10 March 2021

BOONANARRING ANNUAL ORE RESERVE UPDATE

Image Resources NL (ASX: IMA) **("Image" or "the Company")** provides an annual update of Ore Reserves at its 100%-owned, high-grade, zircon-rich Boonanarring and 100%-owned, high-grade Atlas mineral sands projects located in the infrastructure-rich North Perth Basin in Western Australia. **This update is presented as at 31 December 2020 to align with the Company's calendar year reporting period.**

- Boonanarring Ore Reserves of 6.1Mt at 7.8% THM and 24% zircon in the HM
- Atlas Ore Reserves unchanged at 9.5Mt at 8.1% THM and 11% zircon in the HM
- Total Ore Reserves at Boonanarring and Atlas stand at 15.6Mt at 8.0% THM and 16% zircon in the HM

The Ore Reserves update for Boonanarring was completed by Entech Pty Ltd in accordance with the guidelines of the JORC Code (2012). See Schedule 1 for additional details.

Table 1. December 2020 Boonanarring Ore Reserve Summary[1-5]

Classification	Ore Tonnes	THM	Slimes	Oversize	% of total heavy minerals (THM)			
	million	%	%	%	Zircon	Rutile	Leucoxene	Ilmenite
Proved	3.9	8.1	13	5.0	23	2.9	3.0	52
Probable	2.2	7.3	18	7.8	28	4.6	4.8	44
Sub-total	6.1	7.8	15	6.0	24	3.5	3.6	49

Table 1 notes:
1. Mineral Resources have been reported as inclusive of Ore Reserves.
2. The mineral assemblages are reported as a percentage of in-situ THM content.
3. Estimates have been rounded to the nearest 100,000 t of ore, 0.1% for THM/oversize/rutile/leucoxene and 0% for slimes/ilmenite/zircon.
4. Ore Reserves are reported as material within pit designs but limited to below a top-of-ore surface generated from consideration of the optimisation value modelling and current geological domain interpretation.
5. All tonnages and grades have been rounded to reflect the relative uncertainty of the estimate, thus sum of columns may not equal.

Table 2. October 2019 Boonanarring Ore Reserve Summary[1-5]

Classification	Ore Tonnes	THM	Slimes	Oversize	% of total heavy minerals (THM)			
	million	%	%	%	Zircon	Rutile	Leucoxene	Ilmenite
Proved	3.5	13.9	16	8.9	32	2.2	4.6	44
Probable	7.1	6.4	16	5.9	23	2.8	1.7	49
Sub-total	10.7	8.9	16	6.9	28	2.5	3.2	46

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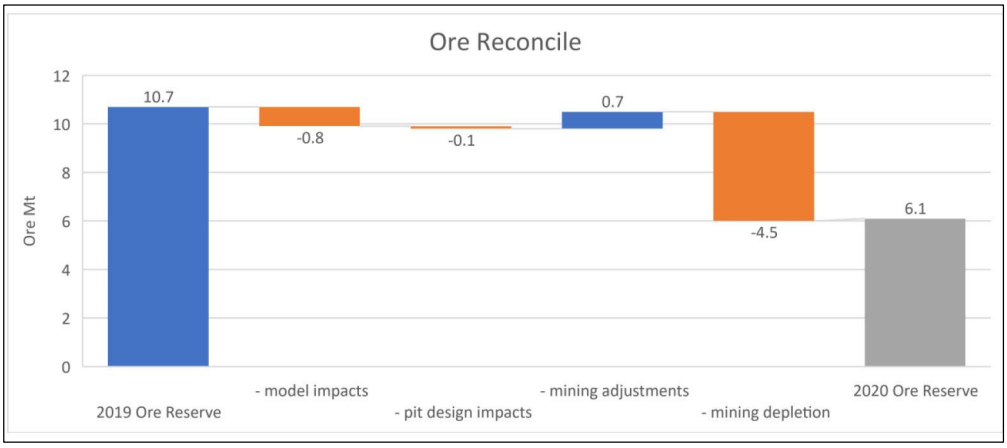
Table 2 notes:

1. *Mineral Resources have been reported as inclusive of Ore Reserves.*
2. *The mineral assemblages are reported as a percentage of in-situ THM content.*
3. *Estimates have been rounded to the nearest 100,000 t of ore, 0.1% for THM/oversize/rutile/leucoxene and 0% for slimes/ilmenite/zircon.*
4. *Ore Reserves are reported as material within pit designs but limited to below a top-of-ore surface generated from consideration of the optimisation value modelling and current geological domain interpretation.*
5. *All tonnages and grades have been rounded to reflect the relative uncertainty of the estimate, thus sum of columns may not equal.*

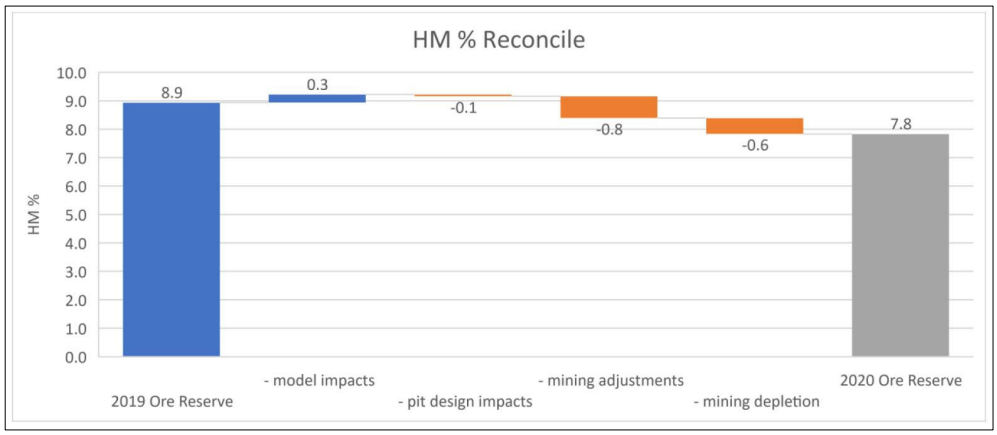
The primary contributors to the decrease in tonnes of ore from the 2019 to the 2020 Ore Reserve estimate were reduction of ore tonnes in the Mineral Resource estimate (see Schedule 2) and depletion from ore mining as presented in Figure 1.

Figure 1: Change in Ore Tonnes (Mt)



The primary contributor to the decrease in heavy minerals (HM) ore grade from the 2019 to the 2020 Ore Reserve estimate was the mining depletion of higher grade ore from Blocks A and B and the inclusion of more lower grade Domain 200 material as planned dilution in the ore feed.

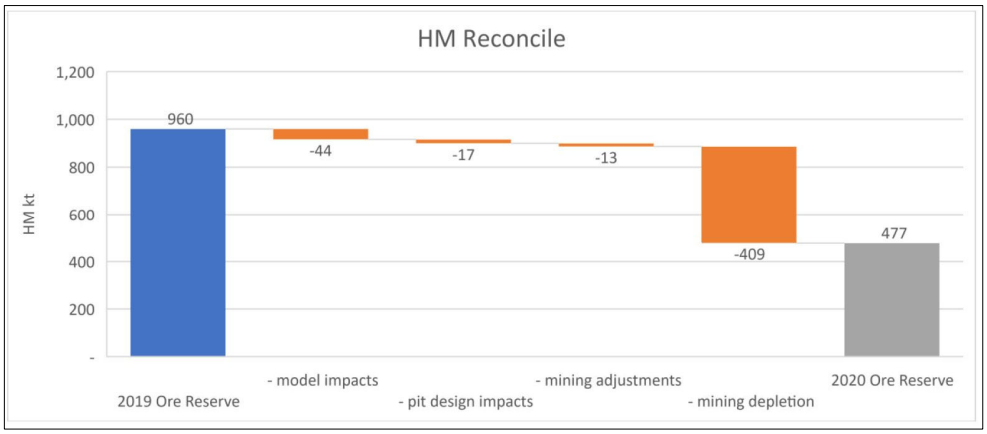
Figure 2: Change in Heavy Mineral Ore Grade



Similarly, zircon grade as a proportion of THM decreased from 27.5% to 24.6% as a result of mining depletion of higher zircon grade reserves in Blocks A and B.

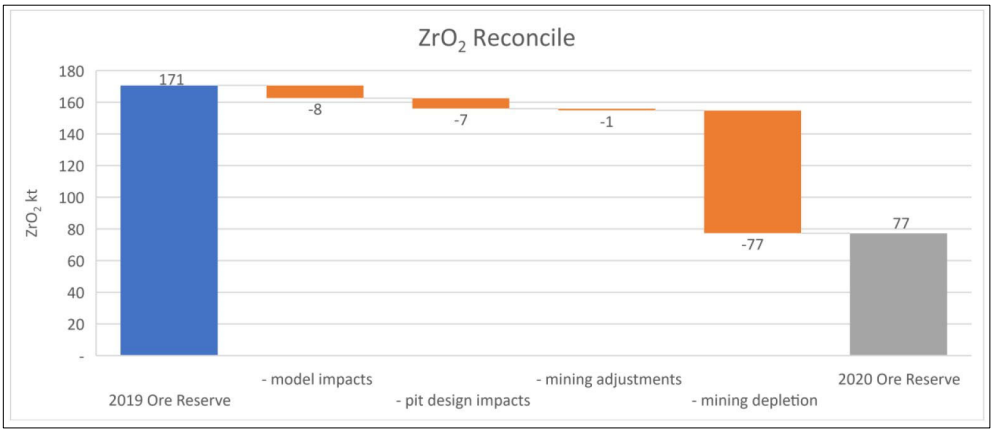
The primary contributors to the decrease in tonnes of total in-situ heavy minerals (HM) from the 2019 to the 2020 Ore Reserve estimate were depletion of HM inventory due to ore mining and the reduction of ore tonnes in the Mineral Resources estimate (see Schedule 2), as presented in Figure 3.

Figure 3: Change in HM Tonnes (Mt)



The reduction to total in-situ ZrO_2 tonnes from the 2019 to the 2020 Ore Reserve was primarily depletion of ZrO_2 tonnes due to ore mining as presented in Figure 4.

Figure 4: Change in ZrO_2 Tonnes (Mt)



Ore Reserves, Mine Life and Extension Potential

Image's 2017 Bankable Feasibility Study (see 30 May 2017 ASX announcement - *Strong Bankable Feasibility Study Results Boonanarring / Atlas Project*) outlined the planned mining of the Boonanarring deposit followed by a relocation of the wet concentration plant (WCP) to the Atlas deposit area, after exhaustion of Ore Reserves at Boonanarring, and continuation of mining of Atlas on its Ore Reserves.

