19 February 2025

GOSCHEN SOUTH MINERAL RESOURCE ESTIMATE

Iluka Resources is pleased to announce an inaugural Mineral Resource estimate for the company's Goschen South deposit. Goschen South is a fine-grained heavy-mineral (HM) deposit located in the Mallee region of north western Victoria, Australia. The Mineral Resource estimate is reported in accordance with the guidelines of the JORC Code (2012 Ed.).

The Goschen South Mineral Resource estimate comprises a combined Indicated and Inferred Mineral Resource of 630mt grading at 3.7% HM for 24mt of HM.

Similar to Iluka's nearby deposits in the Wimmera region, the Goschen South deposit is a large, potentially long life source of zircon and rare earth minerals. Iluka is currently developing Australia's first fully integrated rare earth refinery at Eneabba in Western Australia. Subject to development of Goshen South, its rare earth minerals have the potential to provide significant additional feedstock supply to the Eneabba refinery.

Goschen South deposit Mineral Resource summary

Mineral Resource Category[1]	Resource Tonnes[1]	In situ HM Tonnes	HM	Mineral Assemblage in HM[2]					
				Ilmenite	Zircon	Rutile	Leucoxene	Monazite	Xenotime
	Mt[3]	Mt[3]	%	%	%	%	%	%	%
Indicated	300	12	4.1	34	21	6	5	3.4	0.6
Inferred	330	11	3.4	30	16	5	4	2.8	0.5
Total[3]	**630**	**24**	**3.7**	**32**	**19**	**6**	**5**	**3.1**	**0.6**

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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GOSCHEN SOUTH MINERAL RESOURCE ESTIMATE - OVERVIEW

The Goschen South deposit is located within the Murray Basin geomorphological province in 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 10.5km and an east-west distance of 6km. The mineralisation varies from 1 to 12m in thickness averaging 6.5m and resides beneath 13.5m to 25m of unmineralised sediment.

The Goschen South deposit was initially investigated by Conzinc RioTinto of Australia (CRA) Exploration (CRAE) in the 1980s. As is the case with the Wimmera Industrial Minerals (WIM) style HM deposits, 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 Goschen South deposit is located on a tenement exclusively held by Iluka's wholly owned subsidiary company (Basin Minerals Holdings Pty Ltd).

