Australian Securities Exchange Notice

18 February 2020 ASX: ILU

ENEABBA MINERAL SANDS RECOVERY PROJECT
ORE RESERVE ESTIMATE

Iluka Resources Limited (Iluka) today announces an Ore Reserve estimate for the Eneabba Mineral Separation Plant (MSP) By-Product deposit following the completion of a Definitive Feasibility Study for the Eneabba MSP By-Product Ore Reserve. This Ore Reserve forms the basis of the Eneabba mineral sands recovery project, located at Eneabba, Western Australia.

Eneabba MSP By-Product Ore Reserve

The Eneabba MSP By-Product Ore Reserve is estimated to contain a total Ore Reserve of 0.96mt (0.81mt Proved and 0.15mt Probable) at a Heavy Mineral (HM) grade of 83.5%, to contain 0.80mt of HM (0.68mt Proved and 0.12mt Probable). The total Ore Reserve mineral assemblage in HM is estimated to contain approximately 26% zircon and 20% monazite.

Further details are provided below.

Eneabba Mineral Sands Recovery Project

The Eneabba mineral sands recovery project involves the extraction, processing and sale of a historical monazite-rich tailings stockpile that is currently stored in a mining void at Eneabba.

Phase 1 of the project involves extraction and sale of zircon-monazite concentrate via a simple process. The project has received Board approval and is underpinned by an offtake agreement for 50 thousand tonnes of concentrate per annum for 2 years. Site construction and off-site fabrication activities for the project are underway with expected project capex for Phase 1 less than $10 million. The project is due for commissioning to commence in H1 2020, and first sales in Q3 2020.

Study work into a potential Phase 2 of the project, involving further processing of material, is also being progressed.

Monazite and Rare Earth Elements

Monazite is a heavy mineral containing the rare earth elements neodymium, praseodymium, cerium and lanthanum. These are used in a range of applications including in the manufacture of permanent magnets for use in electric motors (e.g. in electric vehicles) and wind turbines.

Authorised for release by the Company Secretary.

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MSP By-Product Ore Reserve Estimate – Overview

The Eneabba mineral sands recovery project (Phase 1) involves the extraction, processing and sale of a historical monazite rich MSP By-Product stockpile that is currently stored in a mining void at Eneabba, Western Australia. The successful completion of a Definitive Feasibility Study and Board approval in 2019 has the project on track for commissioning to commence in H1 2020, with first sales in Q3 2020.

The MSP By-Product Mineral Resource was reported in an ASX announcement released on 24 July 2019, titled "Eneabba Mineral Sands Recovery Project Updated Mineral Resource Estimate". The resulting Eneabba MSP By-Product Ore Reserve estimate is summarised in Table 1.

Ore Reserve Category	Reserve Tonnes[1]	In situ HM Tonnes	HM	Slimes	Mineral Assemblage in HM[2]			
					Zircon	Monazite	Xenotime	Ilmenite
	(Mt)[3]	(Mt)	(%)	(%)	(%)	(%)	(%)	(%)
Proved	0.81	0.68	84.4	3.0	26	20	1.2	33
Probable	0.15	0.12	78.3	3.7	28	15	1.2	37
Total[4]	**0.96**	**0.80**	**83.5**	**3.1**	**26**	**20**	**1.2**	**33**

Table 1: Ore Reserve estimate summary of the MSP By-Product Ore Reserve estimate, reported in accordance with the guidelines of the JORC Code (2012 Edition).

Notes:
1. Ore Reserves are a sub-set of Mineral Resources.
2. Mineral assemblage is reported as a percentage of HM.
3. In situ (dry) metric tonnage is reported.
4. Rounding may generate differences in the last decimal place.

By-product material from the Narngulu MSP, located east of Geraldton, has been stockpiled at Eneabba since the early 1990's. At the time, demand for the by-product declined and Iluka (and predecessor companies) resolved to store mineral sands concentrate with high monazite credits in anticipation of a potential resurgence in demand and ability to commercialise the material. The monazite contains valuable Rare Earth Elements (REE) which are now in demand for a range of modern technology applications.

Being a stockpile there is no geological structure. The stockpile physically presents as a body of fine grained sand, approximately300m in length, 150m wide, varying from 1 to 15m thickness. The fine grained, dark brown to black material is easily distinguishable from the underlying yellow clayey sand. A half to one meter cap of orange brown, gravelly, clayey sand covers the resource. A mixed zone of the by-product and capping immediately below the capping with high HM grade in combination with elevated slimes and oversize is recognised, being defined in the resource estimation and reporting.

While there is considerable variation in the HM assemblage, large areas of the by-product have a consistent character which is interpreted to reflect the campaign processing of material from mine sites through the Narngulu MSP.

The MSP By-Product Ore Reserve is located approximately 8km south-south-east of the Eneabba town site within the historically mined South Tails area. The location of the MSP By-Product Ore Reserve is shown on Figure 1.