Based on the updated Ore Reserves estimate above, as at 31 December 2020, current remaining Ore Reserves at Boonanarring is scheduled to be depleted in Q3 2022, following which, the WCP

will be relocated to the Atlas Project, where it will be operated on current Atlas Ore Reserves and any newly identified Ore Reserves in the Atlas area.

Atlas Ore Reserves

The high-grade Atlas deposit has current Ore Reserves of 9.5Mt at 8.1% THM and the total Ore Reserves between Boonanarring and Atlas are 15.6Mt at 8.0% THM (see Table 3). Therefore, total remaining mine-life based on current Boonanarring and Atlas Ore Reserves is approximately 4.5 years at a processing rate of 3.5Mt per annum, excluding any potential new Ore Reserves from two other 100%-owned projects of Helene and Hyperion located near Atlas (see Figure 5).

The period that ore processing and HMC production will be offline, for the relocation of the WCP and re-establishment of ore processing of Atlas ore, is estimated to be approximately three months. The cost estimate in the 2017 BFS for re-establishment of ore processing at Atlas was $25 million. Relocation planning is well-advanced and costs are being re-estimated. Relocation costs will be paid for from Image cash reserves.

Table 3. Boonanarring and Atlas Ore Reserves

Ore Reserves - Strand Deposits; in accordance with the JORC Code (2012)										
Project/Deposit	**Category**	**Tonnes**	**HM**	**Slimes**	**HM Tonnes**	**VHM**	**Ilmenite**	**Leucoxene**	**Rutile**	**Zircon**
		(million)	**(%)**	**(%)**	**(million)**	**(%)**	**(%)**	**(%)**	**(%)**	**(%)**
Boonanarring	Proved	3.9	8.1	13	0.32	80.9	52	3.0	2.9	23
Boonanarring	Probable	2.2	7.3	18	0.16	81.4	44	4.8	4.6	28
Total Boonanarring		**6.1**	**7.8**	**15**	**0.48**	**81.0**	**49**	**3.6**	**3.5**	**24**
Atlas[1]	Probable	9.5	8.1	16	0.8	73.3	51	4.5	7.5	11
Total Atlas		**9.5**	**8.1**	**16**	**0.8**	**73.3**	**51**	**4.5**	**7.5**	**11**
Total Ore Reserves		**15.6**	**8.0**	**16**	**1.3**	**76.2**	**50**	**4.1**	**6.0**	**16**

Notes: 1 - Atlas Reserves refer to the 30 May 2017 release "Ore Reserves Update for 100% Owned Atlas Project" http://www.imageres.com.au/images/joomd/1496113407201705300RERESERVESUPDATEFOR100OWNEDATLASPROJECT.pdf. As shown in Table 3, the Ore Reserves at Atlas are unchanged from the 30 May 2017 announcement and the Company is not aware of any new information or data that materially affects this information for the period ending 31 December 2020.

Figure 5. Proximity map for 100%-owned Atlas, Helene and Hyperion

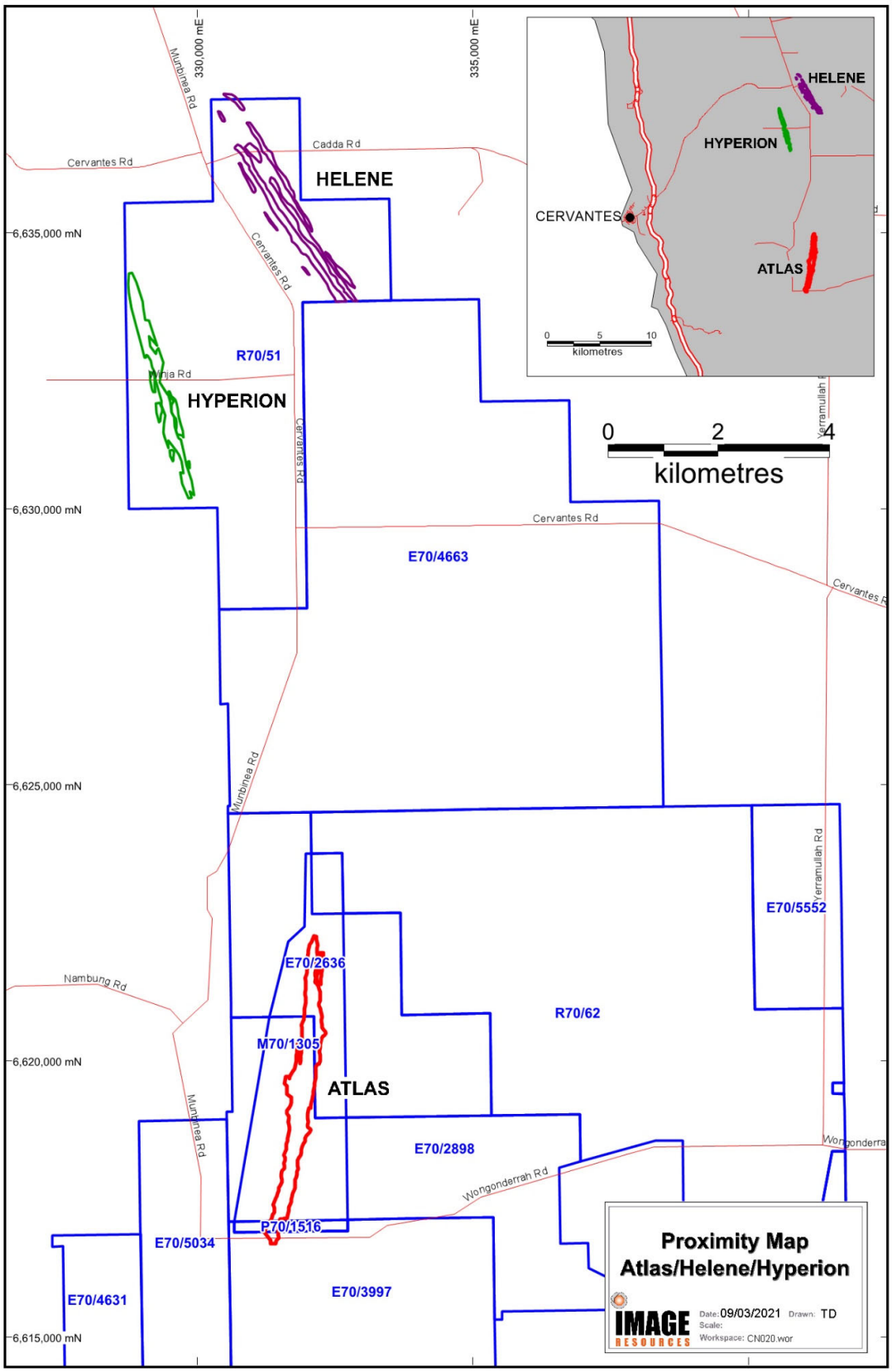


Image Resources Background Information

Image is Australian's newest mineral sands mining company, operating open-cut mining and ore processing facilities at its 100%-owned, high-grade, zircon-rich Boonanarring Mineral Sands Project located 80km north of Perth, Western Australia, in the infrastructure-rich North Perth Basin. Boonanarring is arguably one of the highest grade, zircon-rich, mineral sands projects in Australia. The project was constructed and commissioned on-time and on-budget in 2018 and production of HMC ramped-up to exceed name-plate capacity in only the second month of operation (January 2019).

Image has now completed two full years of successful operations with performance meeting or beating market guidance ranges in all categories. The Company is focused on maintaining its strong operational and health, safety and environmental performance and has prioritised the identification of new Mineral Resources and Ore Reserves, to extend the cumulative mine life of Ore Reserves in its portfolio, while investigating the development of a second operating centre in parallel with current operations.

For further information, please contact:

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COMPETENT PERSON'S STATEMENTS – EXPLORATION RESULTS, MINERAL RESOURCES AND ORE RESERVES

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

The information in this report that relates to Ore Reserves for the Boonanarring mine is based on, and fairly represents, information and supporting documentation prepared by Mr Per Scrimshaw, Mining Engineer and full-time employee of Entech Pty Ltd, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Scrimshaw has sufficient experience in Ore Reserves estimation relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Scrimshaw consents to the inclusion in the report of the matters compiled by him in the form and context in which it appears.

This report includes information that relates to Ore Reserves for the Atlas Deposit which was prepared and first disclosed under JORC Code 2012. The information was extracted from the Company's previous ASX announcement dated 30 May 2017 which is available to view on the Company's website. The Company confirms it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of reporting of Ore Reserves and Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which any

Competent Person's findings are presented have not been materially modified from the original market announcement.

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 events or circumstances after today's date or to reflect the occurrence of unanticipated events.

Schedule 1

Boonanarring Heavy Mineral Sands Deposit Ore Reserve Estimate – 2020

EXECUTIVE SUMMARY

Image Resources ("Image") engaged Entech Pty Ltd ("Entech") to undertake an Ore Reserve update for their Boonanarring Mineral Sands Mine ("Boonanarring Project"), located 80 km north of Perth in Western Australia. Image commenced operations at Boonanarring in late 2018 following a successful construction and commissioning period. Nameplate capacity of the process facilities were achieved in early 2019 and the mine is now fully operational.

Since the previous Ore Reserve estimate, mining activities at the Boonanarring site have been predominantly associated with the Pit B area, where the Eastern Pit was fully mined during the period. Current mining activities are focussed on depleting the remaining Pit B west strands, coincident with the narrow, higher grade Pit A, before relocating the Feed Preparation Plant south of Wannamal Road to deplete the remaining Pit C and D Ore Reserves. Waste materials (overburden and co-disposal tails) are returned to the mine void during mining and process operations followed by post mine and rehabilitation activities (surface overburden stockpile return, topsoil return, profiling and seeding) to return the site to the pre-mine state. In the 12 months to 31 December 2020 the northern end of Pit C had been rehabilitated, at the location of the initial mine void (Figure 2).

The Ore Reserve estimate update is based on a Mineral Resource estimate completed by Optiro as at 31 December 2020. The Mineral Resource estimate used is separately reported in accordance with the JORC Code (2012).

Measured Mineral Resources have been converted to Proved Ore Reserves and Indicated Mineral Resources have been converted to Probable Ore Reserves after application of appropriate modifying factors, subject to mine design physicals and an economic evaluation. Inferred material contained within the mine plan, and below the site top-of-ore surface, is included in the Ore Reserve as a planned dilution where it is considered unable to be selectively mined separately as waste. This dilution has been allocated to respective Proved and Probable categories by pro-rata based on the ratio of Measured and Indicated material in each pit location. The Ore Reserves have been defined at delivery to the in-pit feed unit.