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

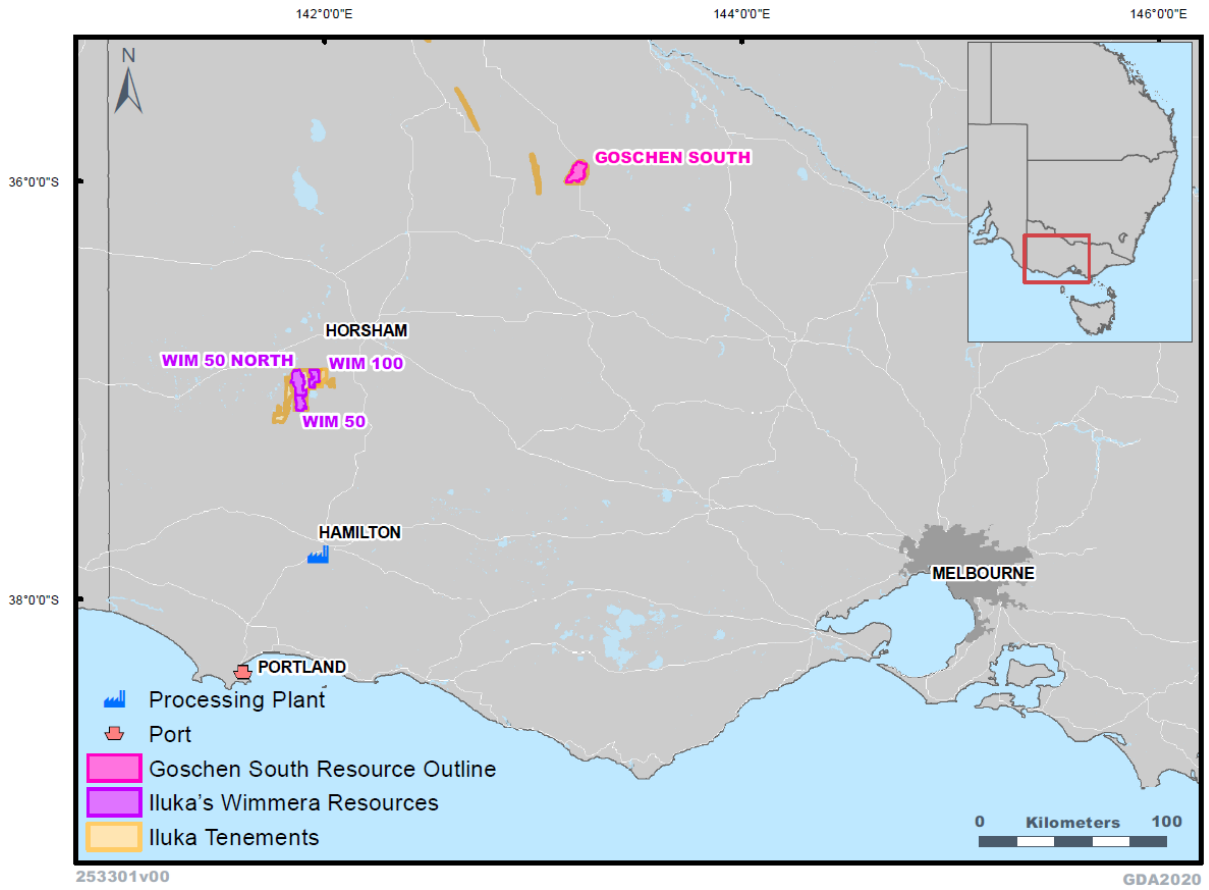


Figure 1: Location plan showing the location of the Goschen South deposit relative to current infrastructure.

Table 1: Mineral Resource estimate for Goschen South reported by JORC Code (2012 Ed.) Category.

Mineral Resource Category[1]	Resource Tonnes[1]	In situ HM Tonnes	HM	Clay	Mineral Assemblage in HM[2]					
					Ilmenite	Zircon	Rutile	Leucoxene	Monazite	Xenotime
	Mt[3]	Mt[3]	%	%	%	%	%	%	%	%
Indicated	300	12	4.1	21	34	21	6	5	3.4	0.6
Inferred	330	11	3.4	21	30	16	5	4	2.8	0.5
Total[3]	**630**	**24**	**3.7**	**21**	**32**	**19**	**6**	**5**	**3.1**	**0.6**

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.

The Goschen South Mineral Resource estimate comprises a combined Indicated and Inferred Mineral Resource of 630 Mt grading at 3.7% HM for 24 Mt of HM. The inaugural Mineral Resource estimate follows additional exploration and deposit modelling undertaken in 2024.

The Goschen South deposit is informed by Reverse Circulation Air Core (AC) drilling undertaken in 2012, 2018 and 2024 for a total of 185 drill holes, 7,240.8m and 3,299 sample assays. A total of 47 mineralogical composites have been completed to inform the HM assemblage and mineral quality at Goschen South.