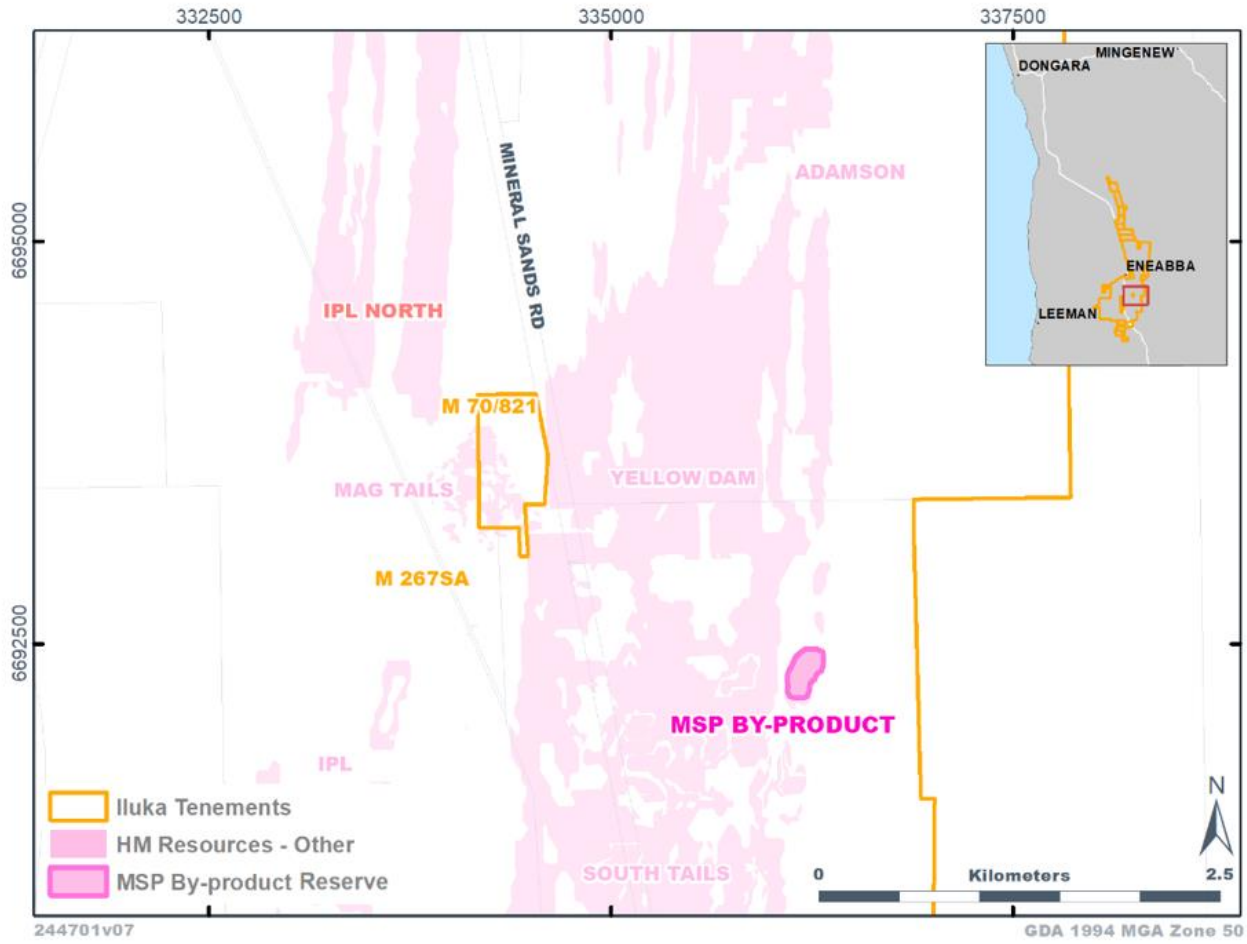

Figure 1: Eneabba summary plan showing the MSP By-Product Ore Reserve in relation to current infrastructure and HM Mineral Resources.

MSP By-Product Ore Reserve - Summary of Reporting Criteria

As per ASX Listing Rule 5.9 and the 2012 JORC reporting guidelines, information material to the MSP By-Product Ore Reserve estimate is summarised below. For more detail, please refer to the JORC Code Table 1, Section 4 in Appendix 1.

Material assumptions and outcomes from the Definitive Feasibility Study

Iluka completed a Definitive Feasibility Study (DFS) in 2019 that enables the Mineral Resources to be converted to Ore Reserves. The DFS showed that the project is technically low risk and displays attractive financial characteristics on the key metrics that Iluka uses to assess project development decisions, including IRR, NPV and payback.

Capital and operating costs have been accounted for in the projects financial modelling. The operating cost estimate has been derived from a combination budget quotations, estimates, factored or built-up rates, historical data and provisional or lump sum allowances where the use of the aforementioned methods are not possible. Capital costs have been derived by internally using project drawings, specifications, models, P&ID's, equipment lists and associated schedules and prepared by the contractors and suppliers.

Reserve Classification

The stated Proved and Probable Ore Reserves correspond with the Measured and Indicated Mineral Resources for the MSP By-Product Stockpile as reported in an ASX announcement released on 24 July 2019, titled "Eneabba Mineral Sands Recovery Project Updated Mineral Resource Estimate". The category distribution is shown in Figure 2.

There are no Inferred Resources included in the stated Ore Reserve numbers.

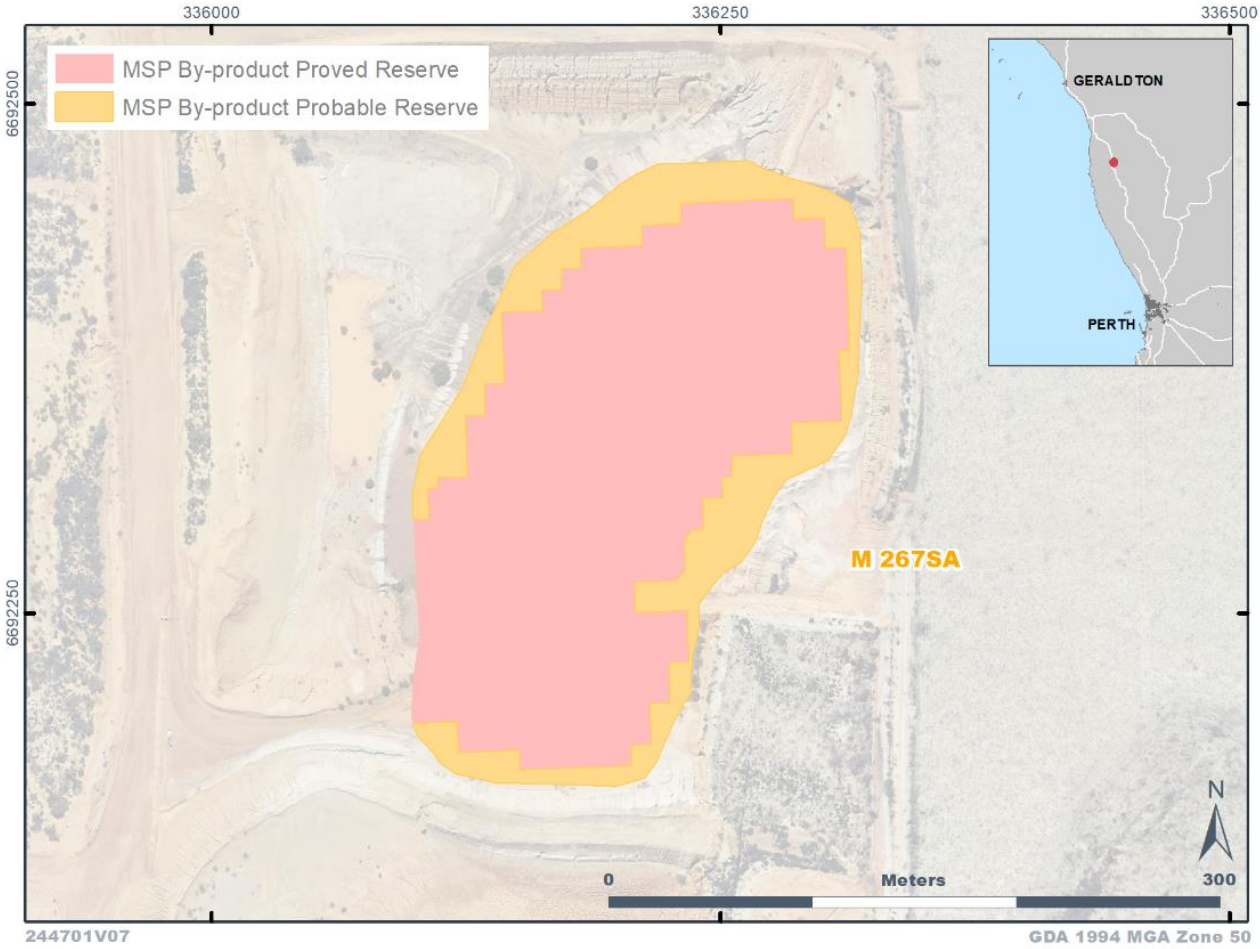

Figure 2: MSP By-Product Ore Reserve JORC category distribution.