Prior to this estimate, the most recent Boonanarring Mine Ore Reserves were estimated by Entech in 2019 (as at 30 September 2019). The following material changes have been made to the mine plan inputs since the previous Ore Reserve Estimate:

- Resource Estimate and corresponding block model updated based on recent drilling, revised geological domain interpretation, sachet logging (identification of high FeOX / laterites) and increased knowledge gained by mining
- Depletion for mining as at 31 December 2020
- Changes in pit design to accommodate the most recent geological domain interpretation, current operating Pit A and B designs and Pit D crest access limitations, and
- The inclusion of increased amounts of lower grade Inferred mineralisation surrounding the defined main strands as planned dilution under the current mine operating plan (Domain 200).

All pit designs and surfaces used for Ore Reserve scheduling and reporting have been provided to site technical personnel for review / feedback prior to finalisation.
The current mine sequence (Figure 3) is based on:

1. Depleting all remaining Ore Reserves north of Wannamal Rd whilst the FPP is situated in its current location. Continue mining Pit A in a northern direction and Pit

B West in a southern direction with a feed blend 25% Pit A. Deplete any remaining ROM stockpiles on the north of Wannamal Rd, then:

2. Relocate the FPP south of Wannamal Rd back into Pit C. Mining will commence at the 30,150N initially and advance to the south, to provide sufficient time for the co-disposal material tailed in Pit C to drain and consolidate, then
3. Mine remaining inventory in Pit C, north of 30,150N to completion in a northerly direction and abutting previously co-disposed tails, and finally:
4. Mine Pit D in a southerly direction.

This Ore Reserve estimate is based on modifying factors and processing inputs determined from analysis of actual operating performance at the Boonanarring site. Mining dilution has been considered by adopting a less selective mine operating plan than previous estimates which now includes increased amounts of lower grade Domain 200 material as planned dilution in the ore feed. This material, previously unclassified, has been classified as Inferred in the updated Mineral Resource and approximately 0.9Mt of this material at 1.3% HM and 14.1% ZrO_2 is included in the Ore Reserve as planned dilution. Mining recovery is assumed to be 100% with provision for a Feed Preparation Plant (FPP) recovery estimate of 99%. Wet Concentration Plant (WCP) mineral recoveries use estimates of 98% (ZrO_2) and 91.6% (TiO_2), which have been reconciled to actual plant performance metrics post commissioning.

Revenue estimates are based on contained ZrO_2 and TiO_2 percentages estimated throughout the Mineral Resource model and aligned with the current methodology for calculating bulk HMC sales revenues under the current offtake agreement pricing models. Operating cost inputs have been based on actual site operating data, contracted rates, or current budget estimates.

All material was subjected to an economic evaluation in a high-level financial model compiled by Entech as well as a detailed financial model compiled by Image and reviewed by Entech. The mine plan is shown to be technically and financially feasible with positive period cashflows generated under both models. A suitable cashflow positive buffer exists below the assumed product prices to provide confidence that the Ore Reserve estimate will be financially viable within a reasonably expectable range of product prices.

An Ore Reserve estimate has been prepared in accordance with the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition). This is tabulated below (Table 1).

Table 1 - 2020 Ore Reserve Update

		(% in Ore)			Mineral Assemblage (% of HM)					
Classification	Ore Tonnes (Mt)	HM	OS	SL	ZIR	RUT	LEU	ILM	ZrO_2	TiO_2
Proved	*3.9*	*8.1*	*5.0*	*13*	*23*	*2.9*	*3.0*	*52*	*15*	*35*
Probable	*2.2*	*7.3*	*7.8*	*18*	*28*	*4.6*	*4.8*	*44*	*19*	*33*
Total	6.1	7.8	6.0	15	24	3.5	3.6	49	16	35

Estimates have been rounded to the nearest 100,000 t of ore, 0.1% for HM/OS/RUT/LEU and 0% for SL/ILM/ZIR/ZrO_2/TiO_2. Ore Reserves are reported as material within pit designs but limited to below a top-of-ore surface generated from consideration of the optimisation value modelling and current geological domain interpretation. All tonnages and grades have been rounded to reflect the relative uncertainty of the estimate, thus sum of columns may not equal.

Detailed comparison has been performed between the 2019 Ore Reserve and this updated estimate. The main variance, both in terms of ore tonnage and contained HM/ZrO_2/TiO_2 is due to mining depletion for the 15 months since the disclosure of the previous estimate. As mining in the same period has focussed on the higher-grade HM areas, this estimate also shows a reduction in the HM%, as higher-grade regions are depleted from the remaining Ore Reserve. Adjustments due to mining have been made that incorporate the inclusion of previously unclassified material as planned dilution material in this estimate. The result of this adjustment is a reduction in HM% and corresponding increase in ore tonnes, but with little material change to contained ZrO_2 (from which

the bulk of the revenue from Boonanarring HMC is derived). More significant impacts on contained ZrO_2 can be attributed to model and pit design changes since the previous Ore Reserve estimate (Figure 1).

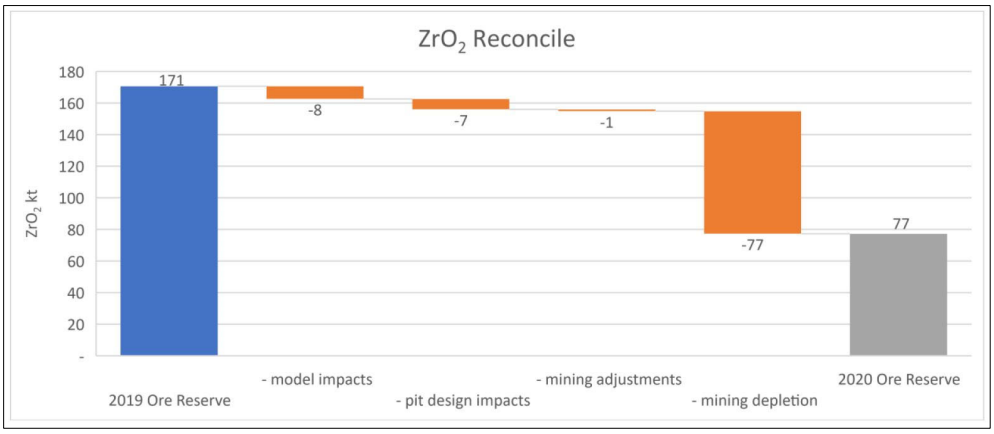

Figure 1 - Change in ZrO_2 Tonnage Waterfall

Figure 4 shows the spatial comparison between 2019 and 2020 Ore Reserve Pit footprints.

The information in this report that relates to Ore Reserves is based on information and supporting documentation prepared by Mr. Per Scrimshaw. Mr. Scrimshaw is a Member of The Australasian Institute of Mining and Metallurgy. Mr. Scrimshaw is employed by Entech, a mining consultancy engaged by Image to prepare Ore Reserves estimation for the Boonanarring Project. Mr. Scrimshaw has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr Scrimshaw conducted a site visit to Boonanarring over two days during September 2019, however due to travel restrictions imposed by COVID-19, was unable to conduct any site visit in the 2020 calendar year. Alternate arrangements were made for a site visit to be undertaken by a senior representative from the local Perth Entech staff, on behalf of the competent person, and this occurred in December 2020.

