

**29 January 2026**

## **WIM100 Mineral Resource estimate increase**

Iluka announces a Mineral Resource estimate update for the WIM100 deposit following additional exploration and deposit modelling.

WIM100 is one of four fine-grained heavy mineral (HM) deposits held by Iluka in western Victoria. It is the initial focus of the company's Wimmera project, which is currently the subject of a definitive feasibility study (DFS) for the potential long-term supply of rare earths and zircon. The Mineral Resource estimate is reported in accordance with the guidelines of the JORC Code (2012 Ed.).

The updated Mineral Resource estimate for WIM100 comprises a total of 540Mt grading at 4.6% HM for 25Mt of HM. Relative to the previous Mineral Resource estimate<sup>1</sup>, there is a 19% increase in total reported HM tonnage; an 8% increase in the HM tonnage classified as Measured; and a 53% increase in HM tonnage classified as Indicated. This represents a significant increase in HM tonnage and improvement in the confidence level of the WIM100 Mineral Resource estimate.

WIM100's rare earths are an important potential future feedstock for Iluka's Eneabba refinery in Western Australia, which is currently under construction. Upon commissioning in 2027, Eneabba will be one of the few rare earths refineries operating outside of China; a multi-decade infrastructure asset capable of processing a diverse range of feedstocks, from Australian and international projects, and producing both light and heavy separated rare earth oxides.

### **WIM100 deposit Mineral Resource summary**

Mineral Resource Category <sup>1</sup>	Resource Tonnes <sup>1</sup>	In situ HM Tonnes	HM	Mineral Assemblage in HM <sup>2</sup>					
				Ilmenite	Zircon	Rutile	Leucoxene	Monazite	Xenotime
	Mt <sup>3</sup>	Mt <sup>3</sup>	%	%	%	%	%	%	%
Measured	250	13	5.2	33	17	6	7	2.0	0.5
Indicated	240	10	4.1	34	19	7	6	2.5	0.5
Inferred	60	2	3.7	34	20	9	5	2.3	0.5
<b>Total<sup>3</sup></b>	<b>540</b>	<b>25</b>	<b>4.6</b>	<b>34</b>	<b>18</b>	<b>7</b>	<b>6</b>	<b>2.2</b>	<b>0.5</b>

Notes:

1. Mineral Resources are reported at a cut-off grade of 1.0% HM.
2. The mineral assemblage is reported as a percentage of the HM content.
3. Rounding may generate differences in the totals.

This document was approved and authorised for release to the market by Iluka's Managing Director.

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<sup>1</sup> Refer ASX release 21 February 2024, *WIM100 Mineral Resource Estimate Update*.

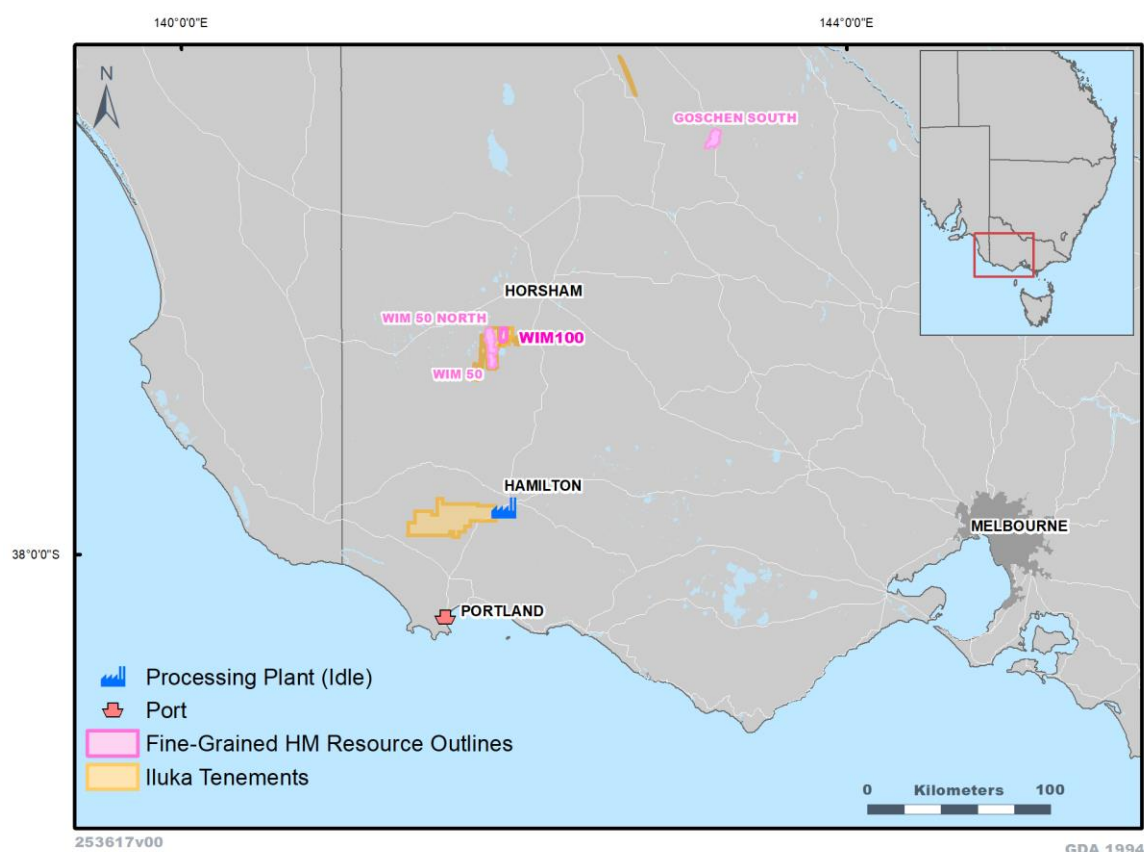
## WIM100 MINERAL RESOURCE ESTIMATE – OVERVIEW

The WIM100 deposit is located along the south eastern margin of the Murray Basin geomorphological province in the state of Victoria, Australia (Figure 1). The zone of mineralisation grading in excess of 1% HM is hosted in a single tabular horizon within the Loxton-Parilla Sand (LPS) geological unit. Mineralisation extends over a north-south strike distance of 10km and an east-west distance of 3.5km. The mineralisation varies from 3m to 20m in thickness, averaging 9m, and resides beneath 6m to 37m of unmineralised sediment.

The Wimmera Industrial Minerals (WIM)-style HM deposits were historically delineated by Conzinc RioTinto of Australia Exploration (CRAE) in the 1980s. The HM differs from traditional beach placer deposits as the valuable minerals are very fine-grained and were considered difficult to recover using traditional HM concentrating equipment. In addition, the zircon contained in WIM deposits has higher levels of impurities.

The WIM100 deposit, along with the adjacent WIM50 and WIM50 North deposits, is located on tenements exclusively held by Iluka's wholly-owned subsidiary company (Basin Minerals Holdings Pty Ltd).

The Mineral Resource estimate for WIM100 was prepared under supervision of Mr Shayne Maycock, an employee of Iluka Resources (refer to Competent Persons Statement), and is reported in accordance with the guidelines of the JORC Code (2012 Ed.).



**Figure 1:** Location plan showing the location of the WIM100 deposit relative to current infrastructure.

**Table 1:** Previous (2024) and updated (2026) Mineral Resource estimates for WIM100**2024 WIM100 Mineral Resource estimate<sup>4</sup>**

Mineral Resource Category <sup>1</sup>	Resource Tonnes <sup>1</sup>	In situ HM Tonnes	HM	Clay	Mineral Assemblage in HM <sup>2</sup>					
					Ilmenite	Zircon	Rutile	Leucoxene	Monazite	Xenotime
	Mt <sup>3</sup>	Mt <sup>3</sup>	%	%	%	%	%	%	%	%
Measured	220	12	5.3	13	34	17	6	7	2.1	0.5
Indicated	160	6	4.0	13	33	17	6	7	2.3	0.5
Inferred	60	3	4.4	13	33	16	5	7	2.1	0.4
<b>Total<sup>3</sup></b>	<b>440</b>	<b>21</b>	<b>4.7</b>	<b>13</b>	<b>34</b>	<b>17</b>	<b>6</b>	<b>7</b>	<b>2.2</b>	<b>0.5</b>

**2026 WIM100 Mineral Resource estimate**

Mineral Resource Category <sup>1</sup>	Resource Tonnes <sup>1</sup>	In situ HM Tonnes	HM	Clay	Mineral Assemblage in HM <sup>2</sup>					
					Ilmenite	Zircon	Rutile	Leucoxene	Monazite	Xenotime
	Mt <sup>3</sup>	Mt <sup>3</sup>	%	%	%	%	%	%	%	%
Measured	250	13	5.2	13	33	17	6	7	2.0	0.5
Indicated	240	10	4.1	13	34	19	7	6	2.5	0.5
Inferred	60	2	3.7	14	34	20	9	5	2.3	0.5
<b>Total<sup>3</sup></b>	<b>540</b>	<b>25</b>	<b>4.6</b>	<b>13</b>	<b>34</b>	<b>18</b>	<b>7</b>	<b>6</b>	<b>2.2</b>	<b>0.5</b>

Notes:

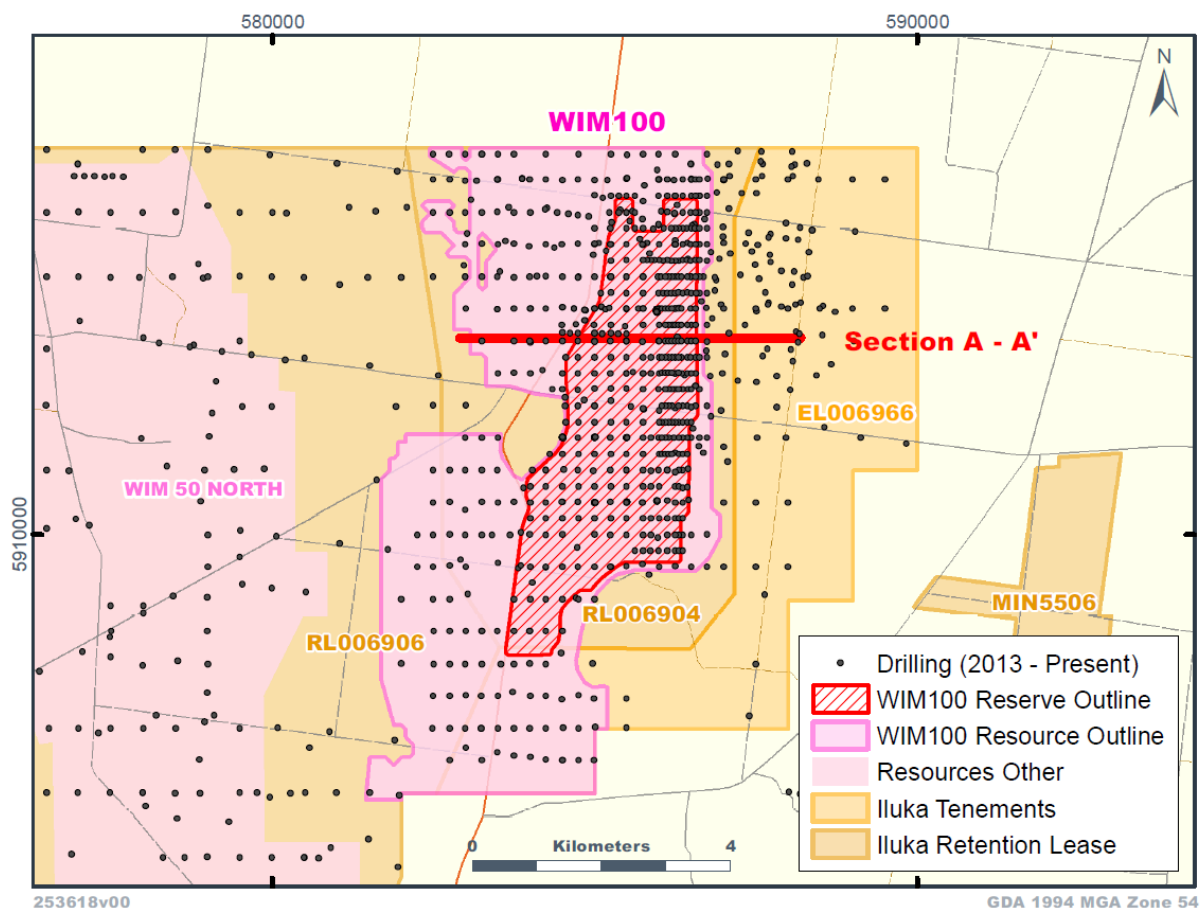
1. Mineral Resources are reported at a cut-off grade of 1.0% HM.
2. The mineral assemblage is reported as a percentage of the HM content.
3. Rounding may generate differences in the totals.
4. Refer ASX release 21 February 2024, WIM100 Mineral Resource Estimate Update.