Mining and recovery factors

The mining will be campaigned and require a Front End Loader (FEL) to move the by-product from the stockpile and feed into a mobile screening plant. A bulldozer will be required for short periods of time to push the top of the by-product stockpile down to enable safe access by the FEL. Once dry screened, the material will be loaded into dump trucks and dumped near the Wet Screening Plant (WSP) for processing.

Mining of the thin layer of waste capping material covering the stockpile will be conducted using a truck and shovel fleet.

Grade control will occur during the mining process, with daily sampling to analyse materials for blending. Blending and grade control will occur during the mobile screening process within the pit. The heavy mineral sand is easily distinguishable from the underlying yellow clayey sand and as such minimal dilution or ore loss is expected.

Modifying factors

Modifying factors such as processing recoveries have been applied from historical performance and results from work programs. The operating cost estimates have been derived from a combination of budget quotations, estimates, factored or built-up rates and historical data sourced from other Iluka mine sites.

The project is located with the mining tenements M267SA and M70/821.

Marketing arrangements are commercially sensitive, but the price assumptions are based on fixed price and volume contracted sales agreements. The price and volume details of those contracts are commercially sensitive, as they are the result of confidential commercial negotiations.

The project has a positive NPV sufficient to meet Iluka's internally generated investment criteria.

All regulatory approvals (including Works Approval, Mineral Export Permit and Project Management Plan (Department of Mines, Industry Regulation and Safety) have been secured.

Infrastructure requirements for the project include: administration buildings; workforce accommodation; power supply; communications; workshops and stores including maintenance facilities; site access roads; weighbridge; light vehicle fleet; contract mining fleet; screening plants and WSP.

The finished Mineral Sands Concentrate will be stored on site, followed by transport by road to Iluka's Mineral Separation Plant at Narngulu and then, once until sufficient Mineral Sands Concentrate has been stockpiled at Narngulu, transport by road to the Port of Geraldton for export by ship.

Processing

Material stockpiled is fed into the WSP by an FEL. The WSP completes primary separation of any remaining oversize material and from any fine clay/slimes. The WSP uses a wet vibrating screen to remove any material above 1mm in particle size.

Desliming cyclones are then used to remove fine clay particles, leaving a clean product. The process involves the use of water, screening equipment and de-sliming cyclones to recover the saleable mineral sands concentrate.

This process utilises known technology where the performance and recovery of the mineral products has been well established by Iluka in current and past operations.

Cut-off grades

The cut-off grade has been calculated using optimization software and an individual cut-off grade applied to each block within the model. The calculations consider overall HM grade and individual assemblage product values, operating costs, recoveries and modifying factors. An economic optimisation is performed to determine if a block is viable to mine, and therefore be included in the Ore Reserve.

Estimation methodology

Pit optimisations were conducted using IMS Minemap mine planning software. This is industry standard software and utilises the Lerch-Grossman algorithm. The optimisation parameters used consisted of costs, revenues and recoveries and other modifying factors.

The results of the pit optimisations and designs were used for production scheduling and economic evaluation.

Competent Person statement

The information in this report that relates to Ore Reserve estimates is based on, and fairly represents, information and supporting documentation prepared by Mr Andrew Walkenhorst, a permanent employee of Iluka.

Mr Walkenhorst is a member of the Australasian Institute for Mining and Metallurgy (MAusIMM) and he has sufficient experience relevant to the style of mineralisation and type of deposits under consideration and to the activity which is being undertaken to be considered a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves', the JORC Code 2012 Edition. Mr Walkenhorst consents to the inclusion in this report of the matters based on the information, in the form and context in which they appear.

Appendix 1 - JORC Code, 2012 Edition – Table 1 Commentary

Section 1 Sampling Techniques and Data (MSP By-Product Mineral Resource)

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

CRITERIA	COMMENTARY
Sampling techniques	The MSP By-Product Mineral Resource was sampled using BQ (49 holes) and NQ (305 holes) diameter Reverse Circulation Air Core (RC-AC) drill holes. A total of 4432.7m has been drilled utilising 1m length sampling from a rotary splitter chute. All holes were drilled vertically, which is essentially perpendicular to the mineralisation. Material is presented to a rotary splitter that rotates at a regular speed to take a representative split. For 2010 drilling, a 25% split was taken for geological logging and sample analysis with the remaining 75% retained for metallurgical test work. For 2018 drilling, about 15% of the sample was collected for geological logging and analysis. Duplicate samples were taken from a second split at a rate of one in every 34 primary samples assayed. All exploration utilised the same drilling methodology and assay analysis techniques. RC-AC drilling was used to obtain a 1m sample from which approximately 1 kg was collected using a rotary splitter. All samples were submitted for assay. The samples were dried, de-slimed (material <53µm removed) and had oversize (material +2mm) removed. 100g of the sample was subjected to float/sink separation using Lithium-Sodium-Tungsten (SG=2.85). The sinks were dried and weighed giving the HM content. HM sinks were then analysed by XRF at internal Iluka laboratories or by a combination of XRF and laser ablation at Bureau Veritas in Canning Vale, Perth. The XRF data was used to calculate a mineral assemblage based on stoichiometric formulae and incorporated into the drill hole file prior to interpolation. Mineral species content was determined by the following formula: • Zircon = 1.488 * ZrO2% • Monazite = 3.174 * CeO2% • Xenotime = 2.041 * Y2O3% • Staurolite = 1.818 * Al2O3% • Ilmenite = TiO2 + Fe2O3% +Mn3O4% – (Staurolite * 0.094) • Others = 100 – (Zircon +Monazite + Xenotime + Ilmenite + Staurolite)
Drilling techniques	All sampling was based on vertical RC-AC drilling utilising BQ or NQ rods to bore a 52mm or 76mm diameter hole respectively.
Drill sample recovery	Sample quality was recorded during field logging. Any factors that affect sample recovery were recorded in the logging comments. Sample weights were reasonably consistent although poor sample recovery is evident in the interval between stockpiled material and the underlying in situ sands. RC-AC samples were visually checked for recovery, moisture and contamination and a consistent rate of penetration was maintained during drilling.