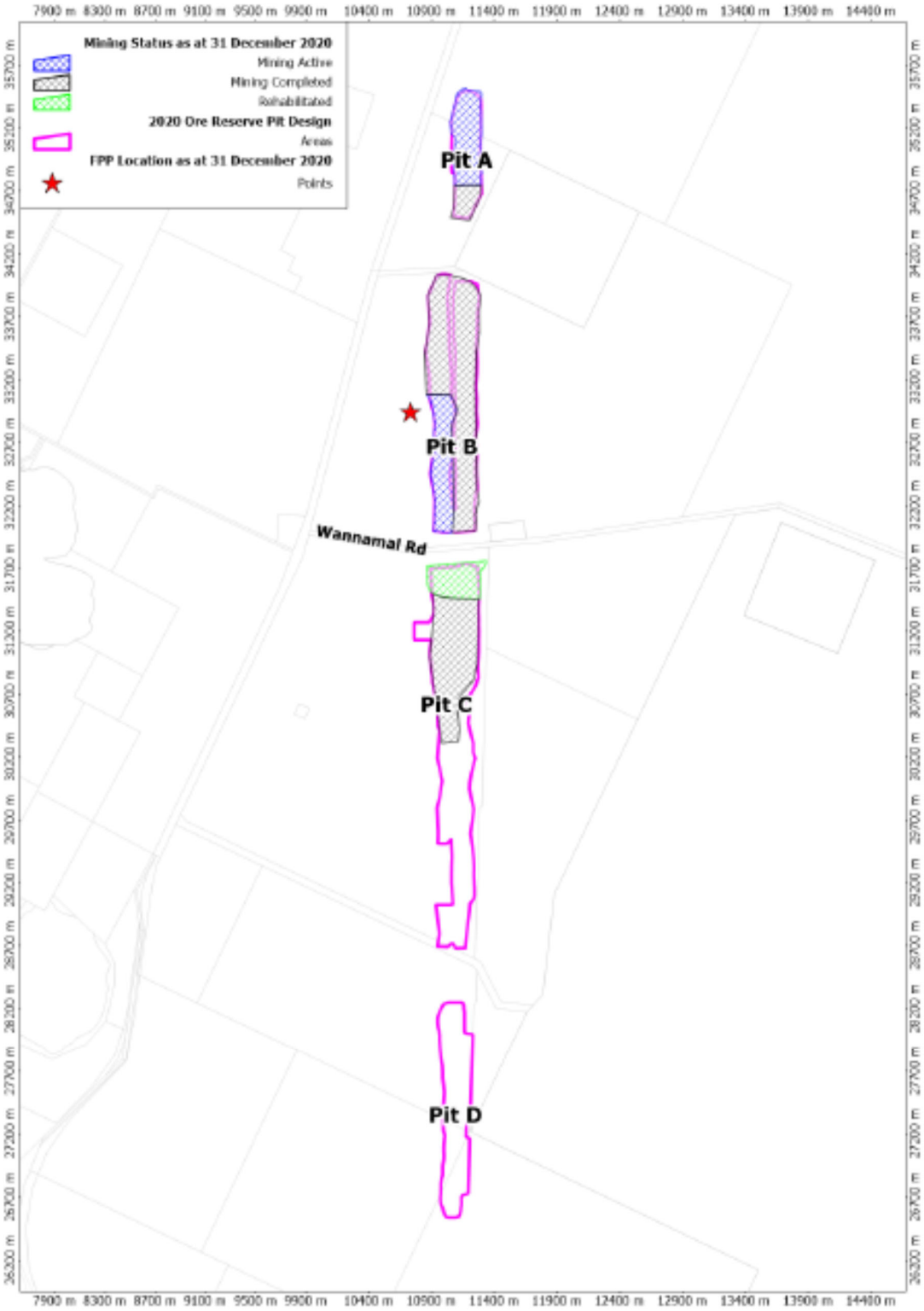

Figure 2 - Mining Status as at 31 December 2020

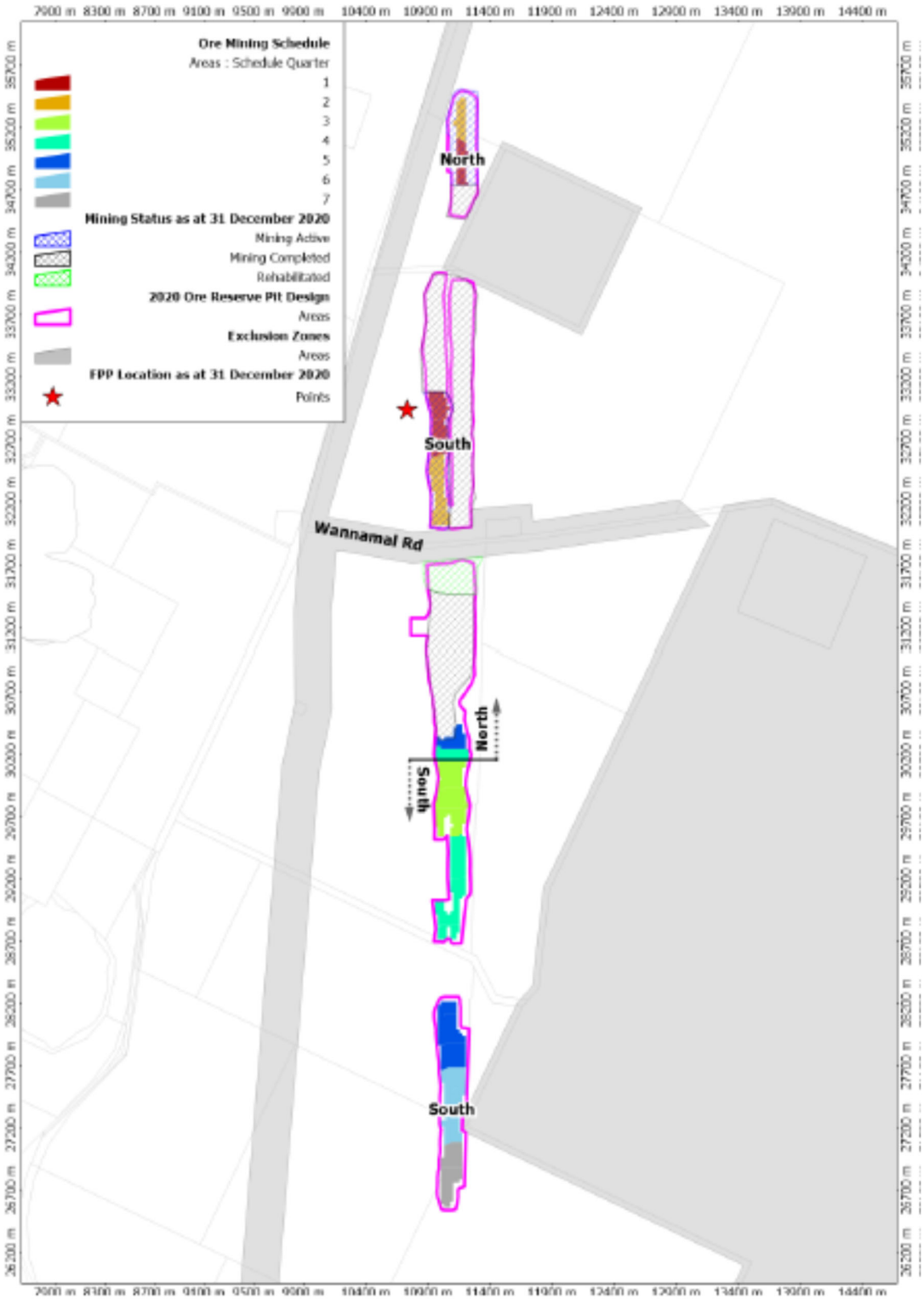

Figure 3 - Mining Direction and Quarterly Ore Mining Schedule

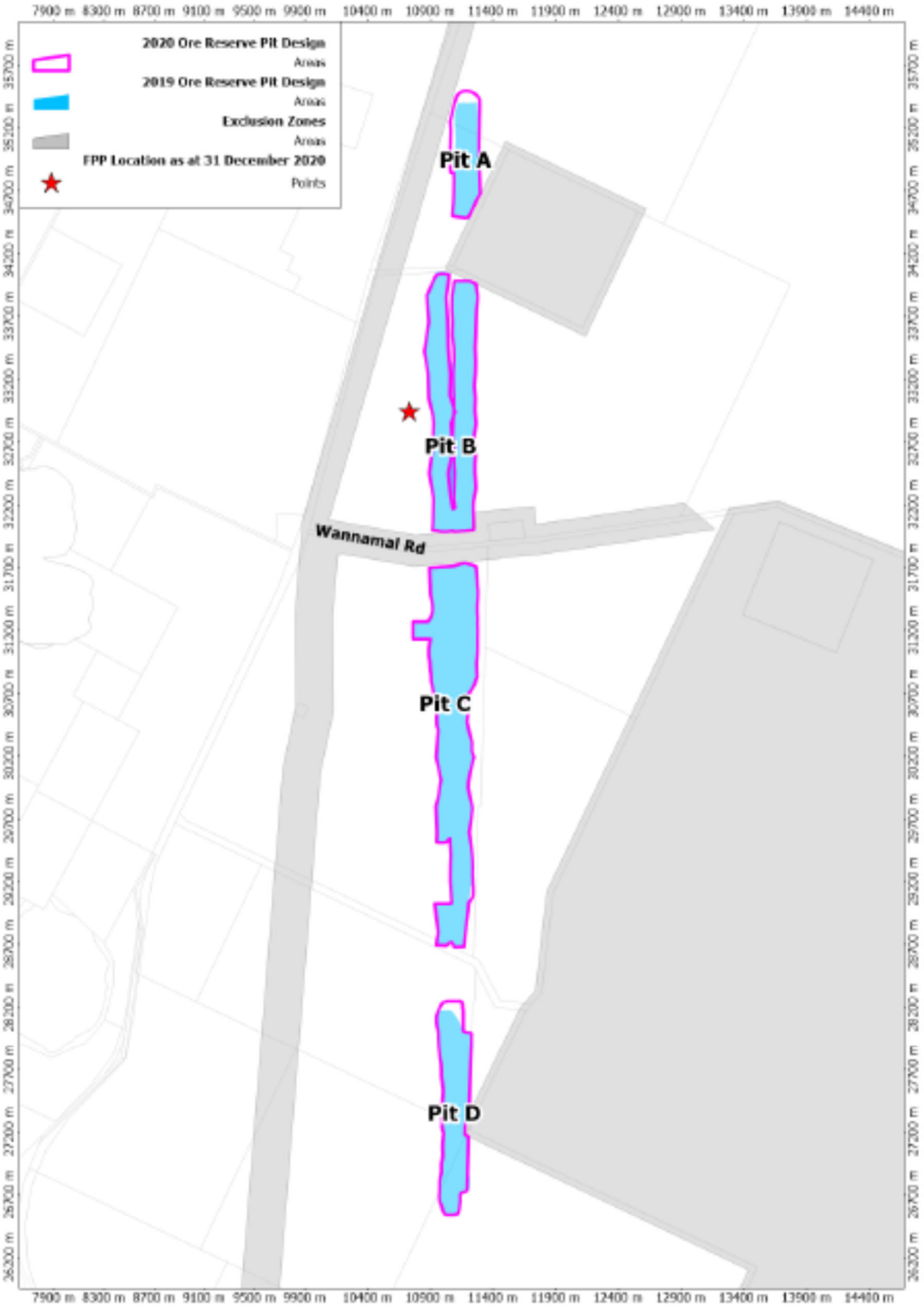

Figure 4 - 2019 and 2020 Ore Reserve Pit Outlines

Schedule 2

Boonanarring Heavy Mineral Sands Deposit Mineral Resource Estimate – 2020

EXECUTIVE SUMMARY

The Boonanarring Heavy Minerals Sands deposit is located in the north of the Perth Basin, Western Australia, approximately 120 km north of Perth. The Boonanarring mineralisation is hosted by the Pleistocene Yoganup Formation, which is a sequence of buried pro-graded shoreline sediments, with dunes, beach ridge and deltaic facies. This formation lies unconformably over the Lower Cretaceous Leederville Formation and is overlain by the Quaternary Bassendean and Guildford Formations. The basement to the main strandline mineralisation is demarcated by the increased slimes content of the Leederville Formation.

Mining commenced at the Boonanarring Project during November 2018 and additional geological, drilling, density, mineral assemblage and reconciliation data has been used to revise the mineralisation interpretation and to update the Mineral Resource estimate. In-pit mapping and production data from the eastern strandline identified a core of high-grade total heavy minerals (HM) including zircon. It also indicated that mineralisation with high iron oxide contents and are not suitable for processing. Some of this material was excluded from the 2019 resource update and the majority of material with high iron oxide content has now been excluded from the 2020 resource update.

Infill drilling and analysis of additional mineral composites were undertaken by Image during 2019 and 2020 to improve definition of the strandline mineralisation and mineral assemblage within the northern and western areas of the main strandlines and the southern strandlines. Optiro's updated 2020 Mineral Resource incorporates results from an additional 632 drillholes (for a total 23,765.2 m) drilled by Image during December 2019 and 2020 and an additional 71 composite samples that were analysed to determine the HM assemblage components. The 2020 Mineral Resource comprises data from 2,680 vertical, reverse circulation (aircore) drillholes for a total of 109,878.9m. Drill samples were collected by the metre from the cyclone. Total HM, slimes and oversize contents have been determined by screening, weight and heavy liquid separation.

The heavy minerals within the Yoganup Formation have been concentrated in two main strandlines that are continuous over a total north-south strike length of 10 km. The strandlines are separated by sands with low concentrations of heavy minerals of 50 m to 100 m width in the north and the strandlines coalesce in the south. The eastern strandline has a strike length of 9 km and is approximately 100 m wide and extends further north than the western strandline. The western strandline has a strike length of 9.6 km and is up to 220 m wide. An additional strandline of mineralisation is present to the east that has a strike length of 3.6 km and is up to 100 m wide and merges with the eastern strandline to the north.

Two additional strandlines, to the south-west of the main strandlines, are present in the southern part of the project area. These extend for approximately 3 km and 2.7 km north-south and have across strike widths of up to 120 m. These are overlain by a shallow sheet of mineralisation with dimensions of 350 m east-west and up to 600 m north-south. The strandlines are up to 15 m thick and have an average thickness of 4.5 m. The eastern strandline is higher in HM grade and the HM has a higher zircon content than the other strandlines.