The updated Mineral Resource estimate for WIM100 results in a 23% increase in material tonnes and 19% increase in HM tonnes relative to the previous Mineral Resource estimate<sup>2</sup>. The increase in material and HM tonnage is due to the expansion of the model and Mineral Resource perimeter to the west following additional drilling completed in 2024 and the expansion is supported by preliminary optimisation studies.

The Mineral Resource confidence has also improved as a result of additional drilling and mineralogical composite analysis completed in 2024. Relative to the previous estimate, there is an 8% increase in the HM tonnage classified as Measured and a 53% increase in HM tonnage classified as Indicated.

The HM assemblage has remained relatively constant within the Measured portion of the deposit compared to the previous estimate. Monazite and xenotime grade has reduced 4% in the Measured Resource and increased 11% and 10% in the Indicated and Inferred Resources respectively. Zircon grade has increased by 12% and 19% within the Indicated and Inferred Resources respectively. Rutile + non-magnetic leucoxene grades have increased by 6% and 13% within the Indicated and Inferred Resources respectively. The change in the mineral assemblage in the Indicated and Inferred Resources is due to the inclusion of a significant amount of additional mineralogical composite samples in the south and west of the deposit from drilling completed in 2024.

<sup>2</sup> Refer ASX release 21 February 2024, WIM100 Mineral Resource Estimate Update.



**Figure 2:** WIM100 Mineral Resource outline and drill collar locations; the location for cross section A-A' (Figure 5) is shown.

The average grade and ratios of the Rare Earth Oxide (REO) suite based on the laser ablation analysis of the HM in the mineralogical composite samples are tabled below.

**Table 2:** REO content in the HM for WIM100 (an allowance for Y<sub>2</sub>O<sub>3</sub> content of 0.39% in zircon was made)

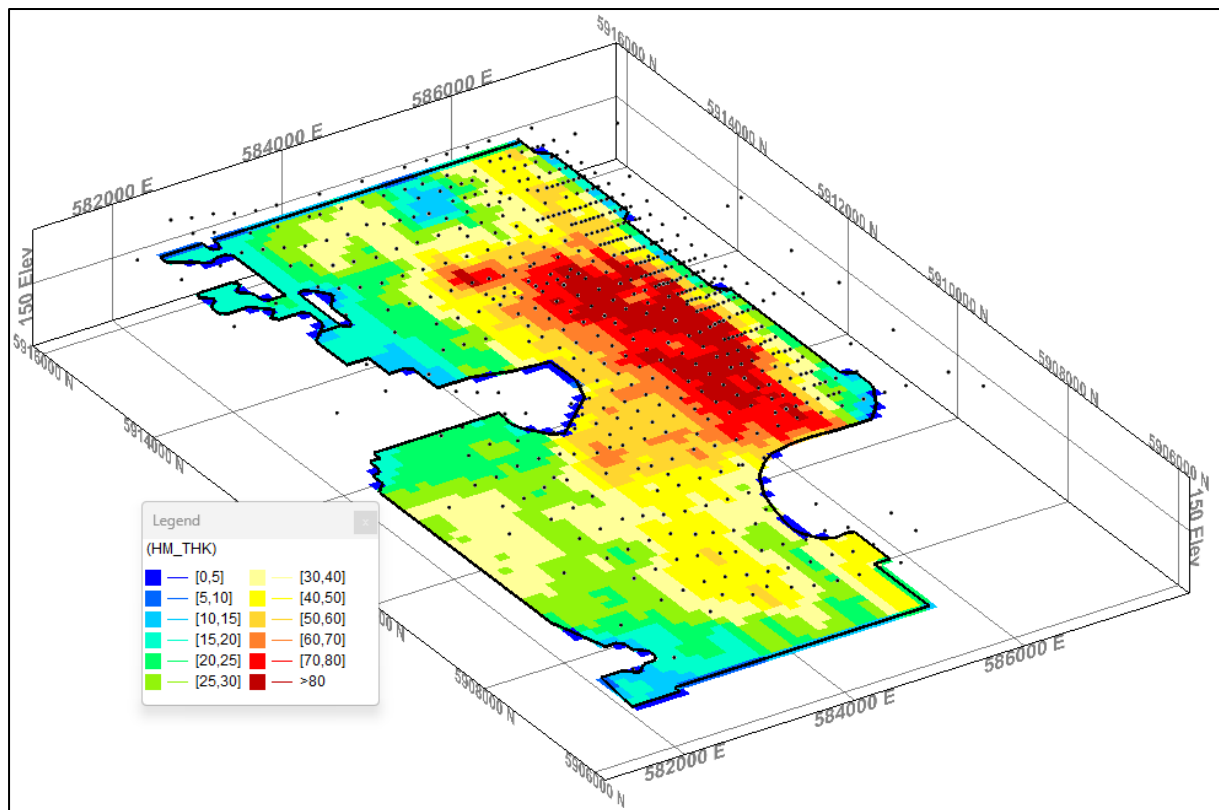
Mineral Resource Category <sup>1</sup>	Rare Earth Element Oxide in HM <sup>2</sup> (%)															
	CeO <sub>2</sub>	Dy <sub>2</sub> O <sub>3</sub>	Er <sub>2</sub> O <sub>3</sub>	Eu <sub>2</sub> O <sub>3</sub>	Gd <sub>2</sub> O <sub>3</sub>	Ho <sub>2</sub> O <sub>3</sub>	La <sub>2</sub> O <sub>3</sub>	Lu <sub>2</sub> O <sub>3</sub>	Nd <sub>2</sub> O <sub>3</sub>	Pr <sub>6</sub> O <sub>11</sub>	Sc <sub>2</sub> O <sub>3</sub>	Sm <sub>2</sub> O <sub>3</sub>	Tb <sub>4</sub> O <sub>7</sub>	TM <sub>2</sub> O <sub>3</sub>	Y <sub>2</sub> O <sub>3</sub>	Yb <sub>2</sub> O <sub>3</sub>
Measured	0.61	0.048	0.034	0.003	0.044	0.011	0.29	0.006	0.25	0.070	0.020	0.050	0.008	0.005	0.27	0.038
Indicated	0.75	0.055	0.039	0.003	0.052	0.012	0.36	0.007	0.31	0.088	0.021	0.060	0.009	0.006	0.31	0.043
Inferred	0.74	0.056	0.039	0.003	0.052	0.012	0.35	0.007	0.31	0.088	0.021	0.059	0.009	0.006	0.31	0.045
<b>TOTAL<sup>3</sup></b>	<b>0.67</b>	<b>0.051</b>	<b>0.036</b>	<b>0.003</b>	<b>0.048</b>	<b>0.012</b>	<b>0.32</b>	<b>0.006</b>	<b>0.28</b>	<b>0.079</b>	<b>0.021</b>	<b>0.055</b>	<b>0.008</b>	<b>0.006</b>	<b>0.29</b>	<b>0.041</b>

Notes:

1. Mineral Resources are reported at a cut-off grade of 1.0% HM.
2. The rare earth element oxide is reported as a percentage of the HM content from the reported Mineral Resource.
3. Rounding may generate differences in the totals.

**Table 3:** REO proportions for the WIM100 Mineral Resource expressed as a percentage of the total REO content (an allowance for Y<sub>2</sub>O<sub>3</sub> content of 0.39% in zircon was made)

Rare earth element oxide	%
Cerium (Ce)	34.9
Dysprosium (Dy)	2.7
Erbium (Er)	1.9
Europium (Eu)	0.1
Gadolinium (Gd)	2.5
Holmium (Ho)	0.6
Lanthanum (La)	16.6
Lutetium (Lu)	0.3
Neodymium (Nd)	14.6
Praseodymium (Pr)	4.1
Scandium (Sc)	1.1
Samarium (Sm)	2.8
Terbium (Tb)	0.4
Thulium (Tm)	0.3
Yttrium (Y)	15.0
Ytterbium (Yb)	2.1
<b>Total</b>	<b>100%</b>



**Figure 3:** Summary plan showing HM grade \* thickness distribution for WIM100. The black line represents the outline of the reported Mineral Resource.

## SUMMARY OF RESOURCE ESTIMATION AND REPORTING CRITERIA

As per ASX Listing Rule 5.8 and the JORC Code (2012 Ed.) reporting guidelines, information material to the updated WIM100 Mineral Resource estimate is summarised below. More detail is provided in the JORC Code (2012 Ed.) Table 1 Summary, Sections 1 to 3, in **Appendix 1**.

### Deposit geology and interpretation

WIM100 and adjacent deposits WIM50 and WIM50 North are located along the southern margin of the Murray Basin, a shallow, intracratonic basin of Cainozoic age. The basin covers a saucer-shaped area around 300,000km<sup>2</sup> extending into eastern South Australia, south western New South Wales, and north western Victoria. It is flanked by uplands of Proterozoic and Palaeozoic rocks.

The Murray Basin contains a succession of freshwater, marine, coastal and continental sediments. The latest marine transgression-regression event resulted in the deposition of the Late Miocene to Late Pliocene Loxton-Parilla Sand (LPS). These sediments were deposited in shallow marine, littoral environments with some terrestrial fluvial intercalation and are characterised by fine- to coarse-grained, generally well sorted sand with minor clay silt and gravel.

The LPS extends over large parts of the basin and is the host of many known HM deposits within the Murray Basin. These include many coarse-grained HM deposits, some of which have been mined, formed in a beach placer environment through the interaction of longshore drift and storm activity. Within the basin, large mineralised zones exist containing fine-grained HM, of which WIM100, WIM50 and WIM50 North are examples. The fine-grained HM deposits are interpreted to be hosted in low energy offshore shallow marine environments.

The HM in the Murray Basin fine-grained deposits likely originates from river systems eroding elevated areas of Palaeozoic igneous rocks and Mesozoic sandstones, draining into the Murrumbidgee Sea. These sediments included quantities of valuable HM such as rutile, zircon, ilmenite, monazite and xenotime which were concentrated through the winnowing action of storms, tides and currents.