CRITERIA	COMMENTARY
	Samples were not affected by the presence of rock or induration and no sample bias is evident.
Logging	Samples were logged by qualified geologists and the geological information recorded is adequate to support the Mineral Resource estimate, classification and subsequent mining studies. Detailed sample analysis also supports metallurgical interpretation. Logging of 2010 RC-AC samples recorded estimated slimes, colour, lithology, dominant grainsize, coarsest grainsize, sorting, induration type, hardness, estimated rock and estimated HM. Logging of 2018 RC-AC samples recorded colour, lithology, dominant grainsize and sorting. All samples representing 100% of the intersections for the MSP By-Product Mineral Resource were logged. Lithology was recorded for all samples drilled in the MSP By-Product Mineral Resource.
Sub-sampling techniques and sample preparation	Samples are collected beneath a rotary splitter fed from a cyclone. A 1kg representative sample was collected for geological logging and analysis. All samples are above the water table however water injection was used for dust suppression during drilling. Sample preparation is consistent with industry standard practice and is deemed appropriated for Heavy Mineral determination. Samples were dried and weighed, then soaked in water with 5ml of TSPP for at least 12 hours, followed by mild attritioning for 5 minutes. The slurry was then wet sieved to determine the portion of sand, oversize and slimes. Duplicate samples were collected from the rotary splitter at the drill rig at the same time as the primary sample. These field duplicates were collected at a rate of one sample every for 34 samples submitted for assay. Laboratory duplicate samples were riffle split at the laboratory at a rate of one sample every 25 samples submitted for assay. Duplicate assay data demonstrates good correlation (r^2 = 0.97). A minor of number of outliers are present which again are associated with variability at the domain margins. The sampling methodology is considered consistent with industry standard practice and appropriate for the material comprising the MSP By-Product Mineral Resource. The sample size is appropriate for the material under consideration and is supported by Gy's Theory on sampling.
Quality of assay data and laboratory tests	The assay technique utilised is appropriate for the mineralisation of the MSP By-Product Mineral Resource, considered total and is supported by decades of reconciliation of mining of other deposits delineated using the same or very similar techniques. The mineralogical evaluation processes (i.e. XRF followed by calculating mineralogy) is considered appropriate for the current level of study. This data does not contain any results generated by geophysical methods. Standards were inserted in the field at a rate of one sample every 39 samples submitted for assay. Laboratory standards were also inserted at a rate of one sample every 294 samples submitted for assay. The results show no bias for HM and a very minor high bias for slimes. This bias will not have an impact on the resource estimate. Duplicate samples were collected in the field at a rate of one sample every 34 samples submitted for assay and in the laboratory at a rate of one sample every 25 samples assayed. Duplicate assay data demonstrates good correlation however some outliers are present.
Verification of sampling and assaying	No verification of the significant results has been undertaken externally however all results have been visually checked for validity by several Competent Persons employed by Iluka. Twin holes were completed at a rate of one twin for every 29 holes drilled. Comparisons between primary and twin hole assay data shows

<table>
<tr><th>CRITERIA</th><th>COMMENTARY</th></tr>
<tr><td></td><td>the material present at the MSP By-Product Mineral Resource is quite variable on a short-range basis however globally there is little variation. Most of the outliers are coincident with the transition from cap material to high grade mineral sands by-product or conversely from high grade mineral sands by-product to low grade basement.

Logging of RC-AC samples was input directly into a laptop computer using either Micromine software or acQuire logging software both with data verification routines enabled. Data was then transferred into Iluka's SQL database which incorporated further verification routines.

No bias or errors were identified in the assay data and no adjustments were made to the raw data. The mineral assemblage was calculated from XRF analysis of the HM sinks fraction.</td></tr>
<tr><td>Location of data points</td><td>The survey was completed using a 3D Terrestrial scanner in conjunction with an RTK_DGPS unit which affords an accuracy to within ±0.02m horizontally and ±0.05m vertically. Collar positions were projected to this topographic surface prior to modelling processes.

Any hole moved from the pegged collar position was re-surveyed after drilling. Topographic control is considered of high quality and adequate for the purpose.

The modelling was done in the same grid reference as the Eneabba Mine (Eneabba Mine Grid – EMG). The data is stored in the geological database with a UTM reference (WGS84 – GDA94, Zone 50). Collar survey data was re-calculated to the EMG using acQuire Software coordinate transformation based on a 2-point transformation.

<table>
<tr><th>Dataset</th><th>Local N</th><th>Local E</th><th>MGA N</th><th>MGA E</th></tr>
<tr><td>ENEABBA</td><td>107706.98</td><td>99829.8</td><td>6696150</td><td>334138.91</td></tr>
<tr><td>ENEABBA</td><td>99553.16</td><td>103508.1</td><td>6688150</td><td>338138.91</td></tr>
</table>
</td></tr>
<tr><td>Data spacing and distribution</td><td>Drilling was conducted on a 10m x 10m drill grid which is considered appropriate for the style of mineralisation being tested.

The drilling is spaced sufficiently to conclusively demonstrate continuity of mineralisation and is appropriate for the style of mineralisation and the Mineral Resource classification applied.

No compositing was used for assay data.</td></tr>
<tr><td>Orientation of data in relation to geological structure</td><td>The MSP By-Product Mineral Resource is not considered geologically continuous due to the nature of the mineralisation present (i.e. mineralisation is associated with mineral sands by-product from Iluka’s Mineral Separation Plant). Drilling has been conducted on a regular grid to provide a representative dataset of the material under consideration and to effectively identify grade and mineralogical variation.

No sampling bias has been identified.</td></tr>
<tr><td>Sample security</td><td>Samples were dispatched with soft copy registers of the samples being freighted. These were then verified by Iluka staff upon arrival at the laboratory. Samples were stored in secure Iluka compounds when not in transport.</td></tr>
<tr><td>Audits or reviews</td><td>No audits were conducted of sampling technique during the drilling of the MSP By-Product Mineral Resource however the sampling techniques used have since been audited for Iluka elsewhere. The same sampling and assay processes also supported Iluka's historic mining operations in Eneabba including mining of other pits.</td></tr>
</table>

Section 2 Reporting of Exploration Results (MSP By-Product Mineral Resource)

(Criteria listed in the preceding section also apply to this section.)

