HM

		Cut-off		In-situ HM		HM	Assemblag	e (% of tot	al HM)		
Deposit	Mineral Resource Category	(total HM%)	Tonnes (million)	Tonnes (millions)	Total HM grade (%)	Zircon	Rutile	Leuc.	Ilmenite	Slimes (%)	s Oversize (%)
	Indicated	4.0	9.0	0.9	9.9	10.0	4.3	10.0	70	17	
Regans Ford	Inferred	4.0	0.9	0.1	6.5	10.1	4.4	7.7	68	19	
	Total	4.0	9.9	1.0	9.6	10.0	4.3	9.8	70	17	

Table 3 – Red Gully Mineral Resource reported above a cut-off grade of 2.5% total HM

	Mineral Resource	Cut-off	<b>T</b>	In-situ HM	Total HM	HM A	Assemblage	e (% of tot	al HM)	Slimes	0
Deposit	Category	(total HM%)	Tonnes (million)	Tonnes (millions)	grade (%)	Zircon	Rutile	Leuc.	Ilmenite	(%)	Oversize (%) 1.1 1.1
	Indicated	2.5	3.4	0.3	7.8	12.4	3.1	8.3	66	12	1.1
Red Gully	Inferred	2.5	2.6	0.2	7.5	12.4	3.1	8.3	66	11	1.1
	Total	2.5	6.0	0.5	7.7	12.4	3.1	8.3	66	11	1.1

Notes:

- Each Mineral Resource estimate has been classified and reported in accordance with the guidelines of JORC Code (2012).
- Total HM is within the +53 μm to -1 mm size fraction and is reported as a percentage of the total material; oversize material is +1 mm and slimes is -53 μm.
- Estimates of the mineral assemblage (zircon, ilmenite, rutile, and leucoxene) are presented as percentages of the total HM component of the deposit, as determined by either Iluka Method 2 Perm Roll or QEMSCAN. QEMSCAN break points for TiO2 minerals are: ilmenite 50–70% TiO<sub>2</sub>; leucoxene 70–95% TiO<sub>2</sub>; rutile >95% TiO<sub>2</sub>.
- All tonnages and grades have been rounded to reflect the relative uncertainty of the estimate, thus sum of columns may not equal.

All three deposits are located in the Shire of Gingin approximately 70km north of Perth.

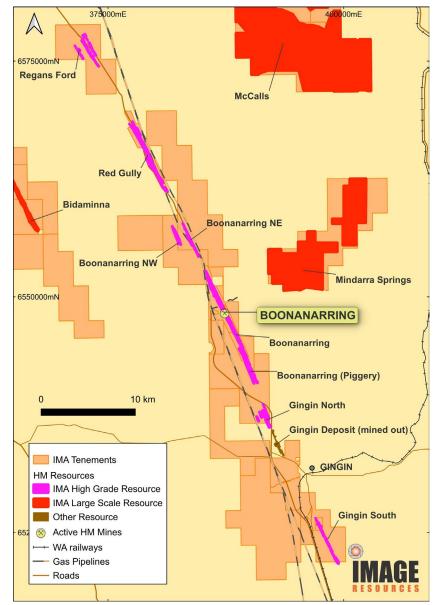
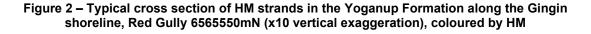


Figure 1 – Location of Image's Gingin South, Red Gully and Regans Ford deposits



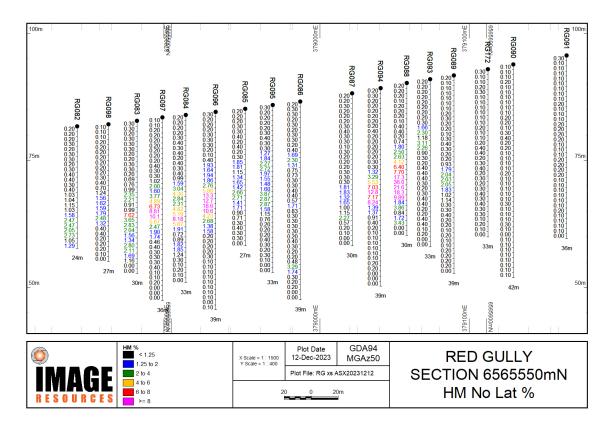


Figure 3 – Typical cross section of HM strand in the Yoganup Formation along the Gingin shoreline, Gingin South 6522100mN (x10 vertical exaggeration), coloured by HM

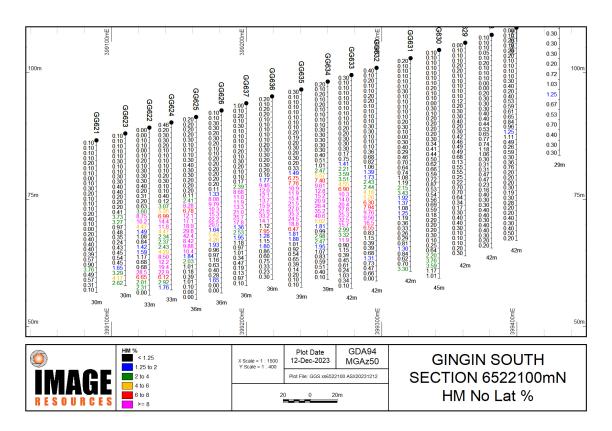
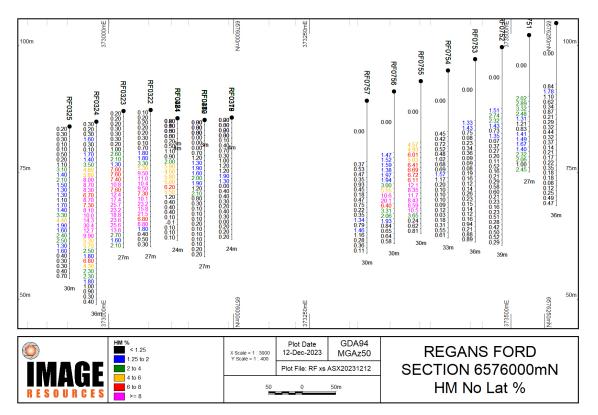


Figure 4 – Typical cross section of HM strands in the Yoganup Formation along the Gingin shoreline, Regans Ford 6576000mN (x10 vertical exaggeration), coloured by HM



# Summary of JORC 2012 Table 1

A summary of the JORC Code 2012 Table 1 for each deposit (included as Appendix 1) is provided below in compliance with the requirements of ASX Listing Rule 5.8.1.

## Geology and Mineralisation Interpretation

All three deposits are hosted in the Pleistocene Yoganup formation along the Gingin shoreline (a paleo shoreline that represents a sea level still stand event) in the north of the Perth Basin. The Gingin shoreline marks the western edge of the Gingin Scarp. The Yoganup formation is a sequence of buried pro-graded shoreline sediments that lie unconformably over the lower Cretaceous Leederville Formation and are overlain by the Quaternary Bassendean and Guilford formations.

Each deposit is characterised by one or more beach strand accumulations of heavy mineral, nested from east to west, along the basal unconformity. In some locations there are additional strand accumulations higher up in the sequence.

## **Drilling Techniques**

All three deposits have been investigated with drilling carried out by Iluka Resources and Image Resources using reverse circulation/aircore (RCAC).

All Image RCAC drillholes were drilled vertically using an NQ-sized (76 mm diameter) drill bit.

All Iluka RCAC drillholes were drilled vertically using a BQ-sized (60 mm diameter) drill bit.