The Boonanarring model has been updated to incorporate all data available as at 21 August 2020 and has been depleted for mining to 31 December 2020. Review of zircon and ZrO2 data indicated that a batch of samples analysed by ALS had calibration issues. This batch of samples was reanalysed, and the corrected zircon, ilmenite, leucoxene and rutile reported in October 2020. The resource model was updated in January 2021 to incorporate the corrected mineral assemblage data.

Updated interpretations of the mineralisation, using nominal cut-off grades of 2% and 10% total HM, were provided by Image. These interpretations used a minimum thickness of 2 m. In addition, a zone of

high zircon was defined within the eastern strand. In addition to the HM content, the interpretation of the mineralised strandlines included consideration of the slimes, oversize and iron oxide contents and the grain size data. Image undertook sachet logging of the HM concentrates from the 2019 and 2020 samples and available HM concentrates from earlier drilling. Sachet logging included assessment of the zircon content and quality and provided estimates of the iron oxide contents of the HM concentrates. The sachet logging was used to interpret areas of high (>40%) iron oxide and to exclude these from the strandline interpretation.

The 2020 resource model was constructed using a parent block size of 5 mE by 25 mN on 1 m benches; the parent blocks were allowed to sub-cell down to 1.25 mE by 12.5 mN by 0.25 mRL to more accurately represent the geometry and volumes of the geological and mineralisation horizons. A soil horizon of 0.5 m was incorporated into the model and block grade estimates were removed from this horizon.

Total HM, slimes and oversize block grades were estimated using ordinary kriging techniques and total HM was also estimated using inverse distance cubed (ID3) techniques. Reconciliation data indicates that the total HM recorded from production data is in-line with the total HM estimated using ID3 techniques and this has been used for resource reporting.

The Mineral Resource includes the results of 474 composite samples (from 803 drillholes totalling 5,374.6 m) which were analysed to determine the HM assemblage. The mineral assemblage data includes information from Iluka (magnetic separation followed by density separation using solutions of 3.85 g/cm3 and 4.05 g/cm3); XRF data (after microscope examination to exclude non-representative samples e.g. laterite); and QEMSCAN data. The results from QEMSCAN analysis of 20 composite samples, originally analysed using XRF, were used to calibrate the results from XRF. The QEMSCAN rules for the titanium mineral determination are ilmenite 50 to 70% TiO_2; leucoxene 70 to 95% TiO_2, and rutile >95% TiO_2. Block grades were estimated for the mineral assemblage components (ilmenite, rutile, leucoxene and zircon) using ID3 techniques. The mining study is to use the TiO_2 and ZrO_2 contents of the HM and the available TiO_2 and ZrO_2 data (from XRF analyses) were used to estimate block contents of TiO_2 and ZrO_2 using ID3 techniques.

A combination of lithology and grades (total HM, slimes and ZrO_2) was used to determine the density values for the 2020 resource model. Revised bulk density formulae for the strandline mineralisation were determined for the previous (2019) resource model using 19 bulk density measurements from the 2016 geotechnical drilling programme and 93 density measurements obtained during 2019. During 2020, an additional 64 measurements of bulk density were obtained including 47 from Pits A, B and C and this data was used for verification and minor modification of the 2019 density formulae.

The resource estimate has been classified according to the guidelines of the JORC Code (2012) into Measured, Indicated and Inferred Mineral Resources, taking into account data quality, data density, geological continuity, grade continuity and confidence in the estimation of heavy mineral content and mineral assemblage. Measured Resources are generally defined where drilling is at 20 m to 40 m on 100 m spaced section lines and where there is good coverage of mineral assemblage data. The Measured Resources include all of the high-grade core of the eastern strandline where the drilling is at a spacing of 5 m to 10 m across strike and on section lines spaced at 50 m to 100 m. Indicated Resources are generally defined where drilling is at 20 m to 40 m on 200 m lines, and Inferred Resources are defined within the southern area of Boonanarring where the drill spacing is up to 80 m on 400 m lines and there is limited mineral assemblage data. An Inferred classification has been assigned to zones of mineralisation that are outside of and adjacent to the interpreted mineralised strandlines.

Resource estimation of the mineral assemblage components is based on drillhole composites; however, the variability of the mineral assemblage components between the composites is low. There is a high degree of confidence in the quality of the zircon and ilmenite data and lower confidence in the rutile and leucoxene data. The combined leucoxene and rutile contribute less than 10% of the total heavy minerals and so the classifications applied to the total HM Mineral Resources have been applied to the mineral assemblage concentrations.

Polygons were used to define the existing pit bases and where the entire thickness of ore (defined from in-pit observations) has been extracted. Blocks within the mineralised domains that are below the base of the pit and within the base of pit polygons are not included in the Mineral Resource tabulation. Image advised a northing where mining has been completed within pits A, B and C. Polygons were created around the pit crest and these northings to define areas where it is expected that mining will not occur. Blocks within these areas have been flagged as sterilised and are not included in the Mineral Resource tabulation.

The Mineral Resource estimate, as at 31 December 2020, for the Boonanarring Heavy Mineral Sands deposit is reported in Table 1.1. This has been classified and reported in accordance with the guidelines of the JORC Code (2012) and is reported above a cut-off grade of 2.0% total heavy minerals. This cut-off grade was selected by Image based on technical and economic assessment and current mining practise at the Boonanarring Project. The resource model has been reported outside of the exclusion zones and sterilised areas and outside of mined pits A, B and C as at 31 December 2020 (i.e., mineralisation that has been mined or is below the base of the 31 December 2020 pits is excluded).

Table 1.1 Boonanarring Mineral Resources as at 31 December 2020

Classification	Million tonnes	Total HM %	Slimes %	Oversize %	% of total heavy mineral			
					Zircon	Rutile	Leucoxene	Ilmenite
Measured	7.4	7.3	13	5.0	19	3.1	4.0	51
Indicated	7.1	5.4	17	5.4	18	4.7	8.3	48
Inferred	1.4	3.5	18	7.8	16	4.1	5.0	53
Total	**15.9**	**6.1**	**15**	**5.5**	**19**	**3.8**	**5.7**	**50**

Notes:
1. Mineralisation reported above a cut-off grade of 2.0% total heavy minerals (HM).
2. The Boonanarring Mineral Resource has been classified and reported in accordance with the guidelines of the JORC Code (2012).
3. Total HM is within the +63 µm to -1 mm size fraction and is reported as a percentage of the total material; oversize material is +1 mm and slimes is -63 µm.
4. 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 Iluka's in-house methods, along with QEMSCAN and XRF methods. QEMSCAN rules used for mineral determination are: ilmenite: 50 to 70% TiO_2; leucoxene: 70 to 95% TiO_2; rutile: >95% TiO_2.
5. All tonnages and grades have been rounded to reflect the relative uncertainty of the estimate, thus sum of columns may not equal.
6. The resource excludes environmental zones, within 50 m of the Bartlett's Well and the Boonanarring Nature Reserves and buffers around major roads and the Dampier to Bunbury pipeline.

Compared to the September 2019 Mineral Resource, there has been a reduction in tonnage, mainly due to mining. The total HM and zircon grades have decreased in the Measured Resources and have increased in the Indicated and Inferred Resources. There has been an increase in the rutile and leucoxene grades for Measured, Indicated and Inferred Resources and an increase in ilmenite grades for the Measured and Inferred Resources and a slight decrease for the Indicated Resources. The overall resource tonnes have decreased by 50%, the total HM, rutile, leucoxene and ilmenite grades have all increased (by 4%, 43%, 63% and 8% respectively and there has been an overall decrease (of 8%) in the zircon grade.

Production data for tonnage, total HM, ZrO_2 and TiO_2 from 1 January 2019 to 31 December2020 is in-line with the model estimates. Depletion of the resource model by the 31 December 2020 pit surfaces and the base of pit polygon indicates that the mined volume is within 2% of the resource volume, the processed tonnage (including the stockpiles) is within 2% of the resource tonnage and the estimated grades for total HM and TiO_2 grade are within 5% and 4% of production, respectively. Reconciliation of the ZrO_2 grade is not as good with a 13% under-call compared to production. The contained total HM, ZrO_2 and TiO_2 are within 3%, 10% and 7% of production, respectively.

Appendix A JORC Code Table 1 criteria

The table below summaries the assessment and reporting criteria used for the Boonanarring deposit Mineral Resource estimate and reflects the guidelines in Table 1 of *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the JORC Code, 2012).

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling. These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.*	• Sampling of the deposit has been by a vertical reverse-circulation air-core method (RCAC). This is a mineral sands industry-standard drilling technique. • Samples are from intervals of 0.2, 0.5 m, 0.7 m, 1 m and 1.5 m and 2 m. The majority of samples (over 99%) are from intervals of 1 m. • For resource definition drilling, duplicate samples were taken at the cone splitter on the rig for QAQC analysis and to assess the retrospectivity of the samples. • 11 vertical diamond core holes were drilled in 2016 to obtain geotechnical and bulk density data.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• All Image RCAC drillholes are drilled vertically using an NQ-sized (76 mm diameter) drill bit. • All Iluka RCAC drillholes are vertical and were drilled using a BQ-sized drill bit (60 mm diameter). • Water injection is used to convert the sample to a slurry so it can be incrementally sampled by a rotary splitter. • 11 vertical diamond core holes were drilled to obtain geotechnical and density data in 2016 using a PQ sized drill bit (85 mm diameter).
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• 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.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• 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. • 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). • To preclude data entry and transcription errors, the logging data is captured into a digital data logger at the rig, which contains pre-set logging codes. • No photographs of samples are taken. HMC concentrates are retained. • The digital logs are downloaded daily and emailed to Image's head office for data security and compilation into the main database server. • 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. • Almost 97% of the drilling has been logged. The level and detail of logging is of sufficient quality to support Mineral Resource estimates. • Geotechnical holes have been logged and assessments as

		to pit stability determined.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• The majority of the samples (over 90%) are from 1 m intervals and 45% of samples were analysed for total HM, slimes and oversize. • 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. • Sample tickets with the interval's unique sample ID are placed in each bag. • 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. • Iluka reports having used a similar procedure (ILU Report TR-T15147), albeit no records are available to support this assertion. • 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. • Image considers the nature, quality and size of the sub-samples collected are consistent with best industry practices of mineral sands explorers in the Perth Basin region.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• 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. • Image engaged four laboratories (Western GeoLabs, Diamantina Laboratory, Diamond Recovery Services Laboratory and Robbins Metallurgical Laboratory). • Iluka used internal standards to quantify the accuracy of the drilling with acceptable results. Image inserted standards for drilling undertaken during 2014 to 2020. • Both Iluka and Image collected duplicate samples including field-duplicates of the primary sample, laboratory duplicates at the laboratory sub-sampling stage (post de-sliming) and laboratory re-submission duplicates to the original or alternative laboratories used by Iluka and/or Image. • Analysis of QAQC data for the drilling programmes indicates that it is of moderate to high quality and supports Mineral Resource estimation. • Three sets of mineral assemblage data have been used to estimate the ilmenite, leucoxene, rutile and zircon concentrations within the HM: – data from Iluka (magnetic separation followed by density separation using solutions of 3.85 g/cm^3 and 4.05 g/cm^3) – XRF data (after microscope examination to exclude non-representative samples e.g. laterite) – QEMSCAN data. Mineral assemblage samples analysed using AutoGeoSEM were not used as these were also analysed using XRF.

Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Image drilled a number of twin holes (within 10 m of Iluka holes). The twin holes compare favourably for HM and slimes grades. Oversize grades could not be compared as Image and Iluka use different size thresholds for oversize. • Image collected primary data on hard copy logs and also used a data logger. Data from laboratories was provided in digital form and compiled in Microsoft Access databases and spreadsheets. • Grain size analysis indicates that the zircon and TiO_2 minerals are ≤850 µm. • Results from QEMSCAN analysis of 20 composite samples, originally analysed using XRF, were used to calibrate the results from XRF with the QEMSCAN results. • All of the 2019 and 2020 composite samples were analysed by QEMSCAN and XRF, which was used to verify the QEMSCAN mineral counts.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drillhole collars at Boonanarring have been surveyed using hand-held GPS and RTK DGPS methods, with the latter method deemed most accurate. • The collar coordinates and survey ground controls have been tied to the Landgate GOLA database by a registered surveyor. • All collars for the Mineral Resource estimate have been adjusted to a LiDAR topographic model described below. • Data for Boonanarring 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. This transformation has been validated by Image's survey contractor. • The topographic model for Boonanarring is based on LiDAR survey. A review of this survey by Image's survey contractor revealed that the survey had an incorrect vertical datum; elevations are 0.3 m higher than measured at collars using RTK DGPS. The corrected LiDAR surface was used to constrain the Mineral Resource model.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The drillhole spacing is generally 20 m to 40 m across strike on section lines spaced at 100 m or 200 m along strike. Several sections on Block C were infilled to 5 m by 50 m, Block B down to 5 m by 100 m and Block A to 10 m by 100 m. Some areas have been drilled at a wider spacing of up to 80 m by 400 m. • The drill database used in the resource estimate comprises 2,680 drillholes for a total 109,878.9 m drilled by Image and Iluka between 1998 and 2020. • 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 474 mineral assemblage composites (from 5,374.6 m) from within the mineralised domains were used in the Mineral Resource estimate. • 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.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• All 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.*	• 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. • 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. • 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.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• The results and logging have been reviewed internally by Image's senior exploration personnel including checking of masses despatched and delivered, checking standard results, and verification logging of significant intercepts. • The database, sampling procedures and documentation were reviewed by Harlequin Consulting Pty Ltd in 2015. • In April 2013, CSA Global audited Robbins Metallurgical Laboratory and found the laboratory practices acceptable to support results for Mineral Resource estimation. • In 2019 audits were conducted at both the Diamantina and Western GeoLabs facilities by Image contractors.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Boonanarring deposit is within mining leases M70/1194 (expiry 15/12/2026) and M70/1311 (expiry 11/03/2034), exploration licence E70/3041 (expiry 9/06/2022) and general-purpose licence G70/250 (expiry 7/05/2034). Image has a 100% interest in each of these licences. • M70/1311 abuts Bartlett's Well and Boonanarring Nature Reserves and Image has allowed for a 50 m buffer zone (of no mining activity) adjacent to these reserves.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Boonanarring deposit was discovered by Iluka, who drilled out the central area to a Measured Resource status. The work is well documented in reports from Iluka, prior Mineral Resource estimators McDonald Speijers (2005) and Widenbar and Associates (2013), and Harlequin Consulting Pty Ltd (2014 and 2015).
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Boonanarring is hosted in the Perth Basin, in the Pleistocene Yoganup Formation on the eastern margin of the Swan Coastal Plain. • 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. • 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. • Boonanarring has three major strandlines of heavy minerals, which are interpreted to have been deposited during the Pleistocene in a notch in the local basement rock that may represent an ancient sea cliff. Lower grade mineralisation is present in the sands proximal to the higher-grade strandlines. • 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. Mineralisation within this has high zircon concentrations.

Drillhole information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* ○ *easting and northing of the drillhole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.*	• Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area. • There are no metal equivalent values assumptions applied in the Mineral Resource reporting.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.*	• The geometry of the Boonanarring 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*	• Refer to diagrams in report
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Not relevant – Mineral Resource defined. Exploration results are not being reported for the Mineral Resource area.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Slimes and HM grain size analysis reported under “Verification of sampling and assaying”. • Bulk density and geotechnical work reported under “Bulk Density” and “Logging”. • Metallurgical test results of bulk samples reported under “Metallurgical factors or assumptions”.

Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Drilling has been completed over the Boonanarring Northern Extension and the Boonanarring North-west areas, to the north of the Boonanarring deposit. Results are encouraging and Image is planning to develop resource models for these areas.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The drillhole database is managed by Image and has been compiled by CSA from Image's internal databases and from databases provided by Iluka. Maintenance of the database includes internal data validation protocols by Image. • Harlequin Consulting Pty Ltd completed a high-level review of the database in 2014 and found the method of construction of the database and validation procedures are acceptable and that the data is acceptable for Mineral Resource estimation. • For the Mineral Resource estimate the drillhole data was extracted directly from the Access drillhole database maintained by Image. • Data was further verified and validated by Optiro using mining software (Datamine) validation protocols, and visually in plan and section views.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	• Mrs Christine Standing (CP for the Mineral Resource estimate) visited the Boonanarring deposit during December 2016. • The sites of the geotechnical drillholes and exclusion zones for reporting of the Mineral Resources were inspected.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• 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. • For the purposes of resource estimation, these units were used in combination with grade criteria to define the following domains: – mineralised strandlines with +2% HM – high grade HM (generally over 10%) – high grade zircon contents within the eastern strandline – top of Leederville Formation – top of Yoganup Formation. • There is good confidence in the geological interpretation of the main strandlines. Confidence in the other lower grade domains is lower, as reflected by the classification.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The heavy minerals within the Yoganup Formation have been concentrated in two main strandlines that are continuous over a north-south strike length of 10 km. The strandlines are separated by sands with low concentrations of heavy minerals of 50 m to 100 m in the north and the strandlines coalesce in the south. The eastern strandline has a strike length of 9 km and is approximately 100 m wide and extends further north than the western strandline. The western strandline has a strike length of 9.6 km and is up to 220 m wide. • An additional strandline of mineralisation is present to the east that has a strike length of 3.6 km and is up to 100 m wide and merges with the eastern strandline to the north. • Two additional strandlines, to the south-west of the main strandlines, are present in the southern part of the project

		area. These extend for approximately 3 km and 2.7 km north-south and have across strike widths of up to 120 m. These are overlain by a shallow sheet of mineralisation with dimensions of 350 m east-west and up to 600 m north-south. • The strandlines are up to 15 m thick and have an average thickness of 4.5 m. The average depth to the top of the mineralised strandlines is 28 m.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	• Image and Image's consultant used Surpac and Datamine software to develop string files of the geology and mineralisation interpretations. • Data analysis and estimation were undertaken by Optiro using Snowden Supervisor, Datamine and Gretl software. • Optiro 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. • Drillhole sample data was flagged from the three-dimensional interpretation of the mineralised horizons. • Samples are from intervals of 0.5 m, 0.7 m, 1 m and 1.5 m and 2 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. • The drillhole spacing is generally 20 m to 40 m across strike on section lines spaced at 100 m or 200 m along strike. Several sections on Block C were infilled to 5 m by 50 m, Block B down to 5 m by 100 m and Block A to 10 m by 100 m. Some areas have been drilled at a wider spacing of up to 80 m by 400 m. • Extrapolation of up to 75 m along strike and approximately half the drill spacing across strike was used for the interpretation. • Block dimensions were selected from kriging neighbourhood analysis and reflect the variability of the deposit and the model's practicality for future mine planning. Sub-cells to a minimum dimension of 1.25 mE by 6.25 mN by 0.25 mRL were used to represent volume. • HM grade was estimated using ordinary kriging (OK) and inverse distance cubed (ID^3) into blocks of 5 mE by 25 mN by 1 mRL. • Slimes and oversize quantities were estimated using ordinary kriging (OK) into blocks of 5 mE by 25 mN by 1 mRL. • Zircon, leucoxene, rutile and ilmenite percentages within the HM fraction were estimated using ID^3 into the parent blocks. • The mining study is to use the TiO_2 and ZrO_2 contents of the HM and the available TiO_2 and ZrO_2 data (from XRF analyses) were used to estimate block contents of TiO_2 and ZrO_2 using ID^3 techniques. • The majority of the total HM and slimes, total HM and oversize, and slimes and oversize data is uncorrelated. • Correlation coefficients of the mineral assemblage data from within the mineralised domains indicate a moderate positive relationship between rutile and leucoxene, a poor positive correlation ilmenite and rutile, and between ilmenite and leucoxene and poor negative correlations between zircon and the other mineral assemblage components. • All variables were estimated separately and independently. • Boundary analysis was undertaken to determine the boundary conditions that were applied to the estimation of HM, slimes and oversize and the mineral assemblage components within the mineralisation domains. • Grade capping was applied to slimes % and oversize %. The top cut levels were determined using a combination of top cut analysis tools, including grade histograms, log

		probability plots and the coefficient of variation. • Variogram analysis was undertaken to determine the kriging estimation parameters used for OK estimation of HM, slimes and oversize and the search dimensions used for ID estimation of HM and mineral assemblage components. • Maximum HM grade continuity ranges are 820 m and 995 m along strike, 59 m and 78 m down-dip and 5.2 m and 4 m within the vertical direction for the eastern and western strandlines respectively. Maximum continuity ranges are 350 m along strike direction, 56 m across strike and 4 m in the vertical direction for the far eastern strandline. Within the southern area the total HM the maximum continuity ranges are 390 m and 250 m along strike, 42 m and 38 m across strike and 3.3 m and 2 m in the vertical direction. • The along strike continuity of the zircon and the titanium minerals was interpreted from variogram analyses to have along strike ranges of 430 m and 630 m respectively. As the composite samples consist of material collected and combined within drillholes, it was not possible to investigate the continuity of the mineral assemblage components in the vertical and across strike directions. • Kriging neighbourhood analysis was performed in order to determine the block size, sample numbers and discretisation levels. • Three estimation passes were used for HM; the first search was based upon the variogram ranges; the second search was double the initial search with reduced sample numbers required for estimation and the third search was expanded to completed grade estimation within each of the mineralised domains (up to six times the second search). Almost 95% of the total HM block grades were estimated in the first search pass, 5% within the second search pass and the remaining 0.5% estimated in the third search pass. • The HM, slimes and oversize estimated block model grades were visually validated against the input drillhole data and comparisons were carried out against the declustered drillhole data and by northing, easting and elevation slices. • The estimated block model grades for zircon, ilmenite, leucoxene and rutile were visually validated against the input drillhole data and comparisons were carried out against the drillhole data and by northing and easting slices. • Compared to the September 2019 Mineral Resource, there has been a 50% reduction in tonnage, mainly due mining. The total HM, rutile, leucoxene and ilmenite grades have all increased (by 4%, 43% 63% and 8% respectively and there has been an overall decrease (of 8%) in the zircon grade. • Production data for tonnage, total HM, ZrO_2 and TiO_2 from 1 January 2019 (post-commissioning) to 31 December2020 is in-line with the model estimates. Depletion of the resource model to 31 December 2020 indicates that the mined volume is within 2% of the resource volume, the processed tonnage (including the stockpiles) is within 2% of the resource tonnage and the contained total HM, ZrO_2 and TiO_2 are within 3%, 10% and 7% of production, respectively.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Mineral Resource estimate for the Boonanarring deposit has been reported at a 2.0% 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.