CRITERIA	COMMENTARY
Mineral tenement and land tenure status	The MSP By-Product Mineral Resource forms part of the previously mined South Tails area at Eneabba some 250km north of Perth in Western Australia. The MSP By-Product Mineral Resource is located within mining lease M267SA which is held by Iluka Midwest Limited, a wholly owned subsidiary of Iluka Resources. The resource is located within Crown Reserve 31030 (South Eneabba Natural Reserve). Mining occurred on Crown Reserve after the status of reserve was awarded. No other licences for the operation of a mine have been awarded over the MSP By-Product Mineral Resource, however it is envisaged that suitable environmental management plans will be produced prior to any mining commencing which will address any environmental considerations.
Exploration done by other parties	All drilling at the MSP By-Product Mineral Resource has been completed by Iluka. No information from any other party has been used or known to exist.
Geology	The MSP By-Product Mineral Resource is located within the Perth Basin however the material is made up of mineral sands by-product from Iluka's Narngulu MSP. Being a minerals sands stockpile there is no geological structure. The stockpile physically presents as a fine grained sand and is approximately 300m in length, 150 wide and varies from 1 to 15m in thickness. The fine grained, dark brown to black material is easily distinguishable from the yellow clayey sand it resides on.
Drill hole Information	A total of 354 drill holes have been used in resource estimation, comprising a total of 4,120 sample points of which 4,115 were assayed. 225 assay values which represented a mix of mineral sands by-product and basement material from sampling through domain boundaries were set to absent for the grade interpolation to minimise any effect that these mixed grade samples would impart. It is impractical to list all the mineralised intercepts and this information is deemed to be largely superseded by the Mineral Resource estimates provided which considers all the exploration data. Representative cross sections showing model Zone, HM grade, in situ zircon and in situ monazite grades are given in Figures 2, 3 and 4 of this public report.
Data aggregation methods	No weighting has been applied in the reporting of exploration results for the MSP By-Product Mineral Resource and is not considered appropriate for reporting in mineral sands. No lower HM cut-off grade was applied as the material has an extremely high HM grade. It is impractical to list all the mineralised intercepts and this information is deemed to be largely superseded by the Mineral Resource estimates provided which considers all the exploration data. Representative cross sections showing model Zone, HM grade, in situ zircon and in situ monazite grades are given in Figures 2, 3 and 4 of this public report.
Relationship between mineralisation widths and intercept lengths	The drilling has been conducted over the by-product stockpiles which have no geological structure or particular mineral orientation. As a result the drilling is considered to be essentially perpendicular to the mineralisation so all intercepts are deemed to represent true widths.
Diagrams	Plans and representative cross sections through the MSP By-Product Mineral Resource are given in Figures 2, 3 and 4 of this public report.

CRITERIA	COMMENTARY
Balanced reporting	The results of the exploration are not reproduced here due to the large number of drill holes and it is considered the resource estimation effectively represents all the dataset.
Other substantive exploration data	XRF analysis has also been completed on all samples which has been used to calculate the mineral assemblage present. This provides a comprehensive data set to support the Mineral Resource estimate, mineral assemblage and inherent variability. The density used in the Mineral Resource estimate is based on the standard Iluka bulk density formula derived from the study of several deposits and material types, including HM concentrate, mined in Western Australia. The average density of the mineral sands by-product is 2.4t/m^3 which is in-line with the expectations for material containing such a high content of HM. No potentially deleterious or contaminating substances have been identified in the MSP By-Product Mineral Resource that would affect product saleability. It is envisaged that material from the MSP By-Product Mineral Resource will be sold as a concentrate with minimal processing.
Further work	No further work is anticipated though further drilling may be warranted if further by-product material is added to the stockpile. The current drilling and survey data have effectively defined the extent of the by-product material and no further extensions exist.

Section 3 Estimation and Reporting of Mineral Resources (MSP By-Product Mineral Resource)

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

CRITERIA	COMMENTARY
Database integrity	Logging of RC-AC samples was captured on a laptop computer using either Micromine software with data verification routines enabled or MS Excel spreadsheet. Data was then transferred into Iluka's acQuire hosted GIM database which incorporates additional validation routines. Drill data was reviewed statistically and visually; to ensure all results were within acceptable ranges and all drill holes were correctly spatially located.
Site visits	No site visits were undertaken during this estimation process, however several Competent Persons employed by Iluka have visited or worked at Iluka's Eneabba Mine Site. No issues were raised as a result of these visits.
Geological interpretation	By-product material from Ilukas' Narngulu MSP, which is located east of Geraldton, has been stockpiled at the current location since the early 1990's. Being a stockpile there is no geological structure. Stratigraphically, the stockpile comprises a half to one metre cap of orange brown, gravelly, clayey sand which covers the Mineral Resource. A mixed zone of mineral sands by-product and capping is immediately below the capping which is characterised by high HM grades in combination with elevated slimes and oversize. The degree of mixing is likely overstated due to contact of the clean mineral sands by-product and cap material being obscured by the 1m drill sample length. Beneath this mixed zone is the mineralised unit which presents as a dark brown to black, well sorted fine grained sand. The mineralised unit is characteristically very high in HM and low in slimes and oversize. The mineralised unit is easily distinguishable from the underlying in-situ yellow clayey sand. All relevant information has been sourced from the drill samples. Some mineralisation is contained in the underlying clayey sand but this material has been excluded from the Mineral Resource estimate for the MSP By-Product Mineral Resource. No alternative interpretations have been considered at this time with the material being treated as a single stockpile. Granularity is provided by the close spaced drilling and XRF analysis being done on every sample. Appropriate domaining and corresponding flagging of drill data has been used to control the estimation of grade during interpolation. The MSP By-Product Mineral Resource, representing a stockpile, does not have geological continuity. While there is considerable variation in the HM assemblage, large areas of the mineral sands by-product have a consistent character which is interpreted to reflect the campaigning of mineral from mine sites feeding the Narngulu MSP.
Dimensions	The stockpile physically presents as a fine grained sand and is approximately 300m in length, 150m wide and varies from 1 to 15m in thickness.
Estimation and modelling techniques	The grade interpolation was carried out using the Estima Superprocess within Datamine Studio software. Grade and XRF data estimation was completed using Inverse Distance Cubed (ID3), and is considered appropriate for this style of mineralisation. No HM top-cut has been used nor deemed necessary. Drill hole sample data was flagged with domain codes corresponding to the "stratigraphy" of the stockpile and the domains imprinted on the model from 3-dimensional surfaces generated from the stratigraphic interpretations. A primary search dimension of 15*15*2m (X*Y*Z) was used for all data. Successive search volume factors of 2 and 3 were used to interpolate grade in areas of lower data density not assigned a grade in the primary search.