## Sampling Techniques

Sampling of the deposits has been by vertical RCAC. Samples were collected from a rotary splitter directly under the cyclone collecting a subsample of between 25% and 50% of the total sample stream. This is a mineral sands industry-standard drilling and sampling technique.

The samples have been taken over intervals of 1 m, 1.5 m, 2.0 m, and 3 m. The majority of samples taken from within mineralised zones have been taken over 1.0m intervals.

## Sampling Analysis Method

Assay methods and laboratory procedures used across the two different generations of data are industry standard although method specifics and heavy liquid compositions vary slightly. For total heavy mineral (HM) determination heavy liquid TBE ranging from 2.84 g/ml to 2.96 g/ml (predominantly 2.96 g/ml) was used. For slimes determination, samples were analysed using a screen size of between 63  $\mu$ m and 45  $\mu$ m (predominantly 53  $\mu$ m). For the determination of oversize material, a screen size of between 2 mm and 1 mm was used (predominantly 1 mm).

The mineral assemblage was analysed using either Iluka Method 2 Perm Roll or Quantitative Evaluation of Minerals by Scanning Electron Microscopy (QEMSCAN<sup>™</sup>) to determine the percentage of ilmenite, leucoxene, rutile, and zircon within the total HM fraction.

## Mineral Resources Estimate

Grade estimations for total HM, slimes and oversize have been carried out using inverse distance squared for Gingin South and Red Gully and inverse distance cubed for Regans Ford. Mineral assemblage data (zircon, rutile, leucoxene, and ilmenite) were assigned to block model cells inside interpreted strands using the nearest neighbour technique based on composite sample ID.

Each Mineral Resource estimate has been classified according to the guidelines of the JORC Code (2012) into Measured, Indicated and Inferred Resources on the basis of confidence in geological and grade continuity and taking into account data quality, different grain size fractions used for analysis, data density, and confidence in estimation of heavy mineral content and mineral assemblage.

The Gingin South deposit was predominantly drilled at a spacing of 20m across strike on lines 100m apart with some locations drilled as close as 5m across strike on lines 50m apart. Measured Resource has been defined within the mineralised domains where the majority of drilling is on a 50m spacing, Indicated Resource has been defined within 100m spaced drilling, and Inferred Resource has been defined within 200m spaced or wider drilling.

Red Gully and Regans Ford were predominantly drilled at a spacing of 20m across strike on lines 400m apart with some locations drilled at 40m across strike on lines 800m apart. Indicated Resource has been defined within the mineralised domains where the majority of drilling is on a 400m spacing, and Inferred Resource has been defined within 800m spaced drilling.

No data has been extrapolated beyond half the distance of the nominal drill spacing.

## Cut-off Grade

The Mineral Resource estimates for the Gingin South and Red Gully deposits have been reported above a 2.5% total HM cut-off grade. This cut-off grade was selected by Image based on technical and economic assessment, comparison with similar deposits and for consistency of reporting with Image's other deposits.

The Mineral Resource estimate for the Regans Ford deposit has been reported above a 4.0% total HM cut-off grade. This cut-off grade was selected based on technical and economic assessment, comparison with similar deposits and the nominal HM grade used during the interpretation of the strand mineralisation.

## Mining Factors

In determining the criteria for reasonable prospects for eventual economic extraction, it is assumed that open pit mining methods will be used, similar to those commonly and currently in use in HM mining operations both in Australia and globally.

It is considered that all three estimated Mineral Resources have a reasonable prospect of eventual economic extraction when considered in the context of the deposit locations and existing infrastructure and taking into consideration the depth, thickness and grade of each deposit.

## Metallurgical Factors

Mineral assemblage data within the Mineral Resource estimates has been analysed using either Iluka Method 2 Perm Roll or QEMSCAN. The QEMSCAN rules for the titanium mineral determination are as follows:

- Ilmenite: 50 to 70% TiO<sub>2</sub>
- Leucoxene: 70 to 95% TiO<sub>2</sub>
- Rutile: >95% TiO<sub>2</sub>.

Image considers there are no metallurgical factors which are likely to affect the assumption that the deposits have reasonable prospects for eventual economic extraction.

Image 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 the Managing Director.

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#### COMPETENT PERSON STATEMENT

The information in this report that relates to the Gingin South, Red Gully and Regans Ford Mineral Resource estimates is based on, and fairly reflects, information and supporting documentation prepared by Mr Damien Addison, who is a Member of the Australian Institute of Geoscientists (AIG). Mr Addison is a full-time employee of Image Resources NL and 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'. Mr Addison holds shares in Image Resources, confirms there is no other potential for a conflict of interest in acting as a Competent Person and has provided his prior written consent to the inclusion in this report of the matters based on his information in the form and context in which it appears.

#### FORWARD LOOKING STATEMENTS

Certain statements made during or in connection with this communication, including, without limitation, those concerning the economic outlook for the mining industry, expectations regarding prices, exploration or development costs and other operating results, growth prospects and the outlook of Image's operations contain or comprise certain forward-looking statements regarding Image's operations, economic performance, and financial condition. Although Image believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct.

Accordingly, results could differ materially from those set out in the forward looking statements as a result of, among other factors, changes in economic and market conditions, success of business and operating initiatives, changes that could result from future acquisitions of new exploration properties, the risks and hazards inherent in the mining business (including industrial accidents, environmental hazards or geologically related conditions), changes in the regulatory environment and other government actions, risks inherent in the ownership, exploration and operation of or investment in mining properties, fluctuations in prices and exchange rates and business and operations risks management, as well as generally those additional factors set forth in our periodic filings with ASX. Image undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect the occurrence of unanticipated events.

# Appendix 1JORC Code Table 1 criteria, summary for the<br/>Gingin South, Red Gully and Regans Ford<br/>deposit Mineral Resource estimates

The table below summaries the assessment and reporting criteria used for the Gingin South deposit Mineral Resource Estimate (carried out by Widenbar and Associates in 2012) 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). The table has been prepared by Mr Damien Addison, who is a Member of the Australian Institute of Geoscientists (AIG), as an addendum to the report "North Perth Basin Gingin South Resources Estimate June 2012" by Lynn Widenbar.

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling. These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul> <li>Sampling of the deposit has been by a vertical reverse-circulation air-core method (RCAC). This is a mineral sands industry-standard drilling technique.</li> <li>For resource definition drilling, subsamples of approximately 15% - 20% of the sample stream were taken using a rotary splitter on the rig cyclone and submitted for analysis. The remainder of the sample stream was retained as a bulk sample for future test work.</li> <li>Samples were riffle split from both the subsample and bulk sample for QAQC analysis.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>All Image RCAC drillholes are drilled vertically using an NQ-sized (76 mm diameter) drill bit.</li> <li>All Iluka RCAC drillholes are vertical and were drilled using a BQ-sized drill bit (60 mm diameter).</li> <li>Water injection is used to convert the sample to a slurry so it can be incrementally sampled by a rotary splitter.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>At the drill site, Image's geologist estimates sample recovery qualitatively (as good, moderate, or poor) for each 1 m down hole sampling interval. Specifically, the supervising geologist visually estimates the volume recovered to sample and reject bags based on prior experience as to what constitutes good recovery.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Image's supervising geologist logs the sample reject material at the rig and pans a small sub-sample of the reject, to visually estimate the proportions of sands, heavy mineral (HM) sands, 'slimes' (clays), and oversize (rock chips) in each sample, in a semi-quantitative manner.</li> <li>The geologist also logs colour, grain size, an estimate of induration (a hardness estimate) and sample 'washability' (ease of separation of slimes from sands by manual attrition).</li> <li>To preclude data entry and transcription errors, the logging data is captured into a digital data logger at the rig, which contains preset logging codes.</li> <li>No photographs of samples are taken. HMC concentrates are retained.</li> <li>The digital logs are downloaded daily and emailed to Image's head office for data security and compilation into the main database server.</li> <li>Samples visually estimated by the geologist to contain more than 0.5% HM (by weight) are despatched for analysis along with the 1 m intervals above and below the mineralised interval.</li> <li>All of the drill samples have been logged by Iluka or Image. The level and detail of logging is of sufficient quality to support Mineral Resource estimates.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether</li> </ul>	<ul> <li>100% of domain 200 has been sampled at 1m intervals. 99% of domain 210 has been sampled at 1m intervals with a few 2m samples. Approximately 70% of the background mineralisation has been sampled at 1m intervals with the remainder sampled over</li> </ul>