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.*	• Open pit mining methods are being used at Boonanarring. • The parent block size, selected from kriging neighbourhood analysis, is in-line with the current mining selectivity at Boonanarring. • Production data to 31 December 2020 is in-line with the estimated tonnage, total HM, ZrO_2 and TiO_2.
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.*	• Mineral assemblage data within the Mineral Resource estimate has been sourced from three different assemblage programmes: – data from Iluka (magnetic separation followed by density separation using solutions of 3.85 g/cm^3 and 4.05 g/cm^3) – XRF data (after microscope examination to exclude non-representative samples e.g., laterite) – QEMSCAN data. • Results from QEMSCAN analysis of 20 composite samples, originally analysed using XRF, were used to calibrate the results from XRF with the QEMSCAN results. • The QEMSCAN rules for the titanium mineral determination are as follows: – Ilmenite: 50 to 70% TiO_2 – Leucoxene: 70 to 95% TiO_2 – Rutile: >95% TiO_2 • Process metallurgical studies of bulk samples from Boonanarring were undertaken in 2013, 2015 and 2016 for the purpose of developing a process flowsheet for the deposit. • Mining and processing of the HM mineralisation commenced at Boonanarring in November 2018. Production data to 31 December 2020 is in-line with the estimated tonnage, total HM, ZrO_2 and TiO_2.
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.*	• Environmental exclusion zones, within 50 m of the Bartlett's Well and Boonanarring Nature Reserves, have been defined and these areas are excluded from the reported Mineral Resource.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.* •	• A combination of lithology and grades (total HM, slimes and ZrO_2) were used to determine the density values and density formulae for the resource model. • Bulk density values and formulae were determined using bulk density measurements from the 2016 geotechnical drilling programme and density measurements obtained during 2019. Values and formulae verified and adjusted where required using data obtained during 2020.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The estimate has been classified according to the guidelines of the JORC Code (2012), into 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. In plan, polygons were used to define zones of different classification within each of the mineralised domains. • Measured Resources are defined within the high-grade core of the eastern strandline where the drilling is at a spacing of 5 m to 10 m across strike on section lines spaced at 50 m to 100 m. Within the strandlines, Measured Resources are generally defined where drilling is at 20 m to 40 m on 100 m spaced section lines and where there is good coverage of mineral assemblage data. • Indicated Resources are generally defined where drilling is at 20 m to 40 m on 200 m lines. • Inferred Resources are defined within the southern area where the drill spacing is up to 80 m on 400 m lines and there is sparse mineral assemblage data. • An Inferred classification has been assigned to zones of mineralisation that are outside of and proximal to the interpreted mineralised strandlines.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource has been reviewed internally as part of normal validation processes by Optiro. • No external audit or review of the current Mineral Resource has been conducted.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The assigned classification of Measured, Indicated and Inferred reflects the Competent Persons' assessment of the accuracy and confidence levels in the Mineral Resource estimate. • The confidence levels reflect production volumes on a monthly basis. • Mining and processing of the HM mineralisation commenced at Boonanarring in November 2018. Production data for tonnage, total HM, ZrO_2 and TiO_2 from 1 January 2019 (post-commissioning) to 31 December2020 is in-line with the model estimates. Depletion of the resource model to 31 December 2020 indicates that the mined volume is within 2% of the resource volume, the processed tonnage (including the stockpiles) is within 2% of the resource tonnage and the contained total HM, ZrO_2 and TiO_2 are within 3%, 10% and 7% of production, respectively.

The table below summaries the assessment and reporting criteria used for the Boonanarring deposit Ore Reserves 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).

Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for theconversion to an Ore Reserve.	The Mineral Resource estimate used was prepared by Christine Standing of Optiro Pty Ltd and classified in accordance with the JORC 2012 guidelines. Thebasis of this Resource estimate is as at 31 December 2020. The corresponding Datamine block model is bn_15jan2021.dm
	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resources are reported inclusive of the Ore Reserves.
Site visits	Comment on any site visits undertaken by the Competent Person and theoutcome of those visits. If no site visits have been undertaken indicate why this is the case.	A site visit was undertaken in September 2019 by Per Scrimshaw of Entech PtyLtd (the Competent Person for Estimation and Reporting of Ore Reserves) withthe purpose of the visit being to assess requirements for evaluating the 2019 Ore Reserve. Due to COVID-19 travel restrictions Mr Scrimshaw was unable toconduct a site visit during 2020, however, a senior Entech representative from the Perth office (Mr Daniel Donald) did undertake a site visit on his behalf during December 2020.
Study status	The type and level of study undertaken to enable Mineral Resources to beconverted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	Image Resources completed a Pre-feasibility study in 2013 and completed a Bankable Feasibility Study in May 2017. Image Resources commenced mining operations in May 2018 and processing operations in November 2018. The mine plan underpinning the economic assessment of the Ore Reserve is derived from the existing site operating budget planning. The physicals from this have been evaluated through the Image corporate financial model.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	The cut-off grade has been calculated using optimisation software on a cashflow basis and an individual cut-off applied to each block within the model.The calculations consider, among other considerations, individual mineral andproduct values, operating costs, and other practical considerations (including ore and overburden variabilities) and HM and product recoveries.

Criteria	JORC Code explanation	Commentary
		Pit shells upon which final pit designs are based are generated using this economic cut-off. A top of ore surface for each pit location has been provided to Entech by the Boonanarring site, which Entech understand to represent the current site surface denoting the anticipated interface between the economic ore and waste after additional consideration of the practicalities of selective mining under the current mine fleet and extraction method. All mineralisation withinthe design pits but below this surface is considered ore.
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	The process for converting the Mineral Resource to an Ore Reserve estimate included pit optimisation studies, followed by detailed mine design and scheduling. Pit designs and life-of-mine schedules generated as part of the OreReserve estimate have been reviewed by the mine site operating technical personnel and have been deemed suitable by them as consistent with existingsite budget planning.
	The choice, nature and appropriateness of the selected mining method(s)and other mining parameters including associated design issues such as pre-strip, access, etc.	The truck and shovel method is employed for the mining of the Boonanarring project. The truck and shovel method is used in similar operations in Australia.Appropriate factors have been applied to the Mineral Resource by optimization and design to derive the Ore Reserves based on operating experience from the first 30 months of mining.
	The assumptions made regarding geotechnical parameters (e.g. pit slopes,stope sizes, etc), grade control and pre-production drilling.	Due to the depth of the Boonanarring deposit a geotechnical study wasconducted by SRK Consulting. A total of 11 holes were drilled to depths of 60 m. Eastern walls range from 32 to 38 degrees and western walls range from 38 to 44 degrees. Updated geotechnical guidance for Pit C and D was received justprior to the reporting date of this estimate (22 December 2020) and whilst pitdesigns have yet to be updated accordingly, Entech have reviewed the updatedguidance and understand the current pit designs to be conservative in relationto the most recent slope design guidelines. Grade control is conducted by a Geologist in pit using panning to establish ore contacts, in conjunction with the Mine Surveyor who is used to stake out ore surfaces.

Criteria	JORC Code explanation	Commentary
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	The Mineral Resource block model used as a basis for mine planning models supporting this Ore Reserve estimate is bn_15jan2021.dm. This model has been depleted for mining as at the date of the Ore Reserve estimate.
	The mining dilution factors used.	Planned mining dilution has been incorporated into the Ore Reserve through the inclusion of low-grade material reporting below the top-of-ore surface but outside of the defined strand mineralised domains. This is predominantly Domain 200 material and is classified Inferred in Mineral Resource estimation. Approximately 0.9Mt of this material at a grade of 1.3% HM and 14.1% ZrO_2 isincluded in the Ore Reserve estimate. This is approximately 18% on an ore tonnes basis but only 2% of the Ore Reserve contained ZrO_2. A mining recoveryfactor of 100% is assumed based on current mining operations and mining techniques.
	The mining recovery factors used.	
	Any minimum mining widths used.	A minimum mining width of 30 m was applied. Design for Pit C includes provision for a breakthrough between east and west strands at the southern end of that Pit to ensure practical mineability.
	The manner in which Inferred Mineral Resources are utilised in miningstudies and the sensitivity of the outcome to their inclusion.	Inferred Mineral Resources are included in the Ore Reserve reporting as planned dilution where they report underneath the current site top-of-ore surfaces and are unable to be discretely separated from the ore mining activities during in pit operations. Approximately 0.9Mt of this material is included in the Ore Reserve estimate, or approximately 18% on an ore tonnesbasis. The inclusion of this material, whilst significant in terms of feed tonnes, does not materially affect the underlying economics of the Ore Reserve as thecontained ZrO_2 (which represents the bulk of the Revenue in the HMC) within this material is only approximately 2% of the total Ore Reserve ZrO_2. The Ore Reserve is economic with the inclusion of this Inferred dilution material and any revenue generated from its inclusion is insignificant in comparison to that derived from the Measured and Indicated components of the pit inventories.