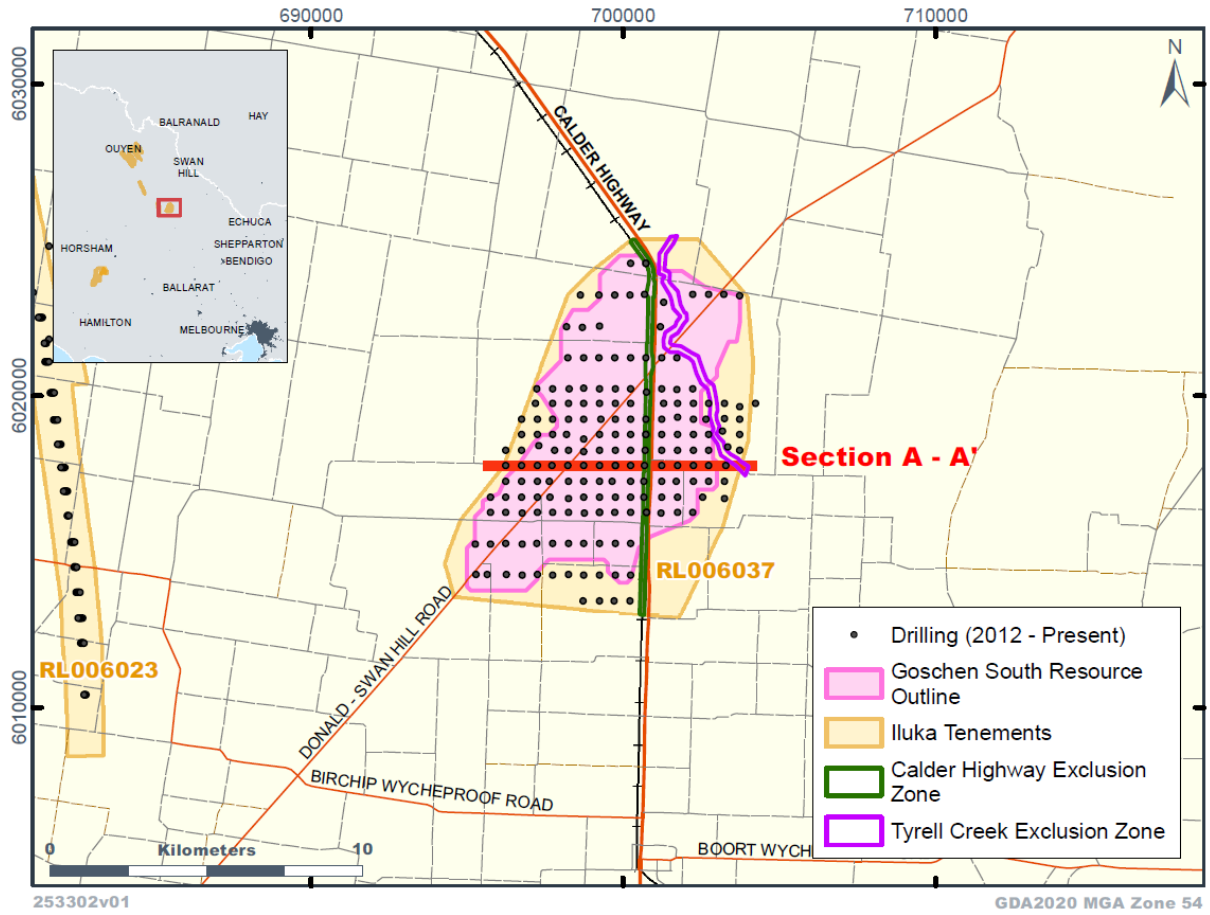


Figure 2: Goschen South Mineral Resource outline, areas excluded from the reported Mineral Resource and drill collar locations; the location for cross section A-A' (Figure 5) is shown.

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 Goschen South (an allowance for Y_2O_3 content of 0.39% in zircon was made).

Mineral Resource Category[1]	Rare Earth Element Oxide in HM[2] (%)															
	CeO_2	Dy_2O_3	Er_2O_3	Eu_2O_3	Gd_2O_3	Ho_2O_3	La_2O_3	Lu_2O_3	Nd_2O_3	Pr_6O_{11}	Sc_2O_3	Sm_2O_3	Tb_4O_7	TM_2O	Y_2O_3	Yb_2O_3
Indicated	0.92	0.065	0.044	0.004	0.064	0.014	0.44	0.007	0.39	0.11	0.026	0.075	0.011	0.007	0.36	0.051
Inferred	0.83	0.059	0.039	0.003	0.058	0.013	0.40	0.007	0.35	0.095	0.026	0.068	0.010	0.006	0.33	0.052
TOTAL[3]	**0.88**	**0.062**	**0.042**	**0.004**	**0.061**	**0.014**	**0.42**	**0.007**	**0.37**	**0.10**	**0.026**	**0.072**	**0.010**	**0.007**	**0.35**	**0.051**

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 Goschen South Mineral Resource expressed as a percentage of the total REO content (an allowance for Y_2O_3 content of 0.39% in zircon was made).