## SECTION 1 SAMPLING TECHNIQUES AND DATA

Quality of assay data and laboratory tests	<ul> <li>sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) produest the suge of the divertion of the suges of the analysis including instrument and specifications factors applied and their derivation, etc.</li> </ul>	<ul> <li>2m intervals.</li> <li>The sample from the internal RC rods is directed to a cyclone and then through a 'rotating-chute' custom-built splitting device. This device allows different fraction splits from the cyclone sample stream to be directed to either 25 cm by 35 cm calico bags (as the laboratory despatch samples) or to large plastic polyweave bags for the sample rejects. The rotary splitter directs ≈10 increments from the stream to the laboratory despatch samples, for a specified sampling interval.</li> <li>Sample tickets with the interval's unique sample ID are placed in each bag.</li> <li>For resource definition drilling, two splits are collected from the rotary splitter into a pre-numbered calico bag (1/8 mass) and pre-numbered polyweave bag (7/8 mass) for each 1 m down hole interval. A selection of the replicate samples are later collected and analysed to quantify field sampling precision, or as samples contributing to potential future mineral assemblage composites.</li> <li>Iluka reports having submitted a 25% split for analysis (Iluka 2010), albeit no records are available to support this assertion.</li> <li>To monitor sample representation and sample number correctness, Image weighs the laboratory despatch samples prior to despatch. The laboratory then weighs the received samples and is also a proxy for sample recovery.</li> <li>Image considers the nature, quality and size of the sub-samples collected are consistent with best industry practises of mineral sands explorers in the Perth Basin region.</li> <li>Image englade Western GeoLabs and Diamantina Laboratories for sample samples, washing slimes from samples and analysis.</li> <li>Iluka used their Narngulu Laboratory to analyse their drill samples.</li> <li>Image einserted standards for drilling undertaken during 2009 to 2011.</li> <li>Iluka submitted 42 duplicate samples to their assay laboratory for data from their Gingin South project (Iluka 2010). Image resources submit routine field duplicates and standards.</li> </ul>
Verification	and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	<ul> <li>Image collected duplicate samples including field-duplicates of the primary sample, laboratory duplicates at the laboratory subsampling stage (post de-sliming) and laboratory re-submission duplicates to the original or alternative.</li> <li>Analysis of QAQC data for the drilling programmes indicates that it is of moderate to high quality and supports Mineral Resource estimation.</li> <li>The mineral assemblage used for the resource estimate data includes information from Iluka (magnetic separation followed by density separation using solutions of 3.85 g/cm<sup>3</sup> and 4.05 g/cm<sup>3</sup> for two samples) and from Image (QEMSCAN data from ALS for 31 samples).</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Image collected primary data using a data logger with daily uploads to Image's database. Data from laboratories was provided in digital form and compiled in Microsoft Access databases and spreadsheets.</li> <li>Composite samples prepared by Image were analysed by QEMSCAN and XRF, which was used to verify the QEMSCAN mineral counts.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	<ul> <li>Drillhole collars at Gingin South have been surveyed using handheld GPS (Image) and RTK DGPS methods (Iluka), with the latter method deemed most accurate.</li> <li>The survey ground controls have been tied to the Landgate GOLA database by a registered surveyor.</li> </ul>

	<ul> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The topographic model for Gingin South is based on LiDAR survey. All collars for the Mineral Resource estimate have been adjusted to this LiDAR topographic model.</li> <li>Data for Gingin South has been surveyed in MGA Zone 50 GDA94. The Mineral Resource has been estimated in a local grid system based on a two-point transformation.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The nominal drill spacing is approximately 20 m across strike (with some infill holes at a closer spacing of 5 m to 15 m) on section lines spaced at 50m to 100m along strike (with some section lines up to 200 m apart).</li> <li>Samples for HM assemblage determination were composited on intervals according to a combination of grade and geology appropriate to reflect resource estimation domains.</li> <li>The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation procedure and classification applied.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	All drillholes are vertical and intersect sub-horizontal strata. This is appropriate for the orientation of the mineralisation and will not have introduced a bias.
Sample security	• The measures taken to ensure sample security.	<ul> <li>All samples are collected from site by Image's staff as soon as practicable once drilling is completed and then delivered to Image's locked storage sheds.</li> <li>Image's staff deliver samples to the laboratory and collect heavy mineral floats from the laboratory, which are also stored in Image's locked storage.</li> <li>Image considers there is negligible risk of deliberate or accidental contamination of samples. Occasional sample mix-ups are corrected using Images checking and quality control procedures.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>The results and logging have been reviewed internally by Image's senior exploration personnel including checking of masses despatched and delivered, checking of standard results, and verification logging of significant intercepts.</li> <li>In 2019 audits were conducted at Diamantina and Western GeoLabs by Image contractors.</li> </ul>

## SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Gingin south deposit is within Exploration Licence E70/3032, and M70/448, both 100% owned by Image Resources.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	• The Gingin South deposit was discovered by Iluka Resources.
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>Mineralisation at the Gingin South deposit is hosted in the Perth Basin, in the Pleistocene Yoganup and Guildford Formations on the eastern margin of the Swan Coastal Plain.</li> <li>The Yoganup Formation is a buried pro-graded shoreline deposit, with dunes, beach ridge and deltaic facies. This formation lies unconformably over the Lower Cretaceous Leederville Formation</li> </ul>

Drillhole information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</li> <li>easting and northing of the drillhole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul>	<ul> <li>and is overlain by the Pleistocene Guildford Formation and the Quaternary Bassendean Sand.</li> <li>The Yoganup Formation consists of unconsolidated poorly sorted sands and gravels, with local interstitial clay and heavy minerals that occur sporadically along the Gingin Scarp, which is interpreted to be an ancient shoreline that was stable during a period of marine regression.</li> <li>The Guildford Formation consists of silty and slightly sandy clay and commonly contains lenses of fine- to coarse-grained, very poorly sorted, conglomeratic and (in places) shelly sand at its base.</li> <li>Gingin South has two major strandlines of heavy minerals within the Yoganup Formation.</li> <li>The basement to the strandline mineralisation is identified by the increased slimes content of the Leederville Formation or at the base of the Yoganup Formation.</li> <li>Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area.</li> </ul>
Data aggregation methods	<ul> <li>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.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area.</li> <li>There are no metal equivalent values assumptions applied in the Mineral Resource reporting.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> </ul>	• The geometry of the Gingin South mineralisation is effectively horizontal and the vertical drillholes used to define the Mineral Resource give the approximate true thicknesses of mineralisation.
Diagrams	<ul> <li>Appropriate maps and sections and tabulations of intercepts should be included for any significant discovery being reported</li> </ul>	<ul> <li>Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area.</li> </ul>
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 avoiding misleading reporting of Exploration Results.	<ul> <li>Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area.</li> </ul>
Other substantive	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical</li> </ul>	<ul> <li>Bulk density is reported under "Bulk Density".</li> </ul>

exploration data	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.	
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>The deposit has been drilled to a sufficient level of accuracy to allow preliminary economic assessment via pit optimisation and mining studies. High grade mineralisation has been identified at the northern most limit of E70/3032. This material requires mineral assemblage analysis and mineral resource estimation prior to economic evaluation.</li> </ul>

## SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>The drillhole database is managed by Image. Maintenance of the database includes internal data validation protocols by Image.</li> <li>For the Mineral Resource estimate the drillhole data was extracted directly from the Access drillhole database maintained by Image.</li> <li>Data was further verified and validated by Widenbar and Associates using mining software (Micromine) validation protocols, and visually in plan and section views.</li> </ul>
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	<ul> <li>Lynn Widenbar (CP for the Mineral Resource estimate) has not visited the Gingin South deposit. He has visited other mineral sands deposits in the North Perth Basin including Image's Boonanarring deposit.</li> <li>Damien Addison has visited the Gingin South Deposit.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>Three stratigraphic (Bassendean/Guildford, Yoganup and Leederville Formations) units within the deposit area were defined using a combination of total HM, slimes, and oversize data and drillhole lithological logs.</li> <li>These units were used in combination with grade criteria (nominal grade cut-off of 2% total HM) to define two mineralised strandlines close to the contact of the Yoganup and Guildford Formations.</li> <li>There is good confidence in the geological interpretation of the mineralised strandlines.</li> </ul>
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.	<ul> <li>The two mineralised strandlines within the Yoganup Formation have strike lengths of approximately 5.5 km. The interpreted mineralisation has an average thickness of 5m to 10m and range from 50m to 200m across. The top of the mineralisation ranges in depth from 6 m to 20 m and the mineralisation extends to a maximum depth of 39 m.</li> </ul>
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes</li> </ul>	<ul> <li>Image used Micromine software to develop string files of the geological interpretation. Mineralisation interpretation, data analysis and estimation was undertaken Widenbar and Associates.</li> <li>Widenbar assessed the robustness of the mineralised domains by critically examining the geological interpretation and by using a variety of measures, including statistical and geostatistical analysis. The domains are considered geologically robust in the context of the resource classification applied to the estimate.</li> <li>Drillhole sample data was flagged from the three-dimensional interpretation of the mineralised horizons.</li> <li>The nominal drill spacing is approximately 20 m across strike (with some infill holes at a closer spacing of 5 m to 15 m) on section lines spaced at 50m to 100m along strike (with some wider</li> </ul>

Moisture	<ul> <li>appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</li> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the</li> </ul>	<ul> <li>section lines at 200 m spacing).</li> <li>Samples are from intervals of 1.0 m and 2.0 m (almost all samples from within the strands mineralised domains or based on 1.0m intervals).</li> <li>Extrapolation of up to 50 m along strike and approximately half the drill spacing across strike was used for the grade estimation.</li> <li>HM, Slimes and Oversize grade were estimated using inverse distance squared (ID<sup>2</sup>) into blocks of 10 mE by 50 mN by 1 mRL (sub-blocked to 1mE by 5mN by 0.5mRL).</li> <li>Block dimensions reflect the variability of the deposit and the model's practicality for future mine planning. Sub-cells to a minimum dimension of 1.0 mE by 5 mN by 0.5 mRL were used to represent volume.</li> <li>Mineral assemblage composite IDs were interpolated into the model using nearest neighbour method and Zircon, leucoxene, rutile, and ilmenite percentages within the HM fraction were pasted into parent blocks based on composite ID.</li> <li>The majority of the total HM and slimes, total HM and oversize, and slimes and oversize data is uncorrelated.</li> <li>Correlation coefficients of the mineral assemblage data indicate a poor positive relationship between ilmenite and rutile and poor negative correlation between ilmenite and rutile and poor negative correlations between ilmenite and rutile and poor negative correlations between ilmenite and versize%.</li> <li>Variogram analysis was undertaken but failed to produce any meaningful variograms.</li> <li>Two estimation passes were used; the first search was based upon 40mE, 400mN and 8mRL; the second search was double the initial search in E and N with reduced sample numbers required for estimated block model grades for zircon, ilmenite, leucoxene, and rutile were visually validated against the input drillhole data and by northing, easting and elevation slices.</li> <li>The estimated block model grades for zircon, ilmenite, leucoxene, and rutile were visually validated against the input drillhole data and by northing and easting slices.</li> <li>Measured, I</li></ul>
	and the method of determination of the moisture content.	
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	• The Mineral Resource estimate for the Gingin South deposit has been reported at a 2.5% HM cut-off. This cut-off grade was selected by Image based on technical and economic assessment and current mining practises at the Boonanarring Project, located to the north of Gingin South.
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	<ul> <li>Open pit mining methods will be used, similar to those currently in use at Image's Boonanarring deposit.</li> <li>Mining factors such as dilution and ore loss have not been applied.</li> </ul>

	methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous.	
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.	<ul> <li>The mineral assemblage estimation has been based on 9 composite samples using the Iluka Method 2 Permroll technique.</li> <li>Image considers there are no metallurgical factors which are likely to affect the assumption that the deposit has reasonable prospects for eventual economic extraction.</li> </ul>
Environmental factors or assumptions	<ul> <li>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.</li> </ul>	<ul> <li>There are no known significant environmental impediments to the project's viability from the currently available information.</li> </ul>
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>A combination of lithology and grades (total HM and slimes) were used to determine the density values for the resource model.</li> <li>Bulk density values were calculated using a formula provided by Image, which takes account of HM proportion, slimes, and sand. Density values range from 1.62 to 2.39 with an average of 1.85.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	• The estimate has been classified according to the guidelines of the JORC Code (2012), as Measured, Indicated and Inferred Resources taking into account data quality, data density, geological continuity, grade continuity and confidence in estimation of heavy mineral content and mineral assemblage.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>The Mineral Resource has been reviewed internally as part of normal validation processes by Image and Widenbar and Associates</li> <li>No external audit or review of the current Mineral Resource has been conducted.</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The assigned classifications reflect the Competent Person's assessment of the accuracy and confidence levels in the Mineral Resource estimate.</li> <li>No production has occurred from the deposit.</li> </ul>

Documentation show assumptions made o used.	
<ul> <li>These statements of</li> </ul>	relative accuracy
and confidence of the be compared with p	
where available.	ounction untu,

The table below summaries the assessment and reporting criteria used for the Red Gully deposit Mineral Resource Estimate (carried out by Widenbar and Associates in 2011) 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). The table has been prepared by Mr Damien Addison, who is a Member of the Australian Institute of Geoscientists (AIG), as an addendum to the report "Red Gully Resource Estimate September 2011" by Lynn Widenbar.