CRITERIA	COMMENTARY
	A comparison estimate was undertaken using the Nearest Neighbour grade interpolation method. This correlated well with the ID3 interpolation and gave a very similar global estimate of grade and tonnage. Metallurgical test work is ongoing to optimise the recovery of valuable HM from the MSP By-Product Mineral Resource. Beneficiation may be able to produce higher value products, concentrated with specific minerals to suite market demand. No deleterious elements have been identified or included in the resource estimation. At time of resource estimation it has been assumed that the stockpiled HM would be sold as a mineral concentrate with minimal processing. A parent cell size of 5*5*1m with 1*1*10 (X*Y*Z) cell splitting has been adopted which is considered appropriate given the approximate drill spacing of 10m*10m*1m (X*Y*Z). A search radius of 15*15*2 has been used in conjunction with 2*2*1 (X*Y*Z) cell discretisation to estimate the grade into model cells. No selective mining units were assumed in this estimate. No correlation between variables has been considered. Appropriate domaining and corresponding flagging of drill data and model cells has been used to control mineralisation estimation during resource estimation. The resource estimate for the stockpile has been restricted to reporting from domains representing mineral sands by-product material. A top cut was not deemed necessary for the HM assays. The MSP By-Product Mineral Resource has a low coefficient of variation negating any requirement for grade cutting. Validation of the model was done by comparing model statistics to drill data statistics, visual comparison of drill and model grades and completing a comparison of the Inverse Distance interpolation against a Nearest Neighbour interpolation. The validation process confirmed the grade interpolation. No reconciliation data is available.
Moisture	The tonnages are estimated on a dry basis using an Iluka developed density formula. The formula is considered appropriate and has been used in other historically mined mineral sands deposits.
Cut-off parameters	No cut-off grade has been applied to the MSP By-Product Mineral Resource as the high HM grade means all the material will effectively be economic providing sales contracts can be secured. Rather the reported Mineral Resource was restricted to material interpreted as bona fide mineral sands by-product.
Mining factors or assumptions	The material is unconsolidated and can easily be excavated by standard earth-moving equipment such as front end loader or truck and shovel. Large portions of the MSP By-Product Mineral Resource are represented by clean HM and direct shipping may be possible. Feasibility studies are currently in progress which will determine the economic viability and address the approvals required to facilitate extraction.
Metallurgical factors or assumptions	The MSP By-Product Mineral Resource is characterised by fine, even grained sand and effectively represents a high value Heavy Mineral Concentrate (HMC). As the material has historically been recovered by conventional mineral sand recovery technology, it is expected that any processing to enhance the concentrate will result in very high recoveries. Only a simplistic treatment process is envisaged to remove a minor amount of contaminating slime and sand, mostly associated with the capping material.
Environmental factors or assumptions	All native title agreements are in place for M267SA. Native vegetation is present in the surrounding area however the MSP By-Product Mineral Resource is located within a previous mine void and no native vegetation is impinging on the deposit.

CRITERIA	COMMENTARY
	Environmental Management Plans are currently being prepared and will need the relevant statutory approval prior to any mining commencing which will address any environmental considerations. Above background radioactivity levels are present in the stockpile material due to the presence of monazite. Feasibility studies are currently in progress and an approved Radiation Management Plan (RMP) will be developed and implemented prior to any mining commencing.
Bulk density	Iluka's standard bulk density formula, developed internally from the studies of various materials mined and HM concentrates, was used. A relatively high density averaging 2.4t/m^3 is estimated by the formula which is in line with the expectations for material containing such a high content of minerals with a high S.G. The Iluka Standard Bulk Density formula used accounts for void space and variable material composition. It is the same formula used at historical Iluka mine sites, which mined similar material. It accounts for variability in HM, slimes and sand content. The formula was determined from results of extensive Nuclear Densometer testing at various Iluka mine sites. It is assumed that the material in the MSP By-Product Mineral Resource has the same density relationship that is seen in Iluka deposits that are currently being mined or have been mined historically.
Classification	The resource category applied is based on: • drill hole spacing and sample density; • density and confidence in the analytical data supporting the assemblage determination; • the data supporting the resource estimate has been acquired using industry standard methods or better; • established grade continuity; and • an understanding of the material stored at the MSP By-Product Mineral Resource which represents specific by-products from the Narngulu MSP. Because the material under consideration comprises a Narngulu MSP By-Product Mineral, an intensive exploration program was adopted to ensure a high confidence in the volume and mineral assemblage. The drilling was conducted on a close 10m by 10m spacing. In addition every sample was subjected to float/sink analysis and the HM sinks for every mineral sands by-product sample was analysed by XRF (when done internally) or XRF in combination with laser ablation at an external laboratory. Effectively there is an assay per 250 tonnes of resource. It is the view of the Competent Person that the frequency and integrity of data, and the resource estimation methodology are appropriate for this style of mineralisation and support the Mineral Resource classification applied.
Audits or reviews	Optiro Mining Consultants (Optiro) reviewed the Mineral Resource estimate and Classification assigned to the MSP By-Product Mineral Resource. Optiro has endorsed the resource estimate and classification for the MSP By-Product Mineral Resource.
Discussion of relative accuracy/ confidence	It is the view of the Competent Person(s) that the frequency and accuracy of the data and the process in which the Mineral Resources were estimated and reported are appropriate for the style of mineralisation under consideration. The relative accuracy of the estimates is reflected in the reporting of the Mineral Resources and the Resource Category assigned as per the guidelines set out in the JORC Code (2012 ed.). The statement refers to global estimates of tonnage and grade. No production data is available as the deposit is not in production.