Rare earth element oxide	%
Cerium (Ce)	35.4
Dysprosium (Dy)	2.5
Erbium (Er)	1.7
Europium (Eu)	0.1
Gadolinium (Gd)	2.5
Holmium (Ho)	0.6
Lanthanum (La)	17.0
Lutetium (Lu)	0.3
Neodymium (Nd)	15.1
Praseodymium (Pr)	4.1
Scandium (Sc)	1.0
Samarium (Sm)	2.9
Terbium (Tb)	0.4
Thulium (Tm)	0.3
Yttrium (Y)	14.0
Ytterbium (Yb)	2.1
Total	**100%**

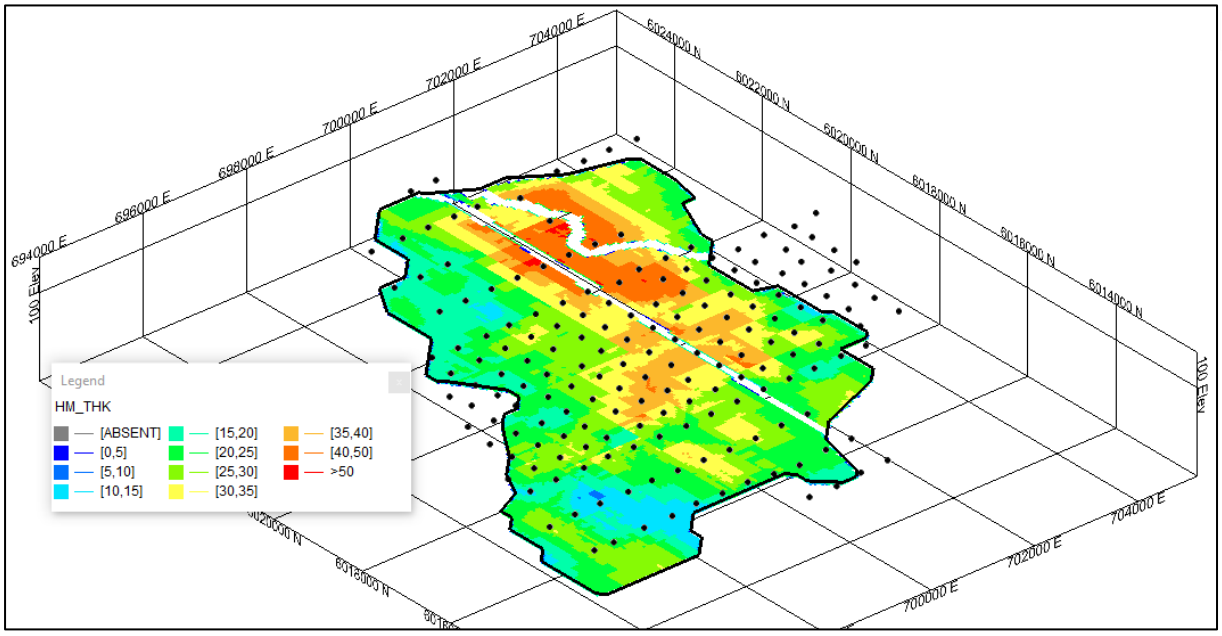


Figure 3: Summary plan showing HM grade * thickness distribution for Goschen South. The black line represents the outline of the reported Mineral Resource.

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 Goschen South 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

The Goschen South deposit is located within the Murray Basin, a shallow, intracratonic basin of Cainozoic age. The basin covers a saucer-shaped area around 300,000km^2 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 Goschen South and WIM100 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 originate from river systems eroding elevated areas of Palaeozoic igneous rocks and Mesozoic sandstones, draining into the Murruvian 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 Goschen South deposit comprises the Shepparton Formation, overlaying LPS which in turn overlays the Geera Clay. The Shepparton Formation blankets the area and is described by Brown and Stevens[1]. At Goschen South, it is typically 3 to 10 metres thick and consists of orange clays and sandy clays. The LPS presents as an extensive blanket of very fine to very coarse sand about 20m thick underlying the Shepparton Formation. The LPS is divided into an upper and a lower unit. The upper LPS consists of foreshore sediments that are medium to coarse grained, angular and immature, containing feldspar and tourmaline, suggesting provenance from adjacent granitic terrains. The lower LPS consists of lower shore/offshore shallow marine sediments which are typically micaceous, with very fine to silt grainsize and good sorting. The interpreted extent of valuable HM is restricted to the lower shore/offshore sediments.