Criteria	JORC Code explanation	Commentary
		The main impost associated from its inclusion is an increase in processing and fixed costs.
	The infrastructure requirements of the selected mining methods.	Infrastructure required including office blocks, mining contractor workshopand associated facilities have been constructed and are being utilised.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	The ore is processed through a Wet Concentration Plant (WCP) to produce a Heavy Mineral Concentrate (HMC) which is shipped through the Port of Bunbury to customers with offshore Mineral Separation Plants (MSP).
	Whether the metallurgical process is well-tested technology or novel innature.	The WCP uses traditional mineral sands separation techniques. The processhas been widely utilised in similar operations.
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	The Metallurgical parameters have been derived from reconciled recoveries based on the first 24 months of process operation. Process recoveries used forthe Ore Reserve estimate are • FPP Recovery of 99% • WCP ZrO_2 Recovery of 98% • WCP TiO_2 Recovery of 91.6%
	Any assumptions or allowances made for deleterious elements.	Deleterious materials include oversize material and clay fines which are managed as part of Image's rehabilitation management plan and mildly radioactive material, which is shipped with the HM concentrate at levels well below public safety limits.
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as awhole.	The Ore Reserve estimation has been based on the recoveries and processes outlined above which are derived from actual operational experience in this deposit.
	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	Yes, mine planning filters and metallurgical recovery through to final products.

Criteria	JORC Code explanation	Commentary
Environmental	The status of studies of potential environmental impacts of the mining andprocessing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage andwaste dumps should be reported.	The Boonanarring Project has been operational since 2018. All environmental,heritage and tenure approvals required under Sate and Commonwealth legislation were granted prior to operations commencing.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	Image has purchased most of the land required. The previous Ore ReservePit D design crest has been further constrained in this Ore Reserve estimate tocadastral boundaries where uncertainty regarding land access is currently unresolved. The Competent Person is not aware of any other impediments to land access. Image owns and operates a WCP, feed preparation plant (FPP), pipes, pumps,and power infrastructure for mining at Boonanarring. Labour has been sourced from the local area and surrounds.
Costs	The derivation of, or assumptions made, regarding projected capital costsin the study.	Projected capital costs relate to sustaining capital only and are considered appropriate. These include suitable allowance for process related sustaining capital and an additional FPP relocation south of Wannamal Rd currently scheduled mid-2021. A total provision of AU$3.7M for sustaining capital is currently budgeted for the remaining LOM at Boonanarring.
	The methodology used to estimate operating costs.	Boonanarring is an operating mine and the assumptions made during the BFS have been replaced by an Image maintained business model using standard cost centres and cost elements which are used for annual budgeting purposesand monthly reporting. Extracts from this model have been used to derive costinputs unless otherwise noted. Mining costs have been estimated using current mining contract schedule of rates based on estimated haulage distances consistent with the current mine plan. HMC related cartage and port handlingcosts have been based on recent invoiced unit rates submitted by the haulagecontractor.

Criteria	JORC Code explanation	Commentary
	Allowances made for the content of deleterious elements.	Cost penalties are applied to deleterious elements associated with slime disposal through detailed analysis of flocculant usage following commencement of tailing co-disposal. Product specifications deals with deleterious elements.
	The source of exchange rates used in the study.	Image monitors a range of recognised external forecasters of foreign exchangerates but ultimately the exchange rates applied are an Image assessment. Exchange rate projections in the Image financial model vary on a period basis,however a 0.725 USD:AUD average exchange rate has been used in this study,for the 24 months projected remaining LOM at Boonanarring.
	Derivation of transportation charges.	Transportation charges reflect contract quotes with service providers. The transportation charges are included in logistics costs. Logistics costs include provision for bagging, handling, transport to port, port costs and shipping.
	The basis for forecasting or source of treatment and refining charges,penalties for failure to meet specification, etc.	Allowances for these aspects are considered within the HMC pricing model ascurrently applicable to offtake agreements.
	The allowances made for royalties payable, both Government and private.	Allowances made for royalties include a 5.0% revenue royalty. There will be nolandowner payments as Image intends to purchase all the land.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	Revenue factors are used to establish pit sensitivities and to test for robustness of the Ore Reserve. Optimisation shells have been generated on 1% revenue increments, encompassing the bulk of the Resource. Revenue calculations for pit optimisation studies are based on a value per unitof ZrO_2 and TiO_2. ZrO_2 revenue assumptions at the southern end of the project(remaining block C and D) are approximately 9% higher than that for the northern end as the quality of the Zircon is anticipated to improve whilst mining in that area, and hence no adjustments for product quality have been applied there. Final revenue estimates used for Entech spatial value modelling have been reconciled to those

Criteria	JORC Code explanation	Commentary
		estimated in Image financial model using final Ore Reservephysicals. Both revenue models correlate very well, with a 3% variance between models over the LOM.
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	HMC product pricing is based upon a detailed pricing model contained within Image's offtake agreements. These agreements are commercial-in-confidence, however the pricing model calculates the value of the HMC based on an agreedestimate of the value of the contained HM products (ZrO_2 and TiO_2) at Chinese CIF market prices. The underlying pricing assumptions of contained HM products (zircon, ilmenite, rutile and leucoxene) are based upon TZMI long term prices adjusted for product quality and other factors.
Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	Image uses independent third-party reports as a guide as to future supply/demand, and hence potential pricing, for the underlying products contained within its HMC and applies these projected prices to its HMC sales price forecasts adjusted, where necessary, for expected quality differences of underlying products and expected specific demand for Image HMC. Demand for mineral sands products typically follow global GDP, with short term forecasts indicating strengthening demand for Ti products and a stabilising in zircon demand / pricing over the remaining period of Boonanarring project operation.
	A customer and competitor analysis along with the identification of likely market windows for the product.	Image produce an HMC containing ZrO_2 and TiO_2 products and 100% of ImageHMC product is contracted under a life of mine offtake to three parties.
	Price and volume forecasts and the basis for these forecasts.	100% of Image HMC product is contracted under a life of mine offtake to threeparties, with no upper or lower limits.
	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	HMC sales are based on assayed TiO_2 and ZrO_2 % within the Heavy Mineral Concentrate produced. All shipments produced to date have met customer specification.
	The inputs to the economic analysis to produce the net present value	To demonstrate the Ore Reserve is economic it has been evaluated through

Criteria	JORC Code explanation	Commentary
Economic	(NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	both a high-level economic analysis using the Entech spatial value model, as well as a more detailed Image corporate financial model. This process has demonstrated the Ore Reserve generates positive period cash flows under both models. Discounted cashflows have been assessed in the high-level economic model using rates of 6%, 8% and 10%. Macro-economic assumptions used in the economic analysis of the Ore Reserves, such as foreign exchange, inflation and discount rates have been internally generated and determined through detailed analysis by Image Resources and benchmarked against commercially available consensus data where applicable.
	NPV ranges and sensitivity to variations in the significant assumptions andinputs.	Project sensitivity analysis has been undertaken within the detailed financial model on six key economic assumptions, with cash flow most sensitive to exchange rates and HM grade / recovery. At -20% individual variances to eitherof these variables the project remains highly economic over life of mine and generates significant positive cashflows
Social	The status of agreements with key stakeholders and matters leading tosocial licence to operate.	Agreements are in place with current relevant stakeholders to allow thecontinued extraction of Ore Reserves until the last few months of the current mine plan. Negotiations are well advanced to secure access to these Ore Reserves in the time required. IMA has a comprehensive and well received community engagement program established well before commencement of operations.
Other	To the extent relevant, the impact of the following on the project and/oron the estimation and classification of the Ore Reserves:	
	Any identified material naturally occurring risks.	No identifiable naturally occurring risks have been identified impacting the OreReserves.
	The status of material legal agreements and marketing arrangements.	Legal agreements and government approvals are in place to allow thecontinued extraction of the remaining Ore Reserves, except for Landowner agreements for the last few months of the current mine plan. Negotiations are well advanced to secure access to the remaining Reserves in the time required. 100% of Image HMC product is contracted under a life of mine offtake to three parties.

Criteria	JORC Code explanation	Commentary
	The status of governmental agreements and approvals critical to theviability of the project, such as mineral tenement status, and governmentand statutory approvals. There must be reasonable grounds to expect thatall necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlightand discuss the materiality of any unresolved matter that is dependent ona third party on which extraction of the reserve is contingent.	The Boonanarring Project has been operational since 2018. All environmental,heritage and tenure approvals required under Sate and Commonwealth legislation were granted prior to operations commencing.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	Mineral Resources converted to Ore Reserves as per JORC 2012 guidelines. i.e.Measured to Proved, Indicated to Probable. Inferred material is only included as a planned dilution and is apportioned on a pit basis based on the ratio of Measured to Indicated ore tonnes within that pit.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The result reflects the Competent Person's view of the deposit.
	The proportion of Probable Ore Reserves that have been derived fromMeasured Mineral Resources (if any).	No Probable Ore Reserves have been derived from Measured MineralResources in this estimate.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	The Ore Reserve has been estimated by Independent consultants Entech Pty Ltd with Image providing the relevant direction and Entech providing Competent Person signing off on the Ore Reserve. Entech have undertaken internal peer review during the process.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemedappropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative	Confidence in mine design and schedule are high as mining rates and modifyingfactors are based on actual site performance. Confidence in operational costs is high given the mine is in operation and costs,prices and recoveries are well understood.

Criteria	JORC Code explanation	Commentary
	accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	
	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.	The statement relates to global estimates.
	Accuracy and confidence discussions should extend to specific discussionsof any applied Modifying Factors that may have a material impact on OreReserve viability, or for which there are remaining areas of uncertainty atthe current study stage.	There remains some uncertainty as to the amount of internal dilution that will be encountered through mining over the remaining mine life at Boonanarring under current mining methods. This modifying factor is not considered to be material to the economic viability of the Reserve due to thelow contained ZrO_2 in the dilution material. The Competent Person expects that ore mining will be able to selectively discard much of the material in operations, however, this Reserve estimate adopts the current operating siteview and mine planning assumptions in this regard – which is a more conservative assumption.
	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Boonanarring is an on-going operation and as such there is the opportunity tocompare the Ore Reserves estimation with actual production data. Mining and processing of the HM mineralisation commenced at Boonanarringin November 2018. Production data for tonnage, total HM, ZrO_2 and TiO_2 from 1 January 2019 (post-commissioning) to 31 December 2020 is in-line with the Mineral Resource model estimates. Depletion of the Mineral Resource model to 31 December 2020 indicates that the mined volume is within 2% of the resource volume, the processed tonnage (including the stockpiles) is within 2% of the resource tonnage and the contained total HM, ZrO_2 and TiO_2 are within 3%, 10% and 7% of production, respectively. Similar reconcile on contained HM, ZrO_2 and TiO_2 is seen when only depletion for the period since the previous Ore Reserve disclosure is considered with the model reporting within 3%, 6% and 7% of production, respectively, in that 15-month period.