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling. These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul> <li>Sampling of the deposit has been by a vertical reverse-circulation air-core method (RCAC). This is a mineral sands industry-standard drilling technique.</li> <li>For resource definition drilling, subsamples of approximately 15% - 20% of the sample stream were taken using a rotary splitter on the rig cyclone and submitted for analysis.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>All Image RCAC drillholes are drilled vertically using an NQ-sized (76 mm diameter) drill bit.</li> <li>All Iluka RCAC drillholes are vertical and were drilled using a BQ-sized drill bit (60 mm diameter).</li> <li>Water injection is used to convert the sample to a slurry so it can be incrementally sampled by a rotary splitter.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>At the drill site, Image's geologist estimates sample recovery qualitatively (as good, moderate, or poor) for each 1 m down hole sampling interval. Specifically, the supervising geologist visually estimates the volume recovered to sample and reject bags based on prior experience as to what constitutes good recovery.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Image's supervising geologist logs the sample reject material at the rig and pans a small sub-sample of the reject, to visually estimate the proportions of sands, heavy mineral (HM) sands, 'slimes' (clays), and oversize (rock chips) in each sample, in a semi-quantitative manner.</li> <li>The geologist also logs colour, grain size, an estimate of induration (a hardness estimate) and sample 'washability' (ease of separation of slimes from sands by manual attrition).</li> <li>To preclude data entry and transcription errors, the logging data is captured into a digital data logger at the rig, which contains preset logging codes.</li> <li>No photographs of samples are taken. HMC concentrates are retained.</li> <li>The digital logs are downloaded daily and emailed to Image's head office for data security and compilation into the main database server.</li> <li>Samples visually estimated by the geologist to contain more than 0.5% HM (by weight) are despatched for analysis along with the 1 m intervals above and below the mineralised interval.</li> <li>All of the drill samples have been logged by Iluka or Image. The level and detail of logging is of sufficient quality to support Mineral Resource estimates.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether</li> </ul>	<ul> <li>The mineralised domains have been sampled at 1.0m and 1.5m intervals. Approximately 70% of the samples are 1.0m. The samples were not composited as the strands were interpreted on un composited data. Length weighting was applied during grade</li> </ul>

## SECTION 1 SAMPLING TECHNIQUES AND DATA

Quality of assay data and laboratory tests	<ul> <li>sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> <li>The verification of significant intersections by either independent or</li> </ul>	<ul> <li>interpolation.</li> <li>The sample from the internal RC rods is directed to a cyclone and then through a 'rotating-chute' custom-built splitting device. This device allows different fraction splits from the cyclone sample stream to be directed to either 25 cm by 35 cm calico bags (as the laboratory despatch samples) or to large plastic polyweave bags for the sample rejects. The rotary splitter directs ≈10 increments from the stream to the laboratory despatch samples, for a specified sampling interval.</li> <li>Sample tickets with the interval's unique sample ID are placed in each bag.</li> <li>For resource definition drilling, two splits are collected from the rotary splitter into a pre-numbered calico bag (1/8 mass) and pre-numbered polyweave bag (7/8 mass) for each 1 m down hole interval. A selection of the replicate samples are later collected and analysed to quantify field sampling precision, or as samples contributing to potential future mineral assemblage composites.</li> <li>Iluka reports having submitted a 25% split for analysis (luka 2010), albeit no records are available to support this assertion.</li> <li>To monitor sample representation and sample number correctness, Image weighs the laboratory despatch samples prior to despatch. The laboratory then weighs the received sample and reports the mass to Image. This identifies any potential mix up of sample numbers and is also a proxy for sample recovery.</li> <li>Image and Iluka used industry standard approaches to estimating the contents of total HM, slimes and oversize involving screening to remove oversize, washing slimes from samples and then extracting the heavy minerals from the residual sands using heavy media.</li> <li>Image engaged Western GeoLabs and Diamantina Laboratories for sample preparation and analysis.</li> <li>Iluka used their Narngulu Laboratory to analyse their drill samples.</li> <li>Image collected duplicate samples including field-duplicates of the primary sample, laboratory duplicates at the laboratory sub-sampling stag</li></ul>
of sampling and assaying	<ul> <li>intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>uploads to Image's database. Data from laboratories was provided in digital form and compiled in Microsoft Access databases and spreadsheets.</li> <li>Composite samples prepared by Image were analysed by QEMSCAN and XRF, which was used to verify the QEMSCAN mineral counts.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Drillhole collars at Red Gully have been surveyed using hand-held GPS (Image) and RTK DGPS methods (Iluka), with the latter method deemed most accurate.</li> <li>The survey ground controls have been tied to the Landgate GOLA database by a registered surveyor.</li> <li>The topographic model for Red Gully has been generated from drill hole collars.</li> <li>Data for Red Gully has been surveyed in MGA Zone 50 GDA94.</li> </ul>

		The Mineral Resource has been estimated in a local grid system based on a two-point transformation.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The nominal drill spacing is approximately 20 m to 40m across strike on section lines spaced at 400m and 800mm along strike (400m across the central part of the deposit).</li> <li>Samples for HM assemblage determination were composited on intervals according to a combination of grade and geology appropriate to reflect resource estimation domains.</li> <li>The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation procedure and classification applied.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	All drillholes are vertical and intersect sub-horizontal strata. This is appropriate for the orientation of the mineralisation and will not have introduced a bias.
Sample security	• The measures taken to ensure sample security.	<ul> <li>All samples are collected from site by Image's staff as soon as practicable once drilling is completed and then delivered to Image's locked storage sheds.</li> <li>Image's staff deliver samples to the laboratory and collect heavy mineral floats from the laboratory, which are also stored in Image's locked storage.</li> <li>Image considers there is negligible risk of deliberate or accidental contamination of samples. Occasional sample mix-ups are corrected using Images checking and quality control procedures.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>The results and logging have been reviewed internally by Image's senior exploration personnel including checking of masses despatched and delivered, checking of standard results, and verification logging of significant intercepts.</li> <li>In 2019 audits were conducted at Diamantina and Western GeoLabs by Image contractors.</li> </ul>

## SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Red Gully deposit is within M70/1192, 100% owned by Image Resources.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Red Gully deposit was discovered by Iluka Resources.
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>Mineralisation at the Red Gully deposit is hosted in the Perth Basin, in the Pleistocene Yoganup and Guildford Formations on the eastern margin of the Swan Coastal Plain.</li> <li>The Yoganup Formation is a buried pro-graded shoreline deposit, with dunes, beach ridge and deltaic facies. This formation lies unconformably over the Lower Cretaceous Leederville Formation and is overlain by the Pleistocene Guildford Formation and the Quaternary Bassendean Sand.</li> <li>The Yoganup Formation consists of unconsolidated poorly sorted sands and gravels, with local interstitial clay and heavy minerals</li> </ul>

Drillhole information Data aggregation methods	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</li> <li>easting and northing of the drillhole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	<ul> <li>that occur sporadically along the Gingin Scarp, which is interpreted to be an ancient shoreline that was stable during a period of marine regression.</li> <li>The Guildford Formation consists of silty and slightly sandy clay and commonly contains lenses of fine- to coarse-grained, very poorly sorted, conglomeratic and (in places) shelly sand at its base.</li> <li>Red Gully has two major strandlines of heavy minerals within the Yoganup Formation.</li> <li>The basement to the strandline mineralisation is identified by the increased slimes content of the Leederville Formation or at the base of the Yoganup Formation.</li> <li>Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area.</li> <li>Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area.</li> <li>There are no metal equivalent value assumptions applied in the Mineral Resource reporting.</li> </ul>
	<ul> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> </ul>	• The geometry of the Red Gully mineralisation is effectively horizontal and the vertical drillholes used to define the Mineral Resource give the approximate true thicknesses of mineralisation.
Diagrams	Appropriate maps and sections and tabulations of intercepts should be included for any significant discovery being reported	<ul> <li>Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area.</li> </ul>
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.	<ul> <li>Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area.</li> </ul>
Other substantive exploration data	<ul> <li>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,</li> </ul>	• Bulk density is reported under "Bulk Density".

	geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>The deposit has been drilled to a sufficient level of accuracy to allow conceptual economic assessment via pit optimisation and mining studies.</li> </ul>

## SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>The drillhole database is managed by Image Resources NL. Maintenance of the database includes internal data validation protocols by Image.</li> <li>For the Mineral Resource estimate the drillhole data was extracted directly from the Micromine drillhole database maintained by Image.</li> <li>Data was further verified and validated by Widenbar and Associates using mining software (Micromine) validation protocols, and visually in plan and section views.</li> </ul>
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	<ul> <li>Lynn Widenbar (Resource estimator) has not visited the Red Gully deposit. He has visited other mineral sands deposits in the North Perth Basin including Image's Boonanarring deposit. Damien Addison has visited the Red Gully deposit and confirmed several randomly selected drill sites from the database.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The basement contact (between the Yoganup formation and the Leederville formation) was interpreted based on slimes and oversize content.</li> <li>The mineralised strands were primarily interpreted on the basis of HM grade but also considered oversize and slimes content.</li> <li>There is good confidence in the geological interpretation of the mineralised strandlines.</li> </ul>
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.	• The two main strandlines have strike lengths of approximately 5.5 km, the northern strand has a strike length of approximately 2km. The interpreted mineralisation has an average thickness of 5m to 10m and ranges from 50m to 150m across. The top of the mineralisation ranges in depth from 6 m to 20 m and the mineralisation extends to a maximum depth of 29 m.
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding</li> </ul>	<ul> <li>Image used Micromine software to develop solid wife frame interpretations of the strand mineralisation. Mineralisation grade interpolation, data analysis and Mineral Resource Estimation was undertaken Widenbar and Associates.</li> <li>Widenbar assessed the robustness of the mineralised domains by critically examining the geological interpretation and by using a variety of measures, including statistical and geostatistical analysis. The domains are considered geologically robust in the context of the resource classification applied to the estimate.</li> <li>Drillhole sample data was flagged from the three-dimensional interpretation of the mineralised horizons.</li> <li>The nominal drill spacing is approximately 20 m across strike (with some areas at 40m across strike) on section lines spaced at 400m and 800m along strike.</li> <li>Samples are from intervals of 1.0 m and 1.5 m within the mineralised strands with some 3.0m intervals in the</li> </ul>

Moisture	<ul> <li>recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>unmineralized material. The majority of the sample intervals are 1.0m.</li> <li>Grade extrapolation was constrained inside solid wire frames. The wire frames were only extended up to 50 m past the last mineralised data point along strike and approximately half the drill spacing across strike.</li> <li>HM, Slimes and Oversize grade were estimated using inverse distance squared (ID<sup>2</sup>) into blocks of 25 mE by 25 mN by 2 mRL (sub-blocked to 2.5mE by 2.5mN by 0.5mRL).</li> <li>Samples were length weighted as the strands were interpreted on raw data (not composited).</li> <li>Block dimensions reflect the variability of the deposit and the model's practicality for future mine planning. Sub-cells to a minimum dimension of 2.5 mE by 2.5 mN by 0.5 mRL were used to represent volume.</li> <li>Mineral assemblage composite IDs were interpolated into the model using nearest neighbour method and Zircon, leucoxene, rutile, and ilmenite percentages within the HM fraction were pasted into parent blocks based on composite ID.</li> <li>The majority of the total HM and slimes, total HM and oversize, and slimes and oversize data is uncorrelated.</li> <li>All variables were estimated separately and independently.</li> <li>No grade capping was applied to HM%, slimes% and oversize%.</li> <li>Two estimation passes were used; the first search was based upon 50mE, 500mN and 10mRL; the second search was 150mE, 1500mN and 10mRL with reduced sample numbers required for estimation.</li> <li>The HM, slimes and oversize estimated block model grades were visually validated against the input drillhole data and comparisons were carried out against the de-clustered drillhole data and by northing, easting and elevation slices.</li> <li>No production has occurred from the deposit.</li> </ul>
Cut-off parameters	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>Tonnages are estimated on a dry basis.</li> <li>Widenbar reported the Mineral Resource estimate for the Red Gully deposit at various HM% cut off grades between 0.0% to 10% from within the interpreted mineralised strands. Image Resources NL reports the Red Gully Mineral Resource at a cut off grade of 2.5% HM from inside the interpreted HM strands. This cut-off grade was selected by Image based on technical and economic assessment and current mining practises at the Boonanarring</li> </ul>
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 methods and parameters when estimating Mineral Resources may not always be rigorous.	<ul> <li>Project, located to the south of Red Gully.</li> <li>Open pit mining methods will be used, similar to those currently in use at Image's Boonanarring deposit.</li> <li>Mining factors such as dilution and ore loss have not been applied.</li> </ul>
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	<ul> <li>The mineral assemblage estimation has been based on 11 composite samples using the Iluka Method 2 Permroll technique.</li> <li>Image considers there are no metallurgical factors which are likely to affect the assumption that the deposit has reasonable prospects for eventual economic extraction.</li> </ul>

	metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous.	
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.	<ul> <li>There are no known significant environmental impediments to the project's viability from the currently available information.</li> </ul>
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>A combination of lithology and grades (total HM and slimes) were used to determine the density values for the resource model.</li> <li>Bulk density values were calculated using a formula provided by Image, which takes account of HM proportion, slimes, and sand. Density values range from 1.68 to 2.27 with an average of 1.92.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	• The estimate has been classified according to the guidelines of the JORC Code (2012), as Indicated and Inferred Resources taking into account data quality, data density, geological continuity, grade continuity and confidence in estimation of heavy mineral content and mineral assemblage.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>The Mineral Resource has been reviewed internally as part of normal validation processes by Image and Widenbar and Associates</li> <li>No external audit or review of the current Mineral Resource has been conducted.</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The assigned classifications reflect the Competent Person's assessment of the accuracy and confidence levels in the Mineral Resource estimate.</li> <li>No production has occurred from the deposit.</li> </ul>

The table below summarises the assessment and reporting criteria used for the Regans Ford deposit Mineral Resource estimates 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). The table has been prepared by Mr Damien Addison, who is a Member of the Australian Institute of Geoscientists (AIG).