Section 4 Estimation and Reporting of Ore Reserves

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

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• The Ore Reserve estimate is based on a Mineral Resource model that has been reviewed and approved by an Iluka Resources Limited (Iluka) Competent Person (CP). The resource model was created for the Mineral Separation Plant (MSP) By-Product Stockpile located at Eneabba to estimate the tonnage and grade, and characterize the style of mineralisation. The JORC code (2012 Ed.) classification of Measured and Indicated has been applied based on data density, quality of the supporting data and consistency of grade. • Ore Reserves comprise the material reported as a sub-set of the Mineral Resource.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• A number of site visits have been completed by various CPs during various drilling, sampling, test-work and study phases. On each occasion the CP was satisfied with the quality of the work being conducted and no matters were observed that would impact the estimation of the Ore Reserves.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least 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.*	• In 2015 Iluka Resources initiated a Pre-Feasibility Study (PFS) to evaluate the viability of a processing operation to re-treat the contents of the MSP By-Product Stockpile. • The PFS led to the approval and completion of a Definitive Feasibility Study (DFS) for the Eneabba Mineral Sands Recovery Project in Q3 2019. • The DFS contains a technically achievable mine plan, which also displays attractive financial characteristics on the key metrics that Iluka uses to assess project development decisions, including IRR, NPV and payback. • Operational factors have been assessed, material modifying factors were considered and a detailed financial analysis completed. • An offtake agreement has been executed as part of the DFS, allowing the project to proceed into the execute phase. The processing methodology has been agreed and costed.
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 and an individual cut-off grade applied to each block within the model. The calculations consider overall HM grade and individual assemblage product values, operating costs, recoveries and modifying factors. An economic optimisation is performed to determine if a block is viable to mine, and therefore be included in the Ore

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		Reserves.
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 choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	• A pit optimisation was conducted by Iluka personnel using IMS Minemap mine planning software. Volume report outputs, pit shells, optimised models and grade tonnage curve data were generated during the optimisation process to determine an accurate reserve. • The mining process will consist of: ○ mining material using an FEL to a mobile screening unit located adjacent to the MSP By-Product Stockpile; ○ dry screening of material to remove +6mm particles in the pit; ○ loading of material from the screened stockpile using a FEL into dump trucks; ○ hauling of material (-6mm) from the dry screening unit to the feed stockpile at the processing plant using dump trucks; and ○ an FEL will feed the material into the WSP processing plant. • The WSP completes the removal of any remaining oversize material and any fine clay/slimes. The WSP uses a wet vibrating screen to remove any material above 1mm in particle size. • Desliming cyclones are then used to remove fine clay particles, leaving a clean Mineral Sand Concentrate (MSC) product. The mineral separation process involves the use of water, screening equipment and de-sliming cyclones. The process will consist of: ○ feeding material into a feed hopper and conveyor; ○ processing material through a wet vibrating screen to remove +1mm oversize; ○ processing through two de-sliming cyclones to remove clay fines (slimes); and ○ stockpiling of final product in a bunker prior to loading into Rotabox containers. • Overall pit design slopes 45º were assumed (dependent on localized conditions during mining). • Grade control will occur during the mining process, with a mobile XRF unit being utilised to analyse materials for blending. Blending and grade control will occur during the mobile screening process within the pit.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		• No mining dilution factors were used and reflect Iluka experience. • Recovery factors were applied to all stages of processing. These are based on detailed metallurgical test work and Iluka's operational experience. • An 80m average mining radius from the in-pit screening unit has been assumed for pit operating purposes. • No Inferred Mineral Resources are included in the MSP By-Product Ore Reserve. • Infrastructure requirements for the project include: administration buildings; workforce accommodation; power supply; communications; workshops and stores including maintenance facilities; site access roads; weighbridge; light vehicle fleet; contract mining fleet; screening plants and WSP.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• The metallurgical separation process utilizes known technology where the performance and recovery of the MSC was established by Iluka. The metallurgical process is well-tested and commonly used in other sands operations worldwide. • Iluka has a history of producing a range of mineral sand products. In the 1970s and 80s Iluka's predecessors Renison Goldfields Consolidated Ltd (RGC) and Westralian Sands Limited (WSL) produced similar concentrates. • During drilling, foreign materials were intersected in a small number of instances (plastics, rubbish, wood and metal) in various locations. Commentary from various sources indicates a variety of rubbish was dumped in the stockpile over the past 25 years of accumulation. This is not likely to have a significant impact on the reserve estimate. • Mineralisation is not well tested where drilling access was restricted by proximity to the edge of the tails. These areas are relatively minor in comparison to the total volume of the stockpile and have been assigned a suitable Resource / Reserve Classification (Indicated / Probable) to reflect the lower confidence in the mineralisation. • There is a small amount of waste material present that has been placed on the stockpile as capping material. All the material will be screened, with the undersize taken to the processing plant while the oversize material will be disposed at the bottom of the pit. • The recoveries for the project are based on various metallurgical test work programs from 1990 to 2013. The test work programs were conducted by Iluka

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		and external parties.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• The Eneabba area has been extensively cleared for agriculture, with designated areas of nature reserve and Vacant Crown Land (VCL). Rare flora and fauna have been identified in the area, and a survey has identified several key species to be reported under the Environment Conservation and Biodiversity Protection Act (1999) including the endangered Carnaby's Black Cockatoo. • The project proposal utilizes historically cleared mining areas with no further vegetation clearing being required. • Key Approvals including: Works Approval, Mineral Export Permit and Project Management Plan (Mines), Midwest Port Authority Environmental Approvals and Radiation Management Plan have all been approved. Environmental Management Plans have been provided as evidence of management commitment under Works Approvals, Mining Approvals, and licenses to abstract water and mine/transport materials, and have been endorsed by the regulators.
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.*	• The mining project area is close to existing infrastructure and similar operations have previously been in production in the project area. • The Eneabba site is located approximately 300 km north of Perth in West Australia. The Eneabba site is located on the State Agreement Act Tenement MLSA 267 and mining tenement M70/821. Several other tenements have also been granted adjacent to the mining operation. • The MSP By-Products stockpile is located on vacant Crown Land on the State Agreement Tenement MLSA 267. The area is adjacent to Iluka owned land and the Eneabba South Nature Reserve. Other areas of the mine site are located on private land under a lease agreement between the landholder and Iluka. • Generators will be utilised to supply power to the processing plant. This consists of two 500 kVA Caterpillar C15 engines and associated fuel tanks. Iluka proposes to install one of these generating sets, with the second one acting as standby. At this stage no high voltage installations are anticipated. An existing switch room and switchboard already located at site will be utilized for the project. • A new process water dam and pumping infrastructure will be required. Existing bores at Eneabba will supply clean water for processing. • Following processing through the WSP, the MSC will be pumped to a designated product storage bunker. This material will remain wet (~4 to 8%