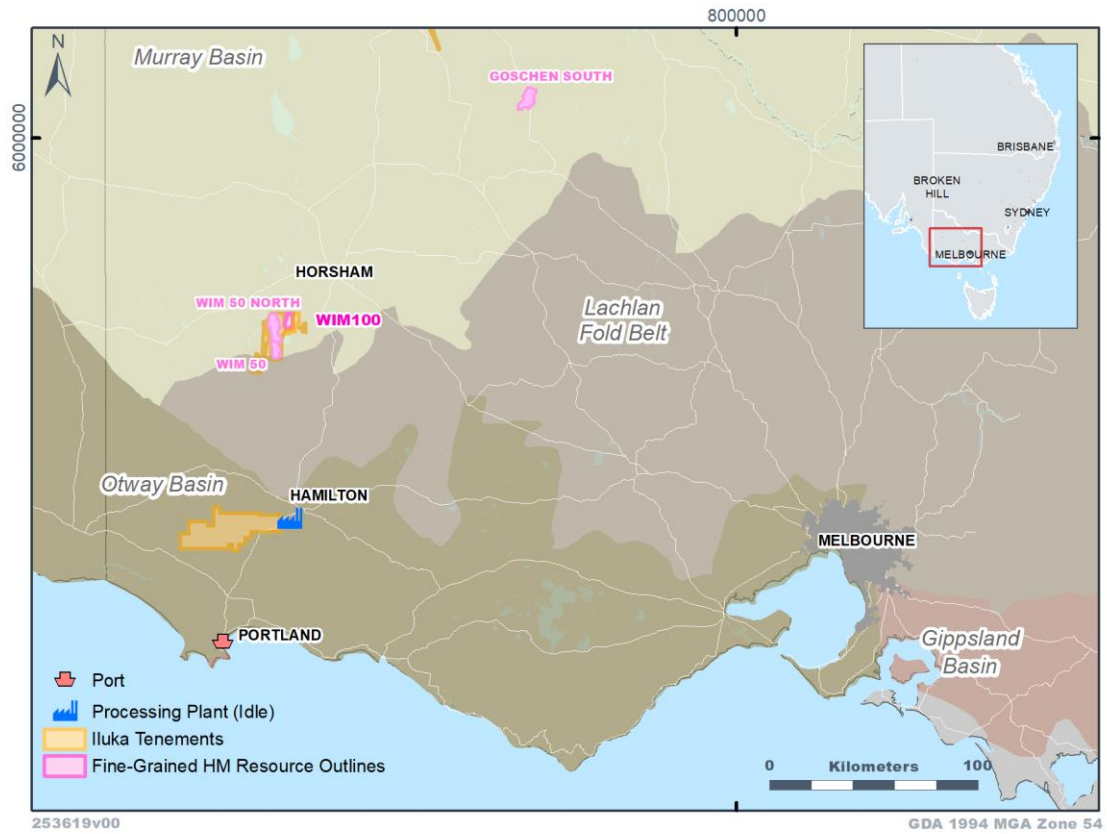
The basic stratigraphy for the WIM100 deposit comprises Shepparton Formation, overlaying LPS which in turn overlays sediments of the Winnambool Formation or Ettrick Formation. The Shepparton Formation blankets the area and is described by Brown and Stephenson<sup>3</sup>. It is typically 5m to 10m thick and consists of clay and silty clay with intercalated lenses of fine to coarse sand and gravel. The clay is silty, variegated grey, red-brown, yellow and white; the sand consists of poorly sorted, rounded to angular, high sphericity to low sphericity polymictic grains. The LPS presents as an extensive blanket of fine to very coarse sand about 20m thick underlying the Shepparton Formation.

The LPS intersected at WIM100 is typically unconsolidated although occasional and erratic soft to medium and rare hard iron cementation is noted.

The offshore sediments of the LPS locally overlay fossiliferous and glauconitic grey-green silty-clay and clay of the Winnambool and Ettrick Formations. The thickness of the Winnambool and Ettrick Formations vary but are generally 30m thick in the project area where they overlie Palaeozoic basement rocks.

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<sup>3</sup> Brown, C.M. and Stephenson, A.E., 1991. Geology of the Murray Basin South-eastern Australia. Bureau of Mineral Resources, Geology and Geophysics Bulletin 235



**Figure 4:** Regional geology plan and Iluka's fine-grained HM deposit locations.



**Table 4:** Typical stratigraphy through the WIM100 deposit

Formation	Environment	Thickness	Description	
Shepparton Formation	Fluvial Lacustrine sediment	5 - 10m	White, orange, brown to dark grey Clay, silty clay and poorly sorted fluvial sand	
Loxton Parilla Sand	Beach placer and shallow marine sediment	15 - 22m	White, yellow orange mottled moderate to well sorted micaceous silt to coarse sand and occasional grit/pebbles.	
Winnambool Formation	Fossiliferous silty clay and clay clay	+10m	Brown to blue grey and grey very fine grained silt, silty clay and clay, richly fossiliferous	
Ettrick Formation	Glauconitic clay unit		Grey, green fossiliferous silty clay and clay	

**Data storage**

Data supporting the Mineral Resource estimate for WIM100 was recorded on Toughbook field computers installed with acQuire data management software. Data was electronically transferred to Iluka's geology database hosted in SQL and interfaced by acQuire, a geological data management system designed and licensed by acQuire Technology Solutions Pty Ltd. Drill logs and assay data are validated on site, then imported directly into the database. The results from sample analysis by Iluka-owned/operated laboratories is hosted in CCLAS, a laboratory information management system owned by Datamine Software Solutions. The assay results are also electronically transferred from CCLAS to the acQuire database system.

**Drill technique and hole spacing**

Historically, close-spaced Reverse Circulation Air Core (AC) drilling was undertaken by Iluka and predecessor companies, during the period from 1980 to 2010, in the search for high-grade beach placer strand mineralisation. This drilling often intersected the fine-grained mineralisation but was given little attention and assay data was often unreliable as a result of the fine-grained nature of the HM and an inappropriate assay method being used.

Drilling targeting the fine-grained mineralisation was originally completed on widely-spaced drill lines several kilometres apart, typically on road verges, with drill holes spaced at about 500m on the lines. This was subsequently infilled to 1km- to 2km-spaced drill lines on areas of anomalous or known



mineralisation with further infill on a regularised grid spacing at WIM100 of about 500m by 500m and down to 250m by 250m spacing to support increased resource confidence and future mine planning. Some drilling at 50m to 62.5m hole spacing was completed along the eastern margin of WIM100 on 250m-spaced drill lines for edge definition and where increased geological complexity is evident.

All the drilling carried out on the WIM100 deposit to support the Mineral Resource estimate was completed by suitably equipped contractor companies using AC drilling techniques and using NQ diameter (76mm) drill rods.

**Table 5:** Summary of AC drilling on Iluka's WIM100 deposit

Drill Year	Holes	Metres	Intervals	HM Assays
2013	2	61	61	26
2014	94	6,001.8	4,190	1,665
2015	9	303	303	227
2016	26	785	785	260
2018	12	455	455	83
2019	124	3,939	3,937	2,807
2020	144	4,428	4,428	1,882
2022	88	2,878	2,878	2,261
2024	163	5,333	5,333	3,386
<b>Total</b>	<b>662</b>	<b>24,183.8</b>	<b>22,370</b>	<b>12,597</b>

### Geological logging

All drill intervals have been logged by Iluka company or contracted geologists or Iluka-trained and supervised geo-technicians. The logging is done on site at the time of drilling and records pertinent information such as:

- colour;
- grainsize information;
- lithology;
- estimated HM and slimes content;
- induration type and an estimate of the percentage of induration;
- quality of the HM including trash and grain size; and
- presence of ground water.

### Sampling and sub-sampling techniques

AC drilling at WIM100 was sampled at almost exclusively 1m intervals. Within the >1% HM mineralised domains, all assays except for three were samples at 1m lengths so no decomposing of longer assay intervals was required.

Sample was delivered via the AC rod string and sample hose to a rig-mounted cyclone and rotary splitter. About a 1kg-2kg quarter sample split was collected beneath the rotary splitter for sample analysis.

## **Sample analysis method**

All samples were analysed at Iluka-owned and operated laboratories, located at either Hamilton (VIC) or Narngulu (WA). The analysis method for determining the HM content was the same for all samples. Samples were dried at 105°C for a minimum of 12 hours and then wet sieved with removal of +2mm oversize (OS) and -38µm slimes. About 100 grams of the dried 38µm to 2mm fraction was split out and screened at 710µm with the 38µm to 710µm sand fraction subjected to float/sink analysis using Lithium Sodium Tungstate (LST) at 2.85 Specific Gravity (SG). The HM (sinks) from this fraction was used to calculate the HM content of the sample.

Mineralogical composite sampling of the HM from the float/sink analysis was done to determine the mineral assemblage, mineral sizing and key mineral quality indicators. This involved combining weighted amounts of HM from geologically unique zones which was subjected to magnetic separation followed with density separation using Thallium Malonate Formate (TMF) liquid at various Specific Gravities (SG). X-ray fluorescence (XRF) analysis of selected magnetic and non-magnetic SG fractions was done to infer the HM mineral assemblage. Additional magnetic separation was done to isolate a high susceptibility magnetic fraction which was subjected to XRF analysis to provide information on the ilmenite quality. Indicative zircon quality was determined from the XRF analysis of the +4.38 SG non-magnetic fraction.

The analysis of the mineralogical composites was augmented with QEMScan analysis of a split of the composite head feed HM at Bureaux Veritas (BV) Laboratory, which was used to assign the mineral assemblage. BV also carried out XRF analysis and Laser Ablation Inductively Couple Plasma Mass Spectrometry (ICP-MS) analysis to determine major, minor and REO elemental content of the HM.

## **Estimation methodology**

Geological interpretation, wireframe surfaces and grade interpolation were completed using Datamine Studio RM Software. The geological interpretation was done on east-west drill sections through the WIM100 deposit. This was used to create open and closed wireframe surfaces to code the 3D block model with geological and mineralised domains. The drill hole data was also coded so that only values within each domain were used to inform model cells within the corresponding model domains.