The LPS intersected at Goschen South is typically unconsolidated although occasional intersection of soft to medium cementation is noted.

The lower shore/offshore sediments of the LPS locally overlay the Geera Clay unit, which comprises predominantly grey clays and silty clays. The Geera Clay acts as the basement unit within the deposit area.

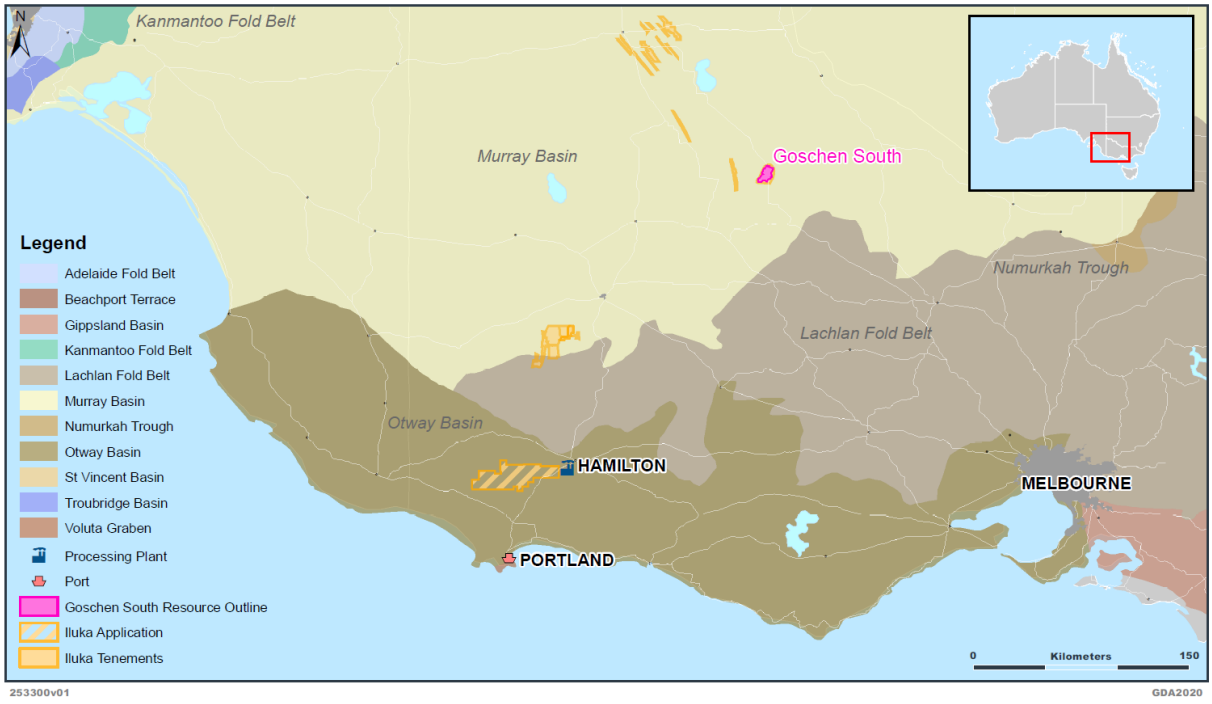


Figure 4: Regional geology plan and Goschen South deposit location.

[1] 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

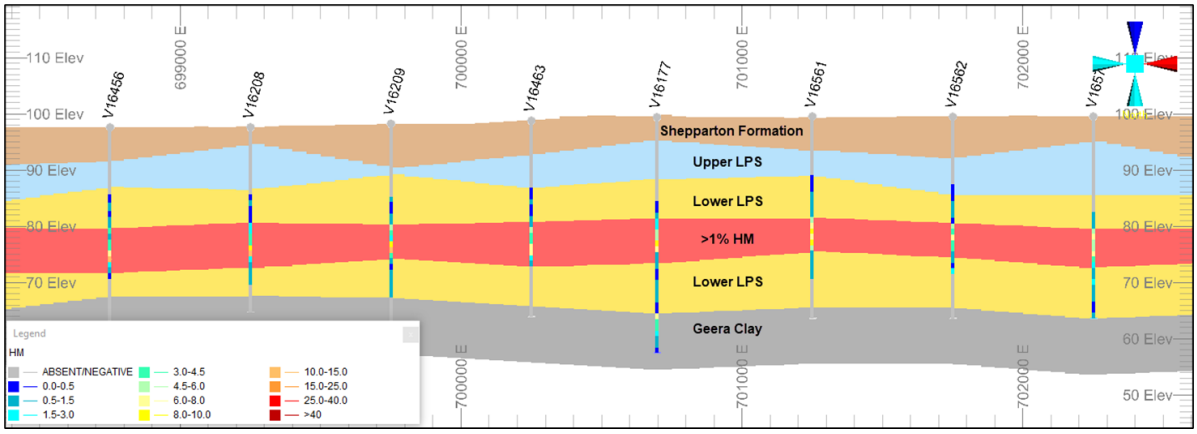


Figure 5: Typical stratigraphy through the Goschen South deposit (20x vertical exaggeration)

Data storage

Data supporting the Mineral Resource estimate for Goschen South 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

Reverse Circulation Air Core (AC) drilling was originally completed by Iluka in 2012 on drill lines spaced 500m apart with drill holes spaced at about 500m on the lines over the central 4km strike length of the known mineralisation. Further drilling was undertaken in 2018 which covered the northern and southern margins of the deposit at a drill spacing of approximately 1000m by 500m. In 2024, some additional drilling was completed along the northern and north-western margins of the deposit at approximately 1000m by 500m spacing.

All the drilling carried out on the Goschen South deposit to support the Mineral Resource estimates 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 Goschen South deposit.

Drill Year	Holes	Metres	Intervals	HM Assays
2012	108	4,225.5	3,997	1994
2018	70	2,757.3	2,759	1166
2024	7	258	258	139
Total	**185**	**7,240.8**	**7,014**	**3299**

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 grainsize; and
- presence of ground water.

Sampling and sub-sampling techniques

The majority of AC drilling at Goschen South was sampled at 1 metre intervals. Of the 3,299 assayed intervals, there are 17 assayed intervals of 1.5m, 1 assayed interval of 0.8m, and the remainder are 1m assayed intervals. Within the mineralised zone, all intervals (except for one) are 1m intervals so no decompositing 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 1-2kg 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. Samples from 2012 were analysed at Iluka's Hamilton laboratory (Victoria) and samples from 2018 and 2024 were analysed at Iluka's Narngulu laboratory (WA). The analysis method for determining the HM content was the same for all samples. Samples were dried at $105^{O}C$ 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, 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). 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.

For all bar one mineralogical composite sample used in estimation, the analysis 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 ICPMS 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 Goschen South 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.

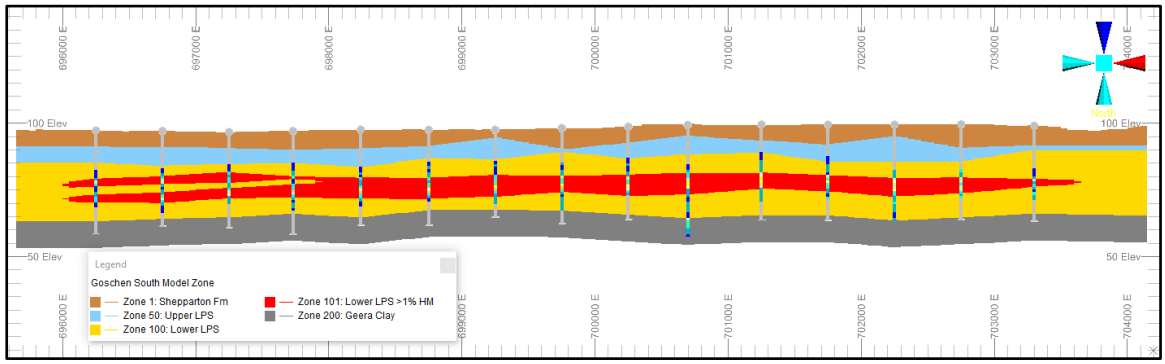
The drill hole spacing at Goschen South varies from about 500mE by 1000mN down to 500mE by 500mN. A parent cell dimension of 250mE by 250mN by 1mRL was selected for the Goschen South deposit given the predominantly 500mE by 500mN or 500mE by 1000mN drill spacing and 1mRL assay length. Sub-celling in 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: Goschen South model parameters.

	Cell Dimension			Interpolation Method	Search Ellipse Dimension			2nd Search Vol Factor	3rd Search Vol Factor
	X	Y	Z		X	Y	Z		
Assay Data	250	250	1	ID3	750	800	3	2	7
Composite Data	250	250	1	NN	750	800	5	2	7

Variogram analysis was carried out on the Goschen South 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.



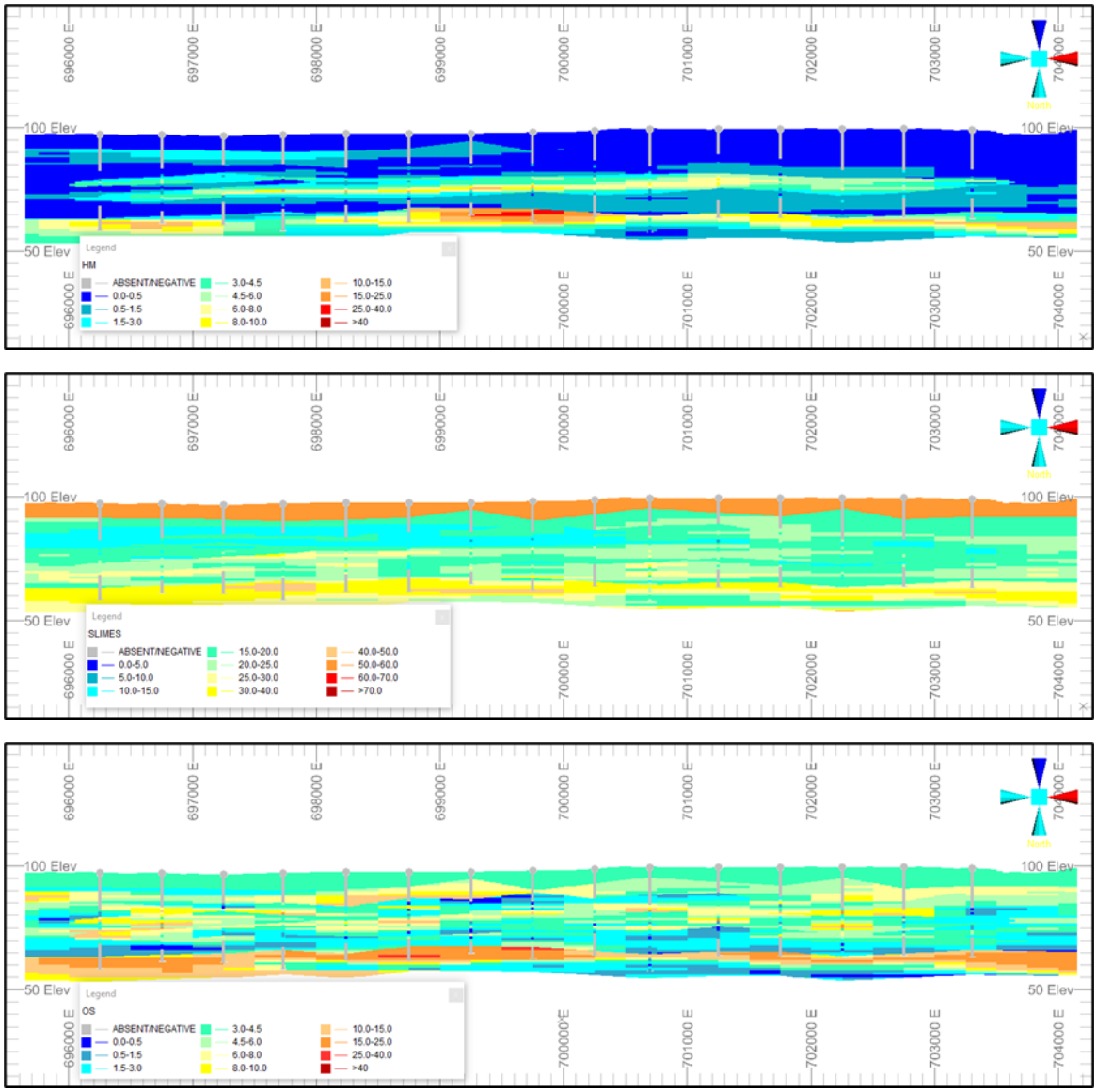


Figure 6: Cross section at 6,017,750mN (A – A' in Figure 2) showing drill holes and model zone assignment, HM, slimes and oversize grades (20x vertical exaggeration; north facing).

Cut-off grade

The Goschen South Mineral Resource estimate was reported using several criteria:

- a lower HM cut-off grade of 1% was adopted;
- an upper Slimes cut-off of 50% was applied;
- only material within the confirmed HM bearing zone (Zone 101) 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 burial mineralisation that is unlikely to be economic to mine which is excluded from the reported 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.

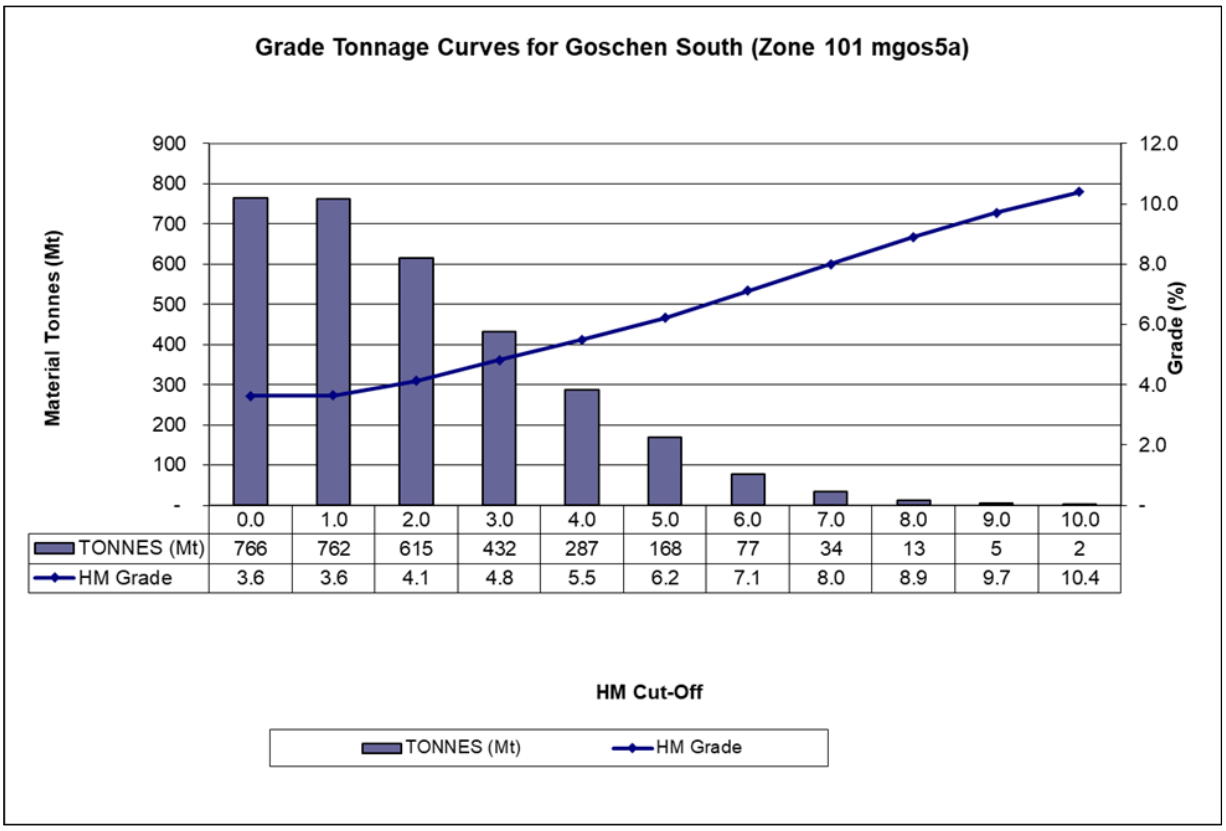


Figure 7: Grade tonnage curves for the Goschen South deposit.