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		moisture) and once a truck arrives the product will be loaded directly into Rotaboxes on the truck. The Rotaboxes will be transported by road to existing Iluka Mineral Separation Plant at Narngulu where it will be stored (within the Rotaboxes) until enough have been processed to fill a shipment. Export will be through the Geraldton Port. • Tailings produced through this process will consist of oversize rocks (lateritic gravel) from the in pit screen and clay from the desliming process. The oversize rock waste (+6mm) has been tested as being at or close to background radiation levels and will remain in the pit for disposal. • An existing mining camp accommodating Iluka employees from the adjacent Eneabba rehabilitation site is located within the town of Eneabba. Accommodation during construction and operations will be provided by the existing camp.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Capital costs have been derived by the following methods: derived internally using project drawings, specifications, models, P&ID's, equipment lists and associated schedules and prepared by the contractors and suppliers. Quantity growth has been applied to the individual line items within the estimate based on the level of design, scope of works and specification completeness and the risk of these items exceeding those quantities. • Pricing for the contractors direct and indirect works has been derived from a combination of the following sources: tendered quotations procured from suppliers and contractors, purchase quotation from suppliers and contractors, budget quotations procured from suppliers and contractors and historical data sourced from previously tendered or estimated projects of a similar nature and location. Where necessary items have been factored to allow for different size/capacity, estimated, factored or built-up rates and provisional or lump sum allowances where the use of the afore mentioned methods are not possible. • Pricing growth has been applied to the individual items, based on the source and accuracy of the prices used for the estimate. • The contingency allowance has been calculated in accordance with the Iluka Project Management System Guideline. The determination of the value for contingency is based on a confidence level of the total modeled estimate. • The estimate is expressed in Australian dollars based on prices and market

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		conditions as at Q4 2019. • Import duties have been included where applicable and the Goods and Services Tax (GST) has been excluded. • The operating cost estimate has been derived from a combination of the following sources: budget quotations procured from suppliers and contractors, estimated, factored or built-up rates, historical data sourced from other Iluka mine sites and provisional or lump sum allowances where the use of the aforementioned methods are not possible. • Cost and recovery penalties have been applied to deleterious elements. • Iluka monitors a range of recognised external forecasters of foreign exchange rates but ultimately the exchange rates applied are an Iluka assessment. • Transportation charges have been procured from contractors. • Allowances have been made for royalties payable to Government and private stakeholders. Due to commercial sensitivities payments to private stakeholders are not detailed.
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.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• The price assumptions are based on contracted sales agreements, the detail of which is commercially sensitive and is not disclosed.
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.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.*	• Global demand for rare earth metals and oxides continues to grow year-on-year fueled by strong growth in permanent magnet and electric motor applications. Neodymium and praseodymium make the world's strongest permanent magnets, which are utilized in electric motors to produce greater power and torque, and owing to the power of the magnets, less material is required such that engines can be considerably smaller and lighter in weight. Electric motors that utilize Rare Earth Elements (REE) are a key component of hybrid vehicles, which will become increasingly abundant on roads throughout the world in years to come. The powerful REE magnets also permit the miniaturisation of hard disk

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	• *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	drives used in many electrical devices. • The demand for Rare Earth Oxides (REO) stems from the strong growth in industrial applications such as electric vehicles and wind turbines. Since the 1990s, China has dominated the production and supply of rare earth products, holding approximately 40% of REO resources and 94% of production capacity. • The execution of an offtake agreement with a fixed price and offtake volumes have been negotiated with the customer. • The REO assemblage of Iluka's monazite, and the costs of production were used to evaluate the pricing and back-calculate a market price. • Iluka personnel conducted a technical assessment on a zircon sample produced from the MSC sent to the customer. The zircon sales team has since completed a product assessment addressing quality, saleability and pricing. • Iluka customers are provided with reports in accordance with their specifications.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• Macro-economic assumptions used in the economic analysis of the mineral sands reserves such as foreign exchange, inflation and discount rates have been internally generated and determined through detailed analysis by Iluka and benchmarked against commercially available consensus data where applicable. • Sensitivity analysis is undertaken on key economic assumptions such as price and exchange rates to ensure the reserves remain economic. Changes in product prices have the potential to increase or decrease the total Ore Reserve.
Social	• *The status of agreements with key stakeholders and matters leading to social license to operate.*	• Discussions with key stakeholders is being addressed through planned stakeholder communication. To date, this has included engagement with regulatory bodies, local councils and commissions, port authorities and contractors. Public engagement commenced in June 2019 and will be ongoing for the life of the project. • Health, environmental and community concerns regarding radiation will be addressed in a comprehensive radiation management plan (RMP) covering processing, transportation, storage and shipping operations. The RMP was submitted to the DMIRS in June 2019 and was approved in December 2019 by the Radiological Council.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore*	• No identifiable naturally occurring risks have been identified to impact the Ore Reserves.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	Reserves: • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• Marketing arrangements are commercially sensitive but the execution of an offtake agreement with a fixed price and offtake volumes have been negotiated. • Iluka has received the consent / approval to sell the MSC monazite from the WA Premier in accordance with clause 21A(3) of the State Agreement Act. • The project proposal was approved by the WA Premier in accordance with clause 21A(3) of the State Agreement Act. • Environmental approvals have been granted. • The Export Permit was approved by the commonwealth government. • The Eneabba Operation is located on the State Agreement Act Tenement MLSA 267 and mining tenement M70/821. Several other Mining Leases granted to Iluka are located adjacent to MLSA 267.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• Measured Mineral Resources are converted to Proved Ore Reserves and Indicated Mineral Resources are converted to Probable Ore Reserves. Inferred Mineral Resources are not included in the reported Ore Reserve. • The results reflect the CP's view of the deposit. • None of the Probable Ore Reserves have been derived from Measured Mineral Resources.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• No external audits of the MSP By-Products Ore Reserves estimates were undertaken. However, periodic reviews of optimisation input parameters, assumptions and proposed mining methods have been undertaken internally.
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 deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed*	• Iluka has considerable experience in reconciliation of its Mineral Resources and Ore Reserves. Actual results generally indicate very good agreement with the geological models and close reconciliation with HM tonnes, ore tonnes and HM percentage head grade. The risk of not achieving good physical Ore Reserve reconciliation is considered to be low. • Operational metallurgical experience, relevant test work and Iluka's experience

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	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.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *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.*	supports the view that metallurgical risk is low. • The MSP By-product Ore Reserve has a considerable quantity of high grade mineralisation within the stockpile. Sensitivity analysis was conducted on the deposit which showed the deposit remains robust to pricing and cost changes. • The Ore Reserve determined during the DFS was based on revenue assumptions negotiated as part of an offtake agreement thus allowing the project to proceed into the execute phase. Consequently, pricing risk is considered low to moderate. • Mining methods selected are not novel and have been demonstrated and are considered a low risk of impacting Ore Reserves. • All costs used in the optimisation and Ore Reserve process are supported by an extended operational history and actual results from Iluka operations. Risk of significant underestimation and effect of that underestimation is considered to be low.