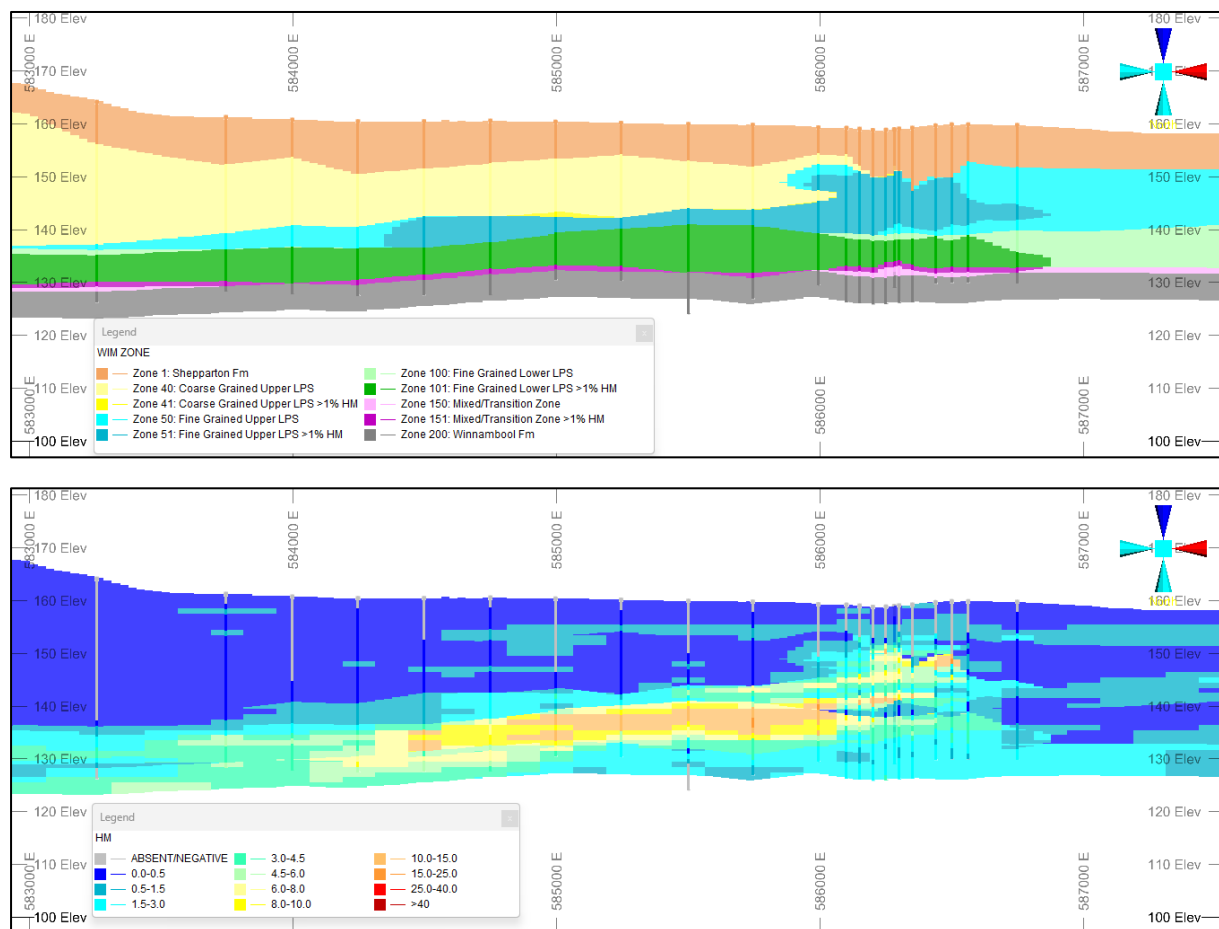
The drill hole spacing at WIM100 varies from about 500mE by 1000mN down to 250mE by 250mN. Drilling spaced at 50mE to 62.5mE by 250mN has been completed along the eastern margin of the deposit to serve as edge definition and provide information in an area of increased geological complexity. A parent cell dimension of 125mE by 125mN by 1mRL was selected for the WIM100 deposit given the predominantly 250mE by 250mN or 250mE by 500mN drill spacing and 1mRL assay length. Sub-celling in the X, Y and Z dimensions was used to assist with volume representation within closed surfaces and along domain boundaries.

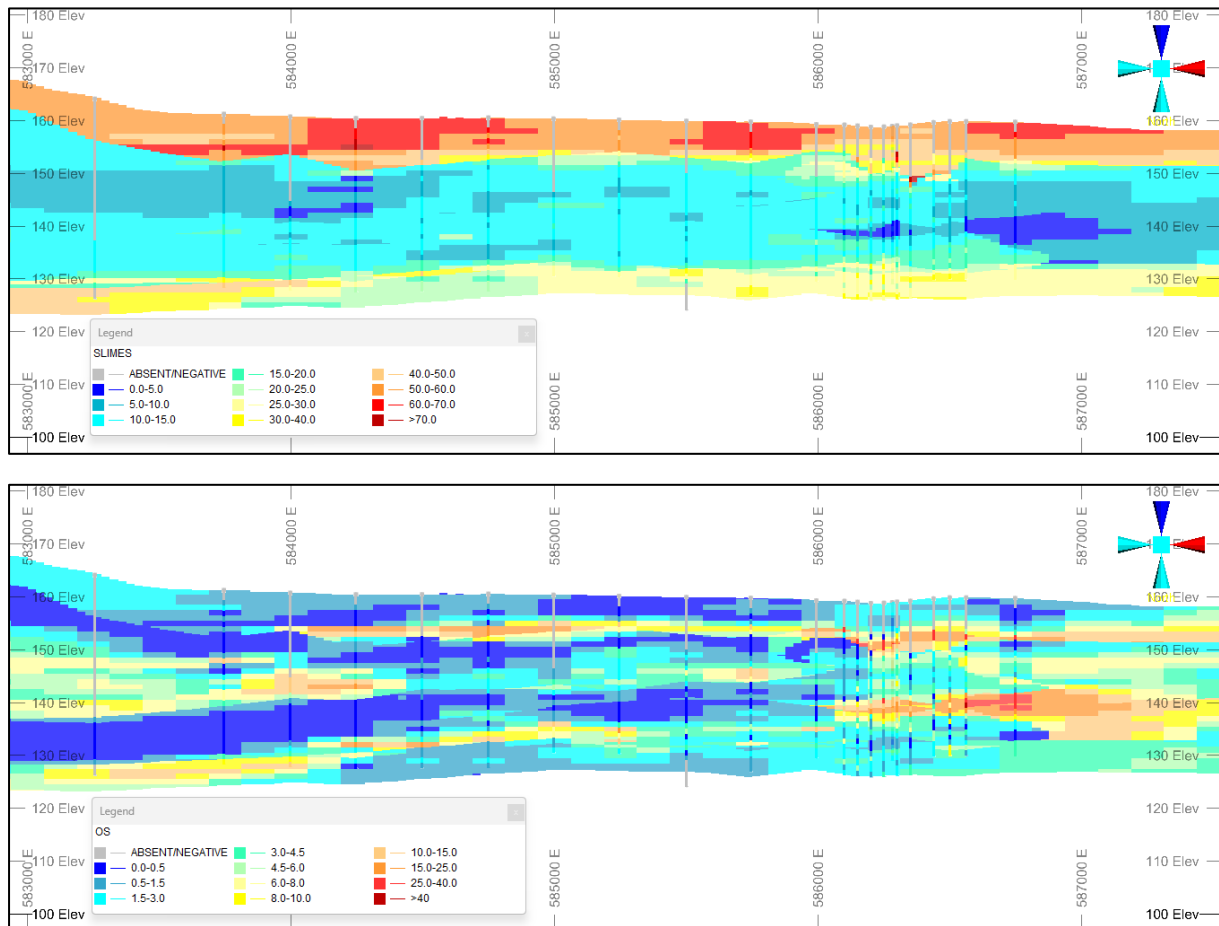
Grade interpolation was done using inverse distance weighting cubed (ID3) for primary assay data while hardness and mineral composite identifier were interpolated using nearest neighbour (NN). Selected composite data was joined to the model using the composite identifier as a key field. The orientation of the search ellipse used for grade interpolation was not dynamically adjusted due to the horizontal nature of the mineralisation which is almost isotropic in the horizontal plane. Successive search volume factors of 2 and 7 were applied if insufficient data was available to inform the model cells with the primary search dimensions. Model and interpolation parameters are tabled below.

**Table 6: WIM100 model parameters**

	Cell Dimension			Interpolation Method	Search Ellipse Dimension			2 <sup>nd</sup> Search Vol Factor	3 <sup>rd</sup> Search Vol Factor
	X	Y	Z		X	Y	Z		
Assay Data	125	125	1	ID3	375	700	3	2	7
Composite Data	125	125	1	NN	375	700	5	2	7

Variogram analysis was carried out on the WIM100 data set to provide information on the continuity of the HM grades and verify the search ellipse dimensions, and also to support the JORC Code Mineral Resource Category assigned.





**Figure 5:** Cross section at 5,913,000mN (A – A' in Figure 2) showing drill holes and model zone assignment, HM, slimes and oversize grades (20x vertical exaggeration; north-facing).

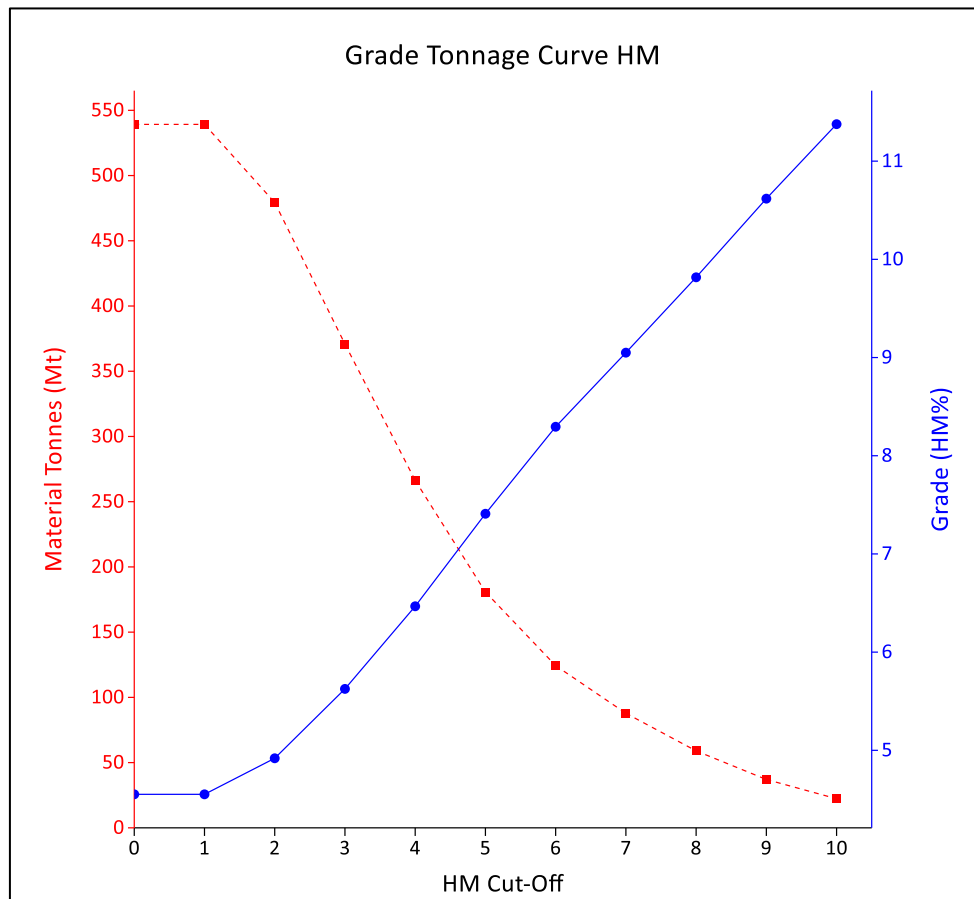
### Cut-off grade

The WIM100 Mineral Resource estimate was reported using the following reporting criteria:

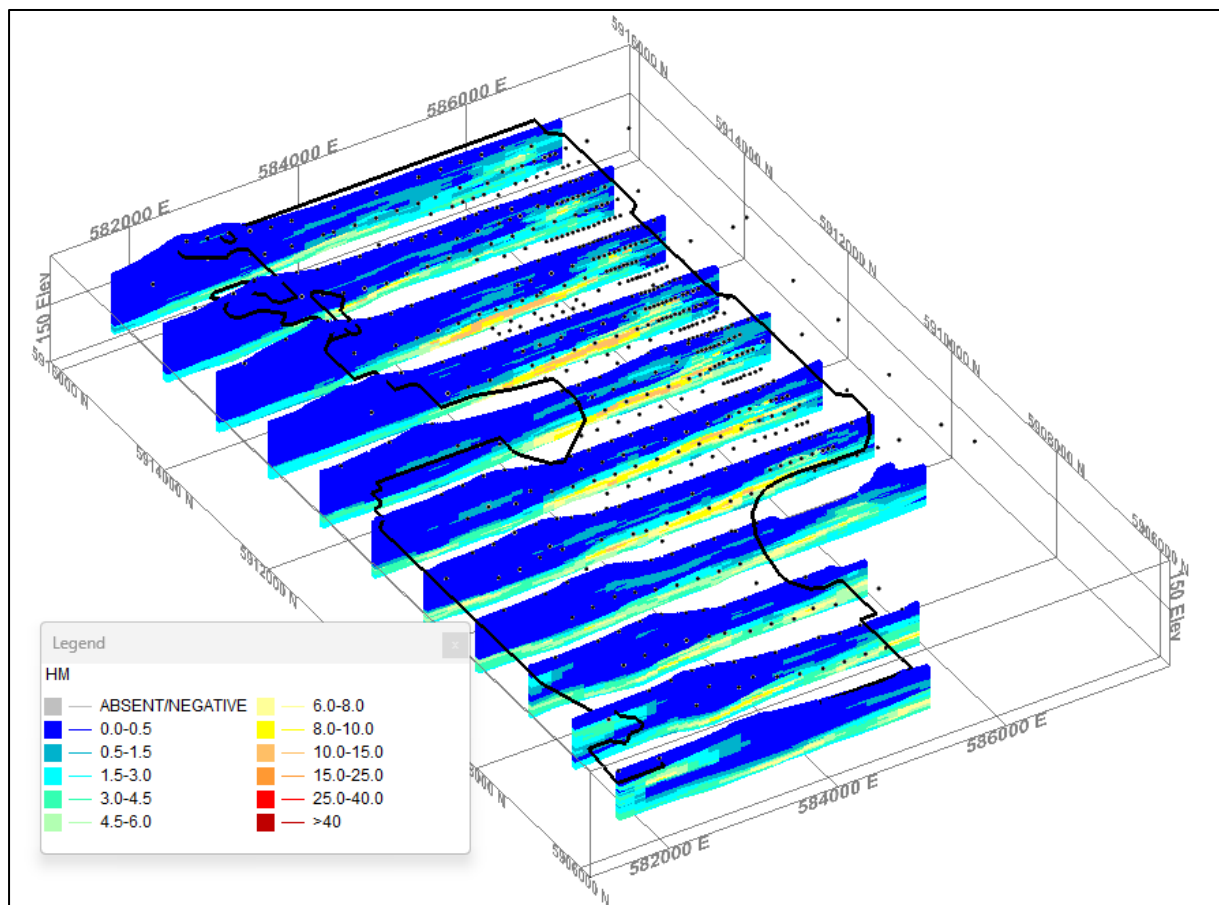
- A lower HM cut-off grade of 1% was adopted;
- An upper slimes cut-off of 35% was applied;
- Only material within confirmed HM bearing zones was reported: and
- A 'grade\*thickness to depth of burial' ratio was applied in conjunction with the 1% HM cut-off.

The 'grade\*thickness to depth of burial' ratio assists in identifying lower grade and/or deeply buried mineralisation that is unlikely to be economic to mine, which is excluded from the reported Mineral Resource estimate.

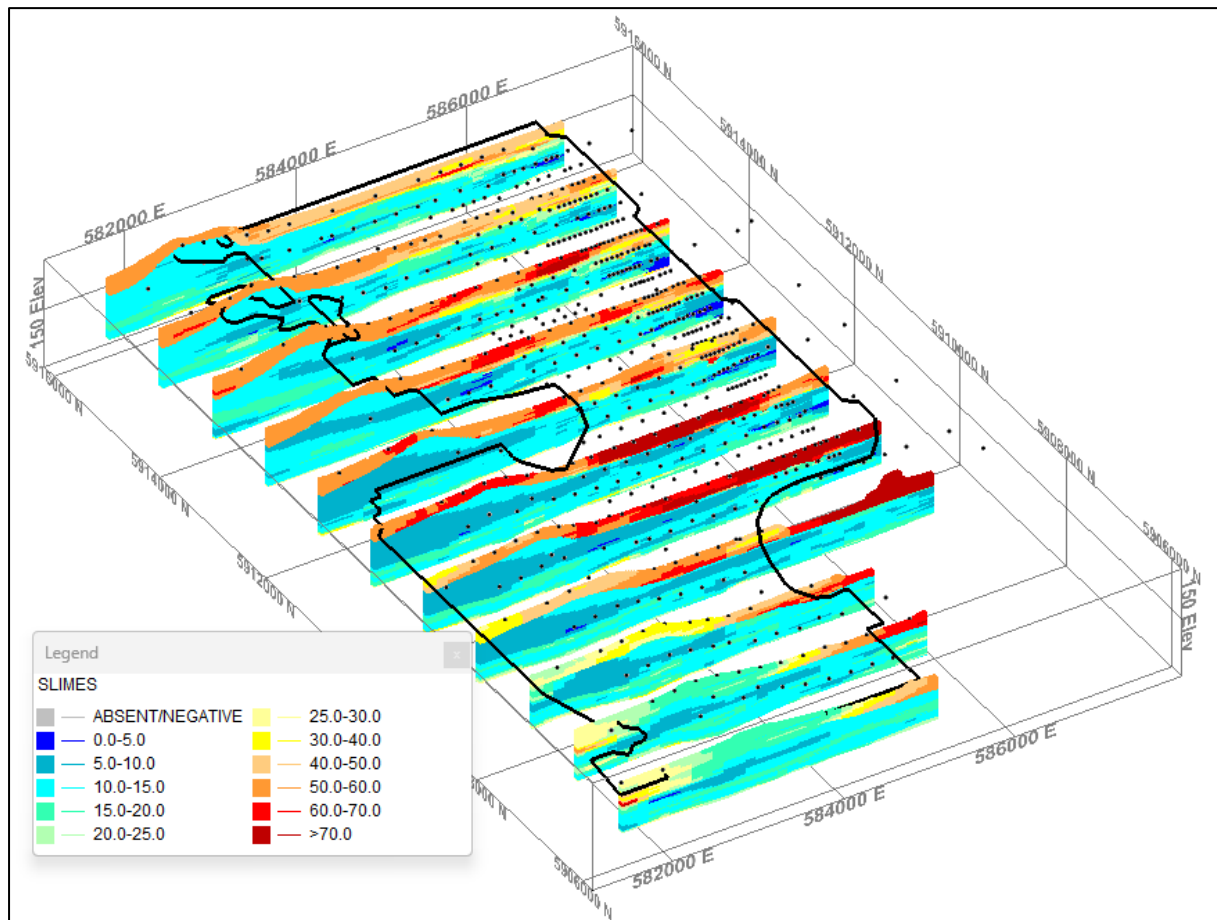
The 1% HM cut-off was adopted on the basis of the percentage and composition of VHM in the mineral suite, a deposit morphology that allows for large-scale, low-cost mining and is supported by preliminary mine optimisation studies.



**Figure 6:** Grade tonnage curve for the WIM100 Mineral Resource.



**Figure 7:** Vertical slices through the WIM100 block model showing HM grade (20x vertical exaggeration; filtered to remove basement cells).



**Figure 8:** Vertical slices through the WIM100 block model showing slimes grade (20x vertical exaggeration; filtered to remove basement cells).

### Resource classification assignment

The Mineral Resource estimate for WIM100 was assigned a resource category based on the definitions defined in the JORC Code (2012 Ed.). The resource category applied is based on:

- Drill hole spacing and sample density, supported by established grade continuity (variography);
- Continuity of geological domains;
- Confidence in the supporting analytical data;
- Density and distribution of mineral assemblage composites; and
- The opinion of the Competent Person.

Where drilling has been completed at 250mE by 250mN spacing or closer and there is supporting mineralogical composite data, a Measured Classification was assigned. Where drilling has been completed at 250mE by 500mN and up to 500mE by 500mN spacing and there is supporting mineralogical composite data, an Indicated Classification was assigned. If the drill spacing is greater than 500mE by 500mN and/or there is limited supporting composite data, an Inferred Classification was assigned. There is limited extrapolation of mineralisation up to distances of 500m from drill holes along strike to the south and up to 100m along strike to the north at WIM100. Less than 3% of the reported Mineral Resource for WIM100 is based on the extrapolation of geological continuity beyond the limit of current drill hole information.

The mineralisation beneath significant wetland areas (Jallumba Marsh and Red Gum Swamp) has been excluded from the WIM100 reported Mineral Resource estimate.

### **Mining and metallurgical methods and parameters**

The WIM100 deposit comprises a large horizontal, lobate and consistently mineralised horizon within the LPS. It is covered by unmineralised sediments varying from 6m to 37m in thickness that would need to be removed as overburden during mining. The geomorphology and unconsolidated nature of the resource allow for large-scale, low-cost earthmoving options to be deployed in open pit scenarios.

The Pre-Feasibility Study<sup>4</sup> (PFS) selected conventional truck and excavator mining of the overburden material at WIM100 with a wheel suction dredge utilised for ore mining as the preferred mining method.

The WIM100 deposit HM is fine-grained, which contributes to recovery and metallurgical challenges typical of WIM-style deposits. A range of mineral separation methods for the fine-grained mineralisation style is being investigated in conjunction with the DFS currently being undertaken on the WIM100 deposit.

As is the case for all WIM-style deposits, the zircon contains uranium and thorium levels above current typical specification for marketable premium zircon. Iluka is investigating a range of purification and separation techniques for producing saleable zircon product(s) in conjunction with the DFS.

Rare earth mineral concentrate (monazite and xenotime) will be transported to Iluka's Eneabba rare earths refinery, through which saleable rare earth oxides will be produced.

### **Other material modifying factors**

Environmental studies are in progress to support preparation of the Environment Effects Statement (EES) for the Wimmera project. The mineralisation located beneath Jallumba Marsh and Red Gum Swamp has been excluded from the WIM100 resource estimate. Additional metallurgical, geological, cultural heritage and mining studies are also underway as part of the DFS.

### **Competent Persons Statement**

The information in this report that relates to Exploration Results or Mineral Resource estimates is based on, and fairly represents, information and supporting documentation prepared by Mr Shayne Maycock and Mr Oliver Hughes, who are both permanent employees of Iluka. Mr Maycock is a member of the Australian Institute of Geoscientists (MAIG) and he has sufficient experience which is relevant to the style of mineralisation and the 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 Maycock consents to the inclusion in this release of the matters based on the information in the form and the context in which they appear. Mr Maycock and Mr Hughes are both shareholders of Iluka.

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<sup>4</sup> Refer ASX release *Revised Announcement – Wimmera Development Progress. WIM100 Ore Reserve Estimate and Updated Mineral Resource Estimate*, 22 February 2023.