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling. These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul> <li>Sampling of the deposit has been by a vertical reverse-circulation air-core method (RCAC). This is a mineral sands industry-standard drilling technique.</li> <li>For resource definition drilling, subsamples of approximately 15% - 20% of the sample stream were taken using a rotary splitter on the rig cyclone and submitted for analysis.</li> <li>Rig duplicates were collected at the drill site from the splitter from a secondary cutter (same as the primary cutter).</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>All Iluka and WSL RCAC drillholes are vertical and were drilled using a BQ-sized drill bit (60 mm diameter).</li> <li>Water injection is used to convert the sample to a slurry so it can be incrementally sampled by a rotary splitter.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>At the drill site, the geologist estimates sample recovery qualitatively (as good, moderate or poor) for each 1 m down hole sampling interval. Specifically, the supervising geologist visually estimates the volume recovered to sample and reject bags based on prior experience as to what constitutes good recovery.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>The supervising geologist logs the sample reject material at the rig and pans a small sub-sample of the reject, to visually estimate the proportions of sands, heavy mineral (HM) sands, 'slimes' (clays), and oversize (rock chips) in each sample, in a semi-quantitative manner.</li> <li>The geologist also logs colour, grain size, an estimate of induration (a hardness estimate) and sample 'washability' (ease of separation of slimes from sands by manual attrition).</li> <li>No photographs of samples are taken. HMC concentrates are retained.</li> <li>Samples visually estimated by the geologist to contain more than 0.5% HM (by weight) are despatched for analysis along with the 1 m intervals above and below the mineralised interval.</li> <li>All of the drill samples have been logged by Iluka or WSL. The level and detail of logging is of sufficient quality to support Mineral Resource estimates.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	<ul> <li>100% of the samples sent for analysis have been taken over intervals of 1 m.</li> <li>The sample from the internal RC rods is directed to a cyclone and then through a 'rotating-chute' custom-built splitting device. This device allows different fraction splits from the cyclone sample stream to be directed to either 25 cm by 35 cm calico bags (as the laboratory despatch samples) or to large plastic polyweave bags for the sample rejects. The rotary splitter directs ≈10 cuts from the stream to the laboratory despatch samples, for a specified sampling interval.</li> <li>Sample tickets with the interval's unique sample ID are placed in</li> </ul>

## SECTION 1 SAMPLING TECHNIQUES AND DATA

	<ul> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>each bag.</li> <li>Iluka reports having submitted a 25% split for analysis (Iluka 2006), albeit no records are available to support this assertion.</li> <li>To monitor sample representation and sample number correctness, Iluka weighs the laboratory despatch samples prior to despatch. The laboratory then weighs the received sample and reports the mass to Image. This identifies any potential mix up of sample numbers and is also a proxy for sample recovery and delimitation errors.</li> <li>Image considers the nature, quality and size of the sub-samples collected are consistent with best industry practises of mineral sands explorers in the Perth Basin region.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>WSL and Iluka used industry standard approaches to estimating the contents of total HM, slimes and oversize involving screening to remove oversize, washing slimes from samples, and then extracting the heavy minerals from the residual sands using heavy media.</li> <li>Iluka used their Narngulu Laboratory to analyse their drill samples.</li> <li>WSL and Iluka inserted standards for drilling undertaken.</li> <li>Analysis of QAQC data for the drilling programmes indicates that it is of moderate to high quality and supports Mineral Resource estimation.</li> <li>The mineral assemblage used for the resource estimate data includes information from Iluka (Perm roll method 2, magnetic separation followed by density separation using solutions of 3.85 g/cm<sup>3</sup> and 4.05 g/cm<sup>3</sup> for two samples)</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Westralian Sands Limited drilled numerous twin holes. The data identified a bias between 1994 holes and holes drilled after 1994. The effect of the bias creates upside potential for the resource estimate as it stands as it is believed that the 1994 data is underestimating HM grades. Otherwise, comparisons of the total HM, slimes are acceptable.</li> <li>Data from laboratories was provided in digital form and compiled in Microsoft Access databases and spreadsheets.</li> <li>Composite samples prepared by Iluka were analysed by Method 2 permroll.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Drillhole collars at Regans Ford have been surveyed RTK DGPS methods (Iluka).</li> <li>The survey ground controls have been tied to the Landgate GOLA database by a registered surveyor.</li> <li>The topographic surface for Regans Ford has been constructed from drill hole collar locations.</li> <li>Data for Regans Ford has been surveyed in MGA Zone 50 GDA94. The Mineral Resource has been estimated in a local grid system based on a two-point transformation.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The nominal drill spacing is approximately 40 m across strike (with some infill holes at a closer spacing of 20 m) on section lines spaced at or 200 m along strike (with some areas in the north east of the deposit drilled at 400m).</li> <li>Samples for HM assemblage determination were composited on intervals according to a combination of grade and geology appropriate to reflect resource estimation domains. A total of 39 mineral assemblage composites were used in the Mineral Resource estimate.</li> <li>The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation procedure and classification applied.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this</li> </ul>	• All drillholes are vertical and intersect sub-horizontal strata. This is appropriate for the orientation of the mineralisation and will not have introduced a bias.

	should be assessed and reported if material.	
Sample security	• The measures taken to ensure sample security.	<ul> <li>All samples are collected from site by WSL and Iluka staff on the day of drilling and then delivered to the inhouse sample laboratory.</li> <li>WSL and Iluka staff deliver samples to the laboratory and collect heavy mineral floats from the laboratory, which are also stored in WLS/Iluka locked storage.</li> <li>There is negligible risk of deliberate or accidental contamination of samples. Occasional sample mix-ups are corrected using checking and quality control procedures.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>The results and logging have been reviewed internally by Iluka senior exploration personnel including checking of masses despatched and delivered, checking of standard results, and verification logging of significant intercepts.</li> </ul>

## SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Regans Ford deposit is within Exploration Licence E70/4946, 100% owned by Image Resources.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>The Regans Ford deposit was discovered by Westralian Sands Limited (WSL).</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>Mineralisation at the Regans Ford deposit is hosted in the Perth Basin, in the Pleistocene Yoganup and Guildford Formations on the eastern margin of the Swan Coastal Plain.</li> <li>The Yoganup Formation is a buried pro-graded shoreline deposit, with dunes, beach ridge and deltaic facies. This formation lies unconformably over the Lower Cretaceous Leederville Formation and is overlain by the Pleistocene Guildford Formation and the Quaternary Bassendean Sand.</li> <li>The Yoganup Formation consists of unconsolidated poorly sorted sands and gravels, with local interstitial clay and heavy minerals that occur sporadically along the Gingin Scarp, which is interpreted to be an ancient shoreline that was stable during a period of marine regression.</li> <li>The Guildford Formation consists of fine- to coarse-grained, very poorly sorted, conglomeratic and (in places) shelly sand at its base.</li> <li>Regans Ford has six separate strandlines of heavy minerals (3 main strands with 3 smaller strands) within the Yoganup Formation.</li> <li>The basement to the strandline mineralisation is identified by the increased slimes content of the Leederville Formation or at the base of the Yoganup Formation.</li> </ul>
Drillhole information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</li> <li>easting and northing of the drillhole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</li> </ul>	<ul> <li>Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area.</li> </ul>

Data aggregation methods	<ul> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values</li> </ul>	<ul> <li>Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area.</li> <li>There are no metal equivalent values assumptions applied in the Mineral Resource reporting.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>should be clearly stated.</li> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> </ul>	• The geometry of the Regans Ford mineralisation is effectively horizontal and the vertical drillholes used to define the Mineral Resource give the approximate true thicknesses of mineralisation.
Diagrams	<ul> <li>Appropriate maps and sections and tabulations of intercepts should be included for any significant discovery being reported</li> </ul>	<ul> <li>Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area.</li> </ul>
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.	<ul> <li>Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	• Bulk density is reported under "Bulk Density".
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>The deposit has been drilled to a sufficient level of accuracy to allow preliminary economic assessment via pit optimisation and mining studies. No further field work is planned until land access issues are resolved with the freehold land owners. When land access is resolved drilling and assaying will be required to facilitate the estimation of oversize in line with Image Resources procedures (&gt;1.00mm).</li> </ul>

# SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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</li> </ul>	<ul> <li>At the time of modelling the Iluka drillhole database was managed in house by Iluka. Maintenance of the database includes internal data validation protocols by Iluka.</li> <li>For the Mineral Resource estimate the drillhole data was extracted</li> </ul>

	<ul><li>Mineral Resource estimation purposes.</li><li>Data validation procedures used.</li></ul>	<ul> <li>directly from the database maintained by Iluka.</li> <li>Data was further verified and validated by Addison and Jones using mining software (Datamine) validation protocols, Excel and visually in plan and section views.</li> <li>Image resources has secured the drill hole data since acquiring the deposit. The drill data is now located in the Image Resources Micromine database.</li> </ul>
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	<ul> <li>Damien Addison (CP for the Mineral Resource estimate) has not visited the Regans Ford deposit. He has visited other mineral sands deposits in the North Perth Basin including Image's Boonanarring deposit during 2022.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>Three stratigraphic (Bassendean/Guildford, Yoganup and Leederville Formations) units within the deposit area were defined using a combination of total HM, slimes and oversize data and drillhole lithological logs.</li> <li>These units were used in combination with grade criteria (nominal grade cut-off of 4.0% total HM) to define six mineralised strandlines close to the contact of the Yoganup and Guildford Formations.</li> <li>There is good confidence in the geological interpretation of the mineralised strandlines.</li> </ul>
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.	<ul> <li>The 3 main mineralised strandlines within the Yoganup Formation have strike lengths of 1.6 to 3.4 km and the 3 minor strands have strike lengths of 0.8 to 0.4 km. The interpreted mineralisation has an average thickness of 4.2 m and a maximum thickness of 12 m. The top of the mineralisation ranges in depth from 11 m to 29 m and the mineralisation extends to a maximum depth of 34 m.</li> </ul>
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of</li> </ul>	<ul> <li>At the time of modelling Iluka used Datamine software to develop string files of the geological interpretation. Mineralisation interpretation, data analysis and estimation was undertaken inhouse by Iluka using Snowden Supervisor and Datamine software.</li> <li>Iluka assessed the robustness of the mineralised domains by critically examining the geological interpretation and by using a variety of measures, including statistical and geostatistical analysis. The domains are considered geologically robust in the context of the resource classification applied to the estimate.</li> <li>Drillhole sample data was flagged from the three-dimensional interpretation of the mineralised strands.</li> <li>The nominal drill spacing is approximately 40 m across strike (with some infill holes at a closer spacing of 20 m) on section lines spaced at 200 m along strike (with some wider section lines at 400 m spacing).</li> <li>Samples are from intervals of 1 m. As the majority of samples (over 99%) are from intervals of 1 m the data was composited to 1 m downhole intervals for resource estimation.</li> <li>Extrapolation of up to 100 m along strike and approximately half the drill spacing across strike was used for the interpretation.</li> <li>HM grade was estimated using anisotropic inverse distance cubed (ID<sup>3</sup>) into blocks of 20 mE by 100 mN by 1 mRL.</li> <li>Block dimensions were selected on the basis of half the drill hole spacing. Sub-cells to a minimum dimension of 2.5 mE by 12.5 mN by 0.01 mRL were used to represent volume.</li> <li>Bulk sample numbers (BSNUM) were modelled using nearest neighbour method. Mineral assemblage values were then added to the model using BSNUM as a key field.</li> <li>All variables were estimated separately and independently.</li> <li>Three estimation passes were used for HM; the first search was based upon the predominant data spacing; the second search was double the initial search with reduced sample numbers required for estimation and the third search was expanded to complete</li> </ul>

Moisture	<ul> <li>reconciliation data if available.</li> <li>Whether the tonnages are estimated on</li> </ul>	<ul> <li>grade estimation within each of the mineralised domains.</li> <li>The HM, slimes and oversize estimated block model grades were visually validated against the input drillhole data and comparisons were carried out against the de-clustered drillhole data and by northing, easting and elevation slices.</li> <li>The estimated block model grades for zircon, ilmenite, leucoxene, and rutile were visually validated against the input drillhole data and by northing and easting slices.</li> <li>Indicated and Inferred Mineral Resources were estimated for the Regans Ford deposit in 2000 by Iluka. A total Mineral Resource of 9.9 Mt at 9.7% total HM, containing 954 kt of total HM was reported. The total 2005 resource tonnes have not increased.</li> <li>No production has occurred from the deposit.</li> </ul>
inclotate.	a dry basis or with natural moisture, and the method of determination of the moisture content.	
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>The Mineral Resource estimate for the Regans Ford deposit has been reported at a 4.0% HM cut-off. This cut-off grade was selected by Iluka at the time of modelling based on technical and economic assessment and current mining practises in the Perth Basin and the nominal HM grade used to interpret the HM mineralisation.</li> </ul>
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 methods and parameters when estimating Mineral Resources may not always be rigorous.	<ul> <li>Open pit mining methods will be used, similar to those currently in use at Image's Boonanarring deposit.</li> <li>Mining factors such as dilution and ore loss have not been applied.</li> </ul>
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.	<ul> <li>The majority (88%) of the mineral assemblage data within the Mineral Resource estimate has been based on WSL/Iluka method 2 permroll (this method includes rutile in the nonmagnetic leucoxene).</li> <li>Image considers there are no metallurgical factors which are likely to affect the assumption that the deposit has reasonable prospects for eventual economic extraction.</li> </ul>
Environmental factors or assumptions	<ul> <li>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.</li> </ul>	<ul> <li>There are no known significant environmental impediments to the project's viability from the currently available information. The deposit is mostly located on cleared farm land.</li> </ul>
Bulk density	<ul> <li>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.</li> <li>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</li> </ul>	<ul> <li>A combination of lithology and grades (total HM and slimes) were used to determine the density values for the resource model.</li> <li>Bulk density formulae were developed by Iluka in 2000 in the Perth Basin, using bulk density measurements from geotechnical drilling programme and in-pit density measurements. The formulae were verified and adjusted where required using data obtained at operating Iluka mines at the time. These formulae have been applied at Regans Ford for density estimation. The formula assumes a quartz sand and HM sand (% based on HM grade) with 30% pore space. Slimes is added to the density until 30% slimes is reached, and then the Qtz/HM density material is</li> </ul>

	<ul> <li>zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	replaced with slimes density.
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The estimate has been classified according to the guidelines of the JORC Code (2012) as Indicated and Inferred Resources taking into account data quality, data density, geological continuity, grade continuity and confidence in estimation of heavy mineral content and mineral assemblage. In plan, polygons were used to define zones of different classification within each of the mineralised domains.</li> <li>Within the mineralised domains the drilling is at 40 m (or less) and on 200 m spaced section lines and the mineral assemblage composites are on 200 m to 400 m spaced sections. The majority of the resources are classified as Indicated.</li> <li>An Inferred classification has been assigned to area with no mineral assemblage data, areas with wide-spaced drilling and thus lower confidence in the mineralisation interpretation.</li> </ul>
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>The Mineral Resource was reviewed internally by Iluka as part of normal validation processes.</li> <li>No external audit or review of the current Mineral Resource has been conducted.</li> <li>The mineral resource estimate is however based on the combined work of 3 competent persons, Olaf Frederickson, Greg Jones and Damien Addison (all full-time employees of Iluka Resources at the time)</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The assigned classification of Indicated and Inferred reflects the Competent Person's assessment of the accuracy and confidence levels in the Mineral Resource estimate.</li> <li>No production has occurred from the deposit.</li> </ul>