## Appendix 1

### JORC Code 2012 edition – Table 1 report

#### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

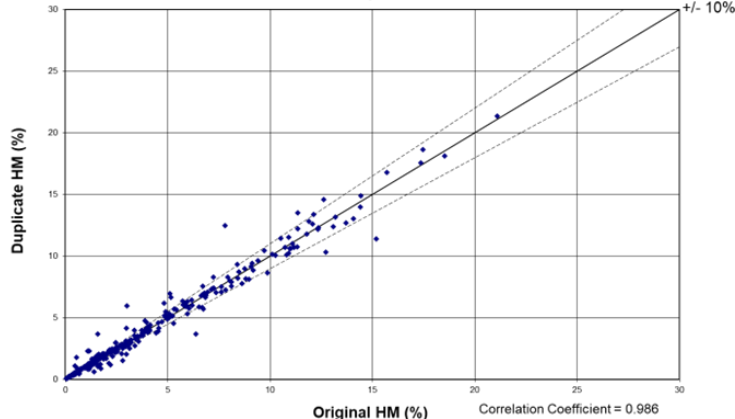
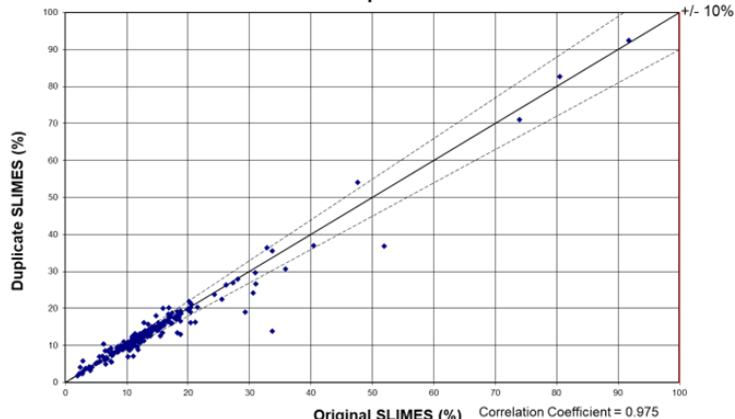
Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>The WIM100 deposit was sampled using Reverse Circulation Aircore (AC) drill holes. All 662 drill holes were drilled vertically which is essentially perpendicular to the mineralisation. Samples were collected at 1m intervals through the mineralisation. A rotary splitter was used to disperse material exiting the cyclone and a sub-sample was collected from a quadrant beneath the splitter. Duplicate samples were taken from a second quadrant at a rate of approximately 1 in 40 primary samples assayed. All of the drilling utilised the same drilling and assay methodology, and mineralogical composite sample analysis techniques. Gamma logging was obtained from 258 AC holes. Gamma logging was completed using a Reflex EX-Gamma probe that was run inside the AC inner tubes on completion of the drill hole.</p> <p>Samples estimated to contain greater than 0.5% heavy mineral were considered 'mineralised' and submitted for analysis. The samples were dried, weighed and de-slimed (material &lt;38µm removed) and oversize (material +2 mm) was removed. About 100g of the 38µm to 2mm sand fraction was sieved at 710µm with the 38µm to 710µm (sand) fraction subjected to float/sink analysis using Lithium-Sodium-Tungsten (LST, SG = 2.85g/cm<sup>3</sup>). The resulting HM concentrate was dried and weighed to determine the in situ HM percentage.</p> <p>Following interpretation of the deposit geology, HM concentrate from similar geological domains was grouped together to form mineralogical composite samples. The composite samples were subjected to magnetic separation with the magnetic and non-magnetic fractions subjected to densometric separation using Thallium Malonate Solution (TMF). Various fractions were then analysed using XRF analysis. This separation technique was used to isolate a zircon-rich fraction to determine grain size and indicative quality for zircon. Another split of about 20g of HM was sent to an external laboratory for QEMScan analysis to determine the mineral assemblage.</p>
<b>Drilling techniques</b>	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic etc) and details (e.g. 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).</i></p>	<p>All sampling was based on vertical, 76mm diameter 'NQ' AC drill holes.</p>

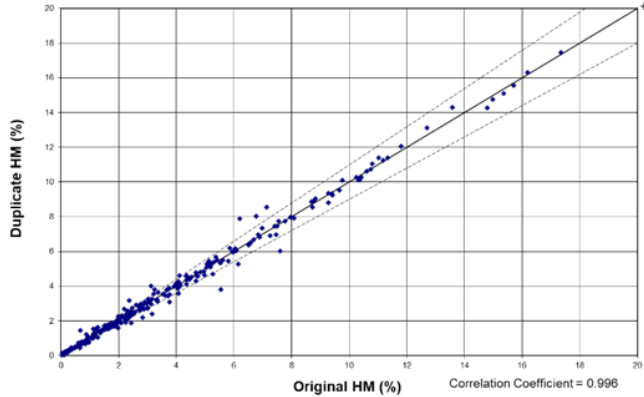
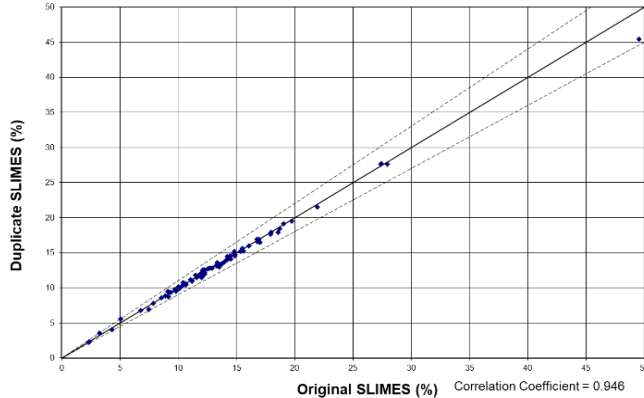
Criteria	JORC Code explanation	Commentary
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>Both sample quality and water content were recorded in the field logging. Any factors that have affected sample recovery were recorded in the logging comments.</p> <p>Sample weights (dry) were recorded by the laboratory which, in conjunction with QA/QC data, provides an indication of the effectiveness and representativeness of the sample splitting. Sample weights were generally in the order of 1kg to 2kg although some variation is noted. During assaying of the 2024 samples, if the sample weight was in excess of 1.3kg, the sample was split using a rotary splitter to reduce the sample weight for analysis to about 1kg. AC samples were visually checked for recovery, moisture and contamination and drilling was continually monitored to ensure a consistent rate of penetration was maintained. Sample weights recorded at the laboratory indicate reasonable sample quality and representativity. The mineralised samples were not typically affected by the presence of rock or induration and no sample bias is evident. Minor slimes loss may have occurred with moisture seeping through the calico sample bags as samples are typically wet.</p> <p>No relationship exists between grade and recovery with mineralised samples exhibiting recovery in line with expectation for the AC drilling method.</p>
<b>Logging</b>	<p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>Geological logging of AC samples recorded colour, lithology, grain size, sorting, induration type, hardness and an estimate of the rock, clay and HM content. Whether the sample was dry or wet or water was injected during drilling was also noted.</p> <p>A small portion of all samples was panned and logged on site at the time of drilling.</p> <p>100% of the samples were logged.</p>
<b>Sub-sampling techniques and sample preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p>	<p>No diamond coring was used to support the estimate of contained mineralisation. Diamond drilling was conducted at WIM100 as part of geotechnical studies and collection of samples for density test-work. Sonic drilling was conducted in 2023 at WIM100 to assess if any sample assay bias exists in the AC data. No bias was identified for HM grade and no adjustments to the resource estimate data were required.</p> <p>A rotary splitter was used to produce sub-samples of typically wet substrate. Most of the mineralisation drilled at the WIM100 deposit is located below the water table and some water injection was used to assist the sample return.</p> <p>Sample preparation is consistent with industry standard techniques used for sampling mineral sand deposits. A 1kg to 2kg 'quarter' sample split was taken</p>



Criteria	JORC Code explanation	Commentary
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample size collected at the time of drilling is deemed appropriate for the fine grain sand material intersected at WIM100 to provide a reliable representation of the HM, slimes, sand and oversize characteristics.
<b>Quality of assay data and laboratory tests</b>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments etc, the parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their derivation etc.</i></p> <p><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></p>	<p>The assay method used is appropriate for assessment of the mineralisation at WIM100. Wet sieving at 38µm has been used to ensure appropriate recovery of the fine-grained mineral associated with this style of mineralisation. The mineralogical composite sample evaluation processes are appropriate for the style of deposit and current level of study. While the QA/QC data indicates some difficulty in analysis for the fine-grained samples, the quality of the data is considered appropriate for the estimation of Mineral Resources. The technique is considered a total analysis.</p> <p>Downhole gamma logging conducted in 258 AC holes confirmed the presence of HM mineralisation corresponding to elevated U and Th present in certain heavy minerals, but the geophysical logging was not used in the resource estimation process.</p> <p>A total of 310 field standards were analysed (about 1 per 41 routine samples) in conjunction with the WIM100 exploration programs carried out between 2013 and 2024. The HM analysis of the field standards returned a fail rate of 9% (28 fails) while the slimes fail rate was 12% (37 fails). HM standard results reported outside the three standard deviations (3SD) triggered re-split and re-assay of the standard and selected samples that were processed at the same time as the standard. The repeat assays were assessed and if the standard returned HM results within specification, then all the repeat assays replaced the original results in the acQuire database. Slimes results outside of 3SD did not trigger repeat assays as the slimes component of the sample is lost during initial processing. The high number of slimes fails are attributed to a number of factors including difficulty in desliming with sieve screens ‘blinding’ due to the very fine material, sensitivity of the slimes to screen wear, the analytical process, and training of new laboratory staff.</p> <p>A total of 392 laboratory reference standards were assayed (about 1 per 32 routine samples) in conjunction with exploration programs carried out on the WIM100 deposit. The HM and slimes analysis of laboratory standards returned a fail rate of 6% for both HM (23 fails) and slimes (24 fails). As was the case with the field standards, laboratory standard HM results reported outside the 3SD triggered re-split and re-assay of the standard and selected samples that were processed at the same time as the standard. The repeat assays were assessed and if the standard returned HM results within specification, then all the repeat assays replaced the original results in the acQuire database. Slimes results outside of 3SD did not trigger repeat assays, as the slimes component of</p>



Criteria	JORC Code explanation	Commentary
		<p>the sample is lost during initial processing, but prompted investigation into the cause to ensure rectification.</p> <p>The field and laboratory standard analysis show reasonable procedural control with no significant bias noted for HM or slimes.</p> <p>A total of 269 field duplicate samples were assayed synchronously with the analysis of the WIM100 samples at a rate of 1 in 47 samples.</p> <p>The field duplicate samples show good correlation as shown in the charts below.</p> <div><p><b>Normal Scatterplot Field Duplicate HM</b></p><p>Duplicate HM (%)</p><p>Original HM (%)</p><p>Correlation Coefficient = 0.986</p><p>+/- 10%</p></div> <div><p><b>Normal Scatterplot Field Duplicate Slimes</b></p><p>Duplicate SLIMES (%)</p><p>Original SLIMES (%)</p><p>Correlation Coefficient = 0.975</p><p>+/- 10%</p></div>

Criteria	JORC Code explanation	Commentary
		<p>A total of 282 laboratory duplicate samples were assayed synchronously with the analysis of the WIM100 samples at a rate of 1 in 45 samples. The laboratory duplicate samples show good correlation as shown in the charts below.</p> <div data-bbox="1279 309 1973 1219"> <p><b>Normal Scatterplot Lab Duplicate HM</b></p>  <p><b>Normal Scatterplot Lab Duplicate SLIMES</b></p>  </div> <p>The results from the QA/QC are considered acceptable and confirm that the data set is robust and appropriate for resource estimation.</p>
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	All assay data is routinely inspected visually and statistically prior to resource estimation. The data has been reviewed by both exploration and resource development personnel at Iluka. The HM component from all samples was verified by examining the sinks after LST separation under a microscope and

Criteria	JORC Code explanation	Commentary
	<p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>comparison to adjacent samples within the drill hole and drill holes on the same section.</p> <p>Twenty-nine twin hole pairs are recorded in Iluka's Geology Database. A comparison of the drill grades between twinned holes shows acceptable correlation. Assay results typically vary considerably on an interval by interval (1m) basis but overall there is no significant bias between the primary and the twin hole assay values within the mineralised domains. One of the twinned pair holes (typically the second drilled) was removed prior to resource estimation.</p> <p>Logging of AC samples was entered directly into a laptop computer using acQuire software with data verification routines enabled. Data was then electronically transferred into Iluka's SQL-hosted geology database interfaced with acQuire data management software which incorporates further verification routines.</p> <p>No bias or errors were identified in the assay data and no adjustments were made.</p>
<b>Location of data points</b>	<p><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>The 2019 to 2024 AC drilling was surveyed using RTK_DGPS equipment, however the drill holes surveyed prior to 2019 used GPS or DGPS. The DGPS and GPS located drill holes are considered to have an accuracy of +/- 5m in X/Y which is adequate considering the spatial extent of the style of deposit. The reduced level (RL) for all holes was taken from a LiDar survey completed by Outline Global which had a project vertical design accuracy of 0.04m at one sigma.</p> <p>The eastings and northings were recorded in GDA94 MGA Zone 54.</p> <p>The topographic surface used for the Wimmera deposits was generated from the 2022 Airborne Laser Scanning (LiDar) survey completed by Outline Global which has a project vertical design accuracy of 0.04m at one sigma. The surface provides very good geomorphological detail and drill hole collar points were projected to this surface to ensure the mineralisation interpretation is at a correct position relative to the surface.</p>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p>	<p>The drilling at WIM100 is variable but predominantly spaced at about 250m by 250m or 500m by 250m with some infill completed to 250m by 62.5m and 250m by 50m along the eastern margin of the deposit, which is more variable within the upper LPS unit. The close-spaced infill drilling also supports detailed mine planning and pit edge definition. Drilling around the periphery of the deposit in areas of lower grade mineralisation increases 1,000m by 500m or greater.</p> <p>Access issues, either social or environmental, meant that there are some gaps in the grid and some holes were required to be offset from the ideal drill grid locations.</p>



Criteria	JORC Code explanation	Commentary
	<p><i>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.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<p>Given the nature of the fine-grained style of mineralisation, there is sufficient confidence in the interpreted geometry and grade continuity for the Mineral Resource classification that has been applied. This is corroborated using geostatistical analysis, particularly variography, and sonic twin check drilling. No compositing was used for assay data, however, assemblage and mineral quality information was derived from composites of HM sinks.</p>
<b>Orientation of data in relation to geological structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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.</i></p>	<p>No bias has been identified or is expected as the vertically-orientated drill holes are effectively perpendicular to the horizontal mineralisation of the WIM100 deposit.</p> <p>No sampling bias is noted.</p>
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	<p>Samples were stored at secure Iluka compounds following transport from the exploration site. The samples received at Iluka's laboratory were compared to the dispatch notes generated from the logged data lodged within the acQuire software. No discrepancies were noted.</p>
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<p>No audits have been conducted of the sampling done on the WIM100 deposit, however, the sampling techniques used were audited for Iluka during exploration over other HM deposits. A similar assaying process supports Iluka's current mining operations and is a standard method used widely in the exploration for mineral sands.</p> <p>The in-house laboratory undergoes regular inspections by Iluka geology staff.</p>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary										
Mineral tenement and land tenure status	<i>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.</i>	<p>Iluka’s WIM100 deposit is located approximately 30km southwest of Horsham in western Victoria.</p> <p>The WIM100 deposit is predominantly located within RL006904, granted on 20 December 2021, with minor extension to the south into EL006966 and to the south west into RL006906. The tenements are held by Basin Minerals Holdings Pty Ltd, a wholly-owned subsidiary of Iluka Resources Limited.</p> <table><tr><th>Tenement</th><th>Status</th></tr><tr><td>RL006904</td><td>Live – registration date of 20/12/21 (WIM100).</td></tr><tr><td>RL006905</td><td>Live – registration date of 27/6/23 (WIM50).</td></tr><tr><td>RL006906</td><td>Live – registration date of 27/6/23 (WIM50N).</td></tr><tr><td>EL006966</td><td>Live – registration date of 23/9/19 (WIM100 extension)</td></tr></table>	Tenement	Status	RL006904	Live – registration date of 20/12/21 (WIM100).	RL006905	Live – registration date of 27/6/23 (WIM50).	RL006906	Live – registration date of 27/6/23 (WIM50N).	EL006966	Live – registration date of 23/9/19 (WIM100 extension)
	Tenement	Status										
RL006904	Live – registration date of 20/12/21 (WIM100).											
RL006905	Live – registration date of 27/6/23 (WIM50).											
RL006906	Live – registration date of 27/6/23 (WIM50N).											
EL006966	Live – registration date of 23/9/19 (WIM100 extension)											
	<i>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.</i>	<p>The tenements predominantly cover privately-owned freehold land with some crown land under reserve, road reserves and the Toolondo State Forest which impinges on the very western margin of retention license RL006905 (WIM50). Environmental, social and cultural heritage investigation studies are being progressed to support project approvals. The mineralisation located beneath Jallumba Marsh and Red Gum Swamp has been excluded from the WIM100 Mineral Resource estimate.</p>										
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>The fine-grained HM deposits of the Wimmera region were initially investigated by CRAE in the 1980s. While the CRAE data has assisted in targeting the mineralisation, no historical information by CRAE or any other company was used in the estimation of the WIM100 Mineral Resource.</p>										
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The fine-grained HM style of deposits such as WIM100 manifest as extensive lobate mineralised zones interpreted to have accumulated in a low energy near/offshore marine setting peripheral to the margin of the Murray Basin geomorphological province. The mineralisation occurs in fine- to very fine-grained, well sorted, silty sand and is dominantly hosted in lower shore facies of the LPS. WIM-style HM deposits are typically extensive with strike lengths of 5km to 20km and widths of 2km to 5km. The mineralisation at WIM100 is between 1m and 20m in thickness and shows good lateral continuity.</p>										

Criteria	JORC Code explanation	Commentary																																				
Drill hole Information	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length.</i>	<p>A summary of the data recorded in Iluka’s Geology Database for the WIM100 Deposit is tabled below. Metallurgical holes, twinned holes, sonic and geotechnical diamond core drill holes (DDH) were removed from the data set used for the resource estimation.</p> <table><tr><th>Drill Type</th><th>Holes</th><th>Metres</th><th>Intervals</th><th>HM Assays</th><th>Comment</th></tr><tr><td>DDH</td><td>16</td><td>494.45</td><td>1,102</td><td>468</td><td>Density testing</td></tr><tr><td>AirCore</td><td>662</td><td>24,186.8</td><td>22,370</td><td>12,597</td><td>Resource definition</td></tr><tr><td>AirCore_Met</td><td>172</td><td>4,329</td><td>-</td><td>-</td><td>Met testing</td></tr><tr><td>Sonic</td><td>6</td><td>189</td><td>124</td><td>117</td><td>Aircore check</td></tr><tr><td>Total</td><td>856</td><td>29,199.25</td><td>23,596</td><td>13,182</td><td></td></tr></table>	Drill Type	Holes	Metres	Intervals	HM Assays	Comment	DDH	16	494.45	1,102	468	Density testing	AirCore	662	24,186.8	22,370	12,597	Resource definition	AirCore_Met	172	4,329	-	-	Met testing	Sonic	6	189	124	117	Aircore check	Total	856	29,199.25	23,596	13,182	
	Drill Type	Holes	Metres	Intervals	HM Assays	Comment																																
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	<i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	<p>Significant intercepts are not presented due to the large number of drill holes and (in the context of the disclosure of this Mineral Resource estimate) is not material. The Competent Person confirms that this exclusion does not detract from the understanding of the Report, on the basis that all relevant drill hole information was used in the estimation of the reported Mineral Resource. All drill holes were drilled vertically with the top of mineralisation intercepted at depths of 6m to 40m downhole. Mineralised intercepts range from 1m to 20m in thickness averaging about 9m.</p>																																				
Data aggregation methods	<p><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></p> <p><i>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.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>No weighting or bottom/top cuts were deemed necessary and have not been used in the estimation of Mineral Resources for the WIM100 Deposit. Envelopes defining a +1% HM grade were used to constrain the grade interpolation and the Mineral Resource estimate was reported using a 1% lower HM cut-off grade.</p> <p>Aggregation of intercepts is not considered applicable.</p> <p>No metal equivalents were used for reporting the WIM100 Mineral Resource estimate.</p>																																				
Relationship between	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	All holes were drilled vertically which is essentially perpendicular to the horizontally-orientated mineralisation, so all intercepts represent true widths.																																				

Criteria	JORC Code explanation	Commentary
<b>mineralisation widths and intercept lengths</b>	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i>	
<b>Diagrams</b>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited, to a plan view of drill hole collar locations and appropriate sectional views.</i>	Figures and representative cross sections showing the distribution of drill hole and grade information are presented in the attached text.
<b>Balanced reporting</b>	<i>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.</i>	The Mineral Resource estimate for WIM100 considers the grade distribution and supersedes the reporting of exploration results.
<b>Other substantive exploration data</b>	<i>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.</i>	<p>Logging of the HM sink includes visually estimating the HM present with the results corroborating the presence of valuable HM mineralisation. This is taken into account when creating the geological and mineralised framework for the block modelling and resource estimation.</p> <p>Composite samples have been created from the HM sink fractions of the routine exploration samples. The composited samples generate between 40g and 200g of HM which is subjected to a process of magnetic and heavy liquid separation followed with XRF, QEMScan and laser ablation analysis of various fractions to determine the assemblage and quality of the mineral present.</p> <p>A test pit was dug within the WIM100 deposit area during 2019. About 500 tonnes of mineralised material was excavated and sent to Iluka's metallurgical test facility at Capel, Western Australia, for processing to support assumptions on mineral recovery and quality and isolate HM products for marketability.</p> <p>Material from the test pit was used to pilot test the mineral processing techniques to recover separated heavy mineral products (zircon, ilmenite, monazite, xenotime and leucoxene).</p> <p>Zircon recovered from the test pit sample has been retained and a range of purification and separation techniques are currently being investigated in conjunction with the DFS to determine the marketability of the zircon.</p> <p>Geophysical gamma surveys were acquired with downhole logging of 258 AC drill holes over the WIM100 deposit. The surveys are generally considered qualitative but high gamma responses corroborate the presence of radionuclides associated with the HM.</p> <p>A density factor based on the testing of undisturbed triple tube diamond core provided information to support a formula for the density of the WIM100 resource which takes into consideration the slimes and HM content.</p> <p>As with all WIM-style deposits, the effective recovery of the fine-grained HM has been considered to be problematic. Also, the uranium and thorium levels</p>



### Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<p><i>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.</i></p> <p><i>Data validation procedures used.</i></p>	<p>Logging of AC samples were entered directly into a laptop computer using acQuire software with data verification routines enabled. Data was then transferred into Iluka's acQuire Geology Database with further validation routines enabled. Assay data was stored in Iluka's CCLAS laboratory database at the time of analysis and transferred electronically to the acQuire-hosted Geology Database.</p> <p>Drill data was reviewed to ensure no duplicate records were present and statistical evaluation was conducted to ensure all results were within acceptable ranges. Datamine Studio software was used to visually check the grade magnitude and spatial distribution of data was as expected.</p>
<b>Site visits</b>	<p><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></p> <p><i>If no site visits have been undertaken indicate why this is the case.</i></p>	<p>All AC programs were visited by experienced Iluka staff geologists. The Competent Person visited the site in 2018. Other Competent Persons from Iluka have visited the site during the 2019, 2022, 2023 and 2024 drill programs. All work has been conducted in accordance with Iluka and industry standard practice.</p>
<b>Geological interpretation</b>	<p><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></p> <p><i>Nature of the data used and of any assumptions made.</i></p> <p><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></p> <p><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></p>	<p>The geological framework for the WIM100 deposit is well understood from many years of exploration by Iluka and other exploration companies. The mineralisation is dominantly confined to the interpreted Lower LPS unit which is tabular and flat lying. At the current drill spacing, the geometry and continuity of the mineralisation is well defined.</p> <p>The density of drilling done by Iluka varies considerably and some assumption of the continuity of mineralisation is made based on the typical continuity of grade for the style of deposit. The deposit shows consistent and continuous mineralisation over a large area.</p> <p>No alternative interpretations have been considered for WIM100.</p> <p>The valid reportable mineralisation was restricted to that hosted in the LPS unit. HM values at the base and transitional to the underlying Winnambool Formation, which are logged with high trash or contaminated with carbonate shell fragments, are domained separately and excluded from the reported Mineral Resource estimate.</p> <p>Appropriate geological domaining and corresponding flagging of drill data was used to control the mineralisation in the WIM100 Mineral Resource estimate.</p>

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	<i>The factors affecting continuity both of grade and geology.</i>	No factors are known which might affect the continuity of the geology. There are no indications of post-depositional fluvial wash-outs impacting the deposit. Some induration is noted which is recorded in terms of the logged hardness and oversize values and incorporated into the geology block models. It should be noted that oversize (OS), which is defined by grains > 2mm diameter, may be represented by coarse sand. The OS value does not necessarily reflect induration.
<b>Dimensions</b>	<i>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.</i>	This model covers the full extent of drilling conducted by Iluka on the WIM100 deposit within tenure held by Iluka. The WIM100 mineralisation has a north-south strike extent of about 10km and an east-west across strike extent of about 3.5km. The mineralisation varies from 3m to 20m in thickness and averages about 9m in thickness. The mineralisation is covered by an average thickness of about 17m of non-mineralised Shepparton Formation and coarse grained LPS with depth to mineralisation varying from about 6m to 37m.
<b>Estimation and modelling techniques</b>	<p><i>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.</i></p> <p><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></p>	<p>Grade interpolation was done using the Estima Superprocess within Datamine Studio software. Grade estimation was completed using Inverse Distance Cubed, which is an Iluka standard and is deemed appropriate for this style of mineralisation. Mineralogy composite identifier and hardness values were interpolated using Nearest Neighbour (NN) method. No HM top cut has been used nor deemed necessary. Drill hole sample data was flagged with domain codes corresponding to the geology of the deposit and a +1% HM grade domain. The domains were imprinted on the model from three-dimensional surfaces generated from the geological and mineralisation interpretations. A primary search dimension of 375m across strike by 700m along strike by 3m RL (X*Y*Z) was used for all assay data with limitations placed on the minimum and maximum number of samples used to inform model cells. Successive search volume factors of 2 and 7 were adopted to estimate grade in areas of lower data density. An increased vertical search distance of 5m was used to estimate the composite data. In the event that a cell still remained uninformative, a domain average value was applied and the cell was to be excluded from the reported Mineral Resource estimate.</p> <p>Nearest Neighbour grade interpolation was carried out for HM which resulted in a similar grade distribution and tenor as the Inverse Distance Cubed results. A comparison to the previous Mineral Resource Estimate completed in 2023 was undertaken. There is a 23% increase in tonnes and 19% increase in HM tonnes compared to the 2023 estimate. The increase in material and HM tonnage is driven by the expansion of the model and Mineral Resource perimeter to the west following additional drilling completed in 2024 and is supported by preliminary optimisation studies. Additional drilling and</p>



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	<p><i>The assumptions made regarding recovery of by-products.</i></p> <p><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></p> <p><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></p>	<p>composite sample analysis has resulted in the upgrading of Indicated and Inferred resources to Measured and Indicated classifications. Measured material tonnes has increased by 10% and Indicated material tonnes has increased by 50%. No mine production data is available as the WIM100 deposit is not in production.</p> <p>No by-products were considered as part of the WIM100 Mineral Resource estimate.</p> <p>Deleterious minerals (trash minerals) were identified as part of the mineralogical composites. Various mineral quality attributes are also included in the grade estimation which inform the marketability of the WIM100 HM. The zircon contains elevated uranium and thorium which is typical for all the fine-grained WIM deposits. A range of purification and separation techniques is currently being investigated in conjunction with the WIM100 DFS to determine the marketability of the zircon.</p> <p>The drill spacing over WIM100 is dominantly 250mE by 250mN or 250mE by 500mN with some closer spaced drilling down to 50mE by 250mN on the eastern margin. The drill sample length used is almost exclusively 1m. A parent cell size of 125mE by 125mN by 1mRL was adopted. Sub-celling of 2 x 2 x 10 (X/Y/Z) was used to improved volume resolution along domain boundaries.</p> <table><tr><th></th><th colspan="2">Model</th><th rowspan="2">Cell Dimensions</th><th rowspan="2">Number of Cells</th><th rowspan="2">Sub celling</th></tr><tr><th>Axis</th><th>Origin</th><th>Extent</th></tr><tr><td>X</td><td>581,062.5</td><td>587,937.5</td><td>125</td><td>55</td><td>2</td></tr><tr><td>Y</td><td>5,905,812.5</td><td>5,916,187.5</td><td>125</td><td>83</td><td>2</td></tr><tr><td>Z</td><td>114.5</td><td>180.5</td><td>1</td><td>66</td><td>10</td></tr></table>		Model		Cell Dimensions	Number of Cells	Sub celling	Axis	Origin	Extent	X	581,062.5	587,937.5	125	55	2	Y	5,905,812.5	5,916,187.5	125	83	2	Z	114.5	180.5	1	66	10
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	<p><i>Any assumptions behind modelling of selective mining units.</i></p> <p><i>Any assumptions about correlation between variables.</i></p> <p><i>Description of how the geological interpretation was used to control the resource estimates.</i></p> <p><i>Discussion of basis for using or not using grade cutting or capping.</i></p>	<p>No assumptions have been made regarding modelling of selective mining units, however, based on the completed PFS, the ore is expected to be mined using a dredge and the overburden removed using truck and excavator methods.</p> <p>No correlations or assumptions were used in this resource estimation.</p> <p>Appropriate geological domaining and corresponding flagging of drill data and model cells was used to control the grade interpolation. Closed wireframes outlining the extent of +1% HM grade were used to constrain the extent of mineralisation.</p> <p>A top cut was not deemed necessary for HM assays following evaluation of statistics and consideration of the extent and consistency of the sample grades.</p>																											

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	<i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i>	Validation of the grade estimation was done for WIM100 by comparing model statistics to sample statistics and a visual comparison of drill to model grades using Datamine Studio Software. The modelled grades are in line with the input drill assay data. Given no mining has taken place no reconciliation data is available.
<b>Moisture</b>	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	The tonnages are estimated on a dry basis.
<b>Cut-off parameters</b>	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	A nominal cut-off grade of 1% HM was chosen for reporting the Mineral Resource for WIM100. A 1% HM cut-off is considered appropriate for a deposit of this magnitude and contained valuable HM assemblage to represent an inventory of the contained mineralisation.
<b>Mining factors or assumptions</b>	<i>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. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i>	The PFS selected conventional truck and excavator mining of the overburden material at WIM100 with a wheel suction dredge utilised for ore mining as the preferred mining method.
<b>Metallurgical factors or assumptions</b>	<i>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. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i>	The metallurgical assumptions are based on mineralogical data and comprehensive testing of a number of bulk samples (including the test pit sample) collected from the WIM100 deposit between 2015 and 2022. This has included detailed analysis of recovery and the quality of various marketable mineral species. Iluka is investigating a range of options for producing saleable zircon product(s) in conjunction with the DFS.
<b>Environmental factors or assumptions</b>	<i>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. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i>	Environmental studies are in progress to support preparation of the Environment Effects Statement (EES) associated with the DFS. The EES is required by law as part of the progression to mining. Additional metallurgical, geological and mining studies are also underway as part of the DFS. The mineralisation located beneath significant wetland areas (Jallumba Marsh and Red Gum Swamp) has been excluded from the WIM100 reported Mineral Resource estimate. No assumptions were made regarding possible waste and process streams in the estimation of the WIM100 Mineral Resource. The overburden including topsoils and subsoils will be removed and stockpiled from the areas identified in the mine optimisation studies. Ore will be mined and processed to remove the HM and the sand tails and fines will be returned to the mine void. Following stabilisation of the tails, the overburden, subsoil and topsoil will be replaced and the site rehabilitated.

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<b>Bulk density</b>	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<p>An in situ dry bulk density, based on testing of 127 samples selected from undisturbed triple tube diamond core acquired in early 2022, was developed by Iluka. The density formula comprises a regression formula taking into account the slimes and HM content which impact on the in situ dry density. Sections of high-quality core varying in length from 20cm to 50cm were chosen for testing. The core was carefully measured for length and diameter, then double bagged in plastic bags ensuring no loss of material. The samples were then analysed at Iluka's Narngulu laboratory for wet weight and dry weight (after drying at 105°C for 24 hours). The samples were then analysed for HM and slimes using Iluka's standard HM determination method.</p> <p>The calculation of the bulk density takes into account the weight percent of HM and slimes and is derived from diamond drilling completed in 2022 specifically commissioned to provide bulk density details. The formula results in a deposit average dry density of about 1.6t/m<sup>3</sup> for the fine-grained mineralised LPS.</p> <p>Iluka's standard bulk density, which is appropriate for high clay and coarse-grained sedimentary material, was applied to the Shepparton Formation and the coarse-grained LPS.</p>
<b>Classification</b>	<p><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></p> <p><i>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).</i></p> <p><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p>	<p>In consideration of the JORC Code classification of Measured, Indicated or Inferred Resources, the following aspects were considered:</p> <ul style="list-style-type: none"> <li>• The drill hole and data spacing;</li> <li>• The robustness of the input data as supported by QA/QC;</li> <li>• Level of supporting mineralogical composite data;</li> <li>• Geological understanding and confidence in the style of mineralisation under consideration; and</li> <li>• Continuity of grade within the geological framework as assessed both visually and geostatistically.</li> </ul> <p>The QA/QC data associated with the WIM100 samples demonstrates sound data integrity and that the assay data is suitable for resource estimation. Where drilling is 250m by 250m spacing and there is supporting mineral assemblage data, a Measured classification was assigned. Where drilling is 500m by 250m up to 500m by 500m spacing and there is supporting mineral assemblage data, an Indicated classification was assigned. If the drill spacing is greater than 500m by 500m and/or there is limited supporting mineral assemblage data, an Inferred classification was assigned.</p> <p>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 the Mineral Resource classification applied.</p>
<b>Audits or reviews</b>	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	Internal review processes within Iluka assisted in the estimation of the WIM100 Mineral Resource. External review of the previous model was undertaken by

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		Snowden Optiro Consultants in 2022, which corroborated the Mineral Resource estimate for WIM100. Snowden Optiro consultants reviewed the current model in 2025, which corroborated the Mineral Resource estimate and classification based on confidence in total HM, HM assemblage information for mineralised fine-grained upper LPS (zone 51) and mineralised fine-grained lower LPS (zone 101). Snowden Optiro recommended that the mineralised coarse grained upper LPS (zone 41), which represents less than 0.1% of the total reported HM tonnage, is classified as Indicated at best, however, given the minor contribution of this material to the total Mineral Resource and the relative position of zone 41, Iluka considers a Measured classification to be appropriate and any change to the classification of zone 41 is not significant to the Mineral Resource estimate.
<b>Discussion of relative accuracy/ confidence</b>	<p><i>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. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></p> <p><i>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.</i></p> <p><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></p>	<p>No geostatistical process was done (such as kriging or conditional simulation) for the resource estimation of WIM100. Variography was undertaken on the HM grade distribution to determine the optimal sample spacing to support the JORC classification assigned. Validation of the model against drill grades by visual assessment, swath plot and statistical comparison supports the integrity of the Mineral Resource estimate for the WIM100 deposit.</p> <p>This statement refers to global estimates for the WIM100 HM deposit.</p> <p>No reconciliation data is available as the WIM100 deposit is not in production.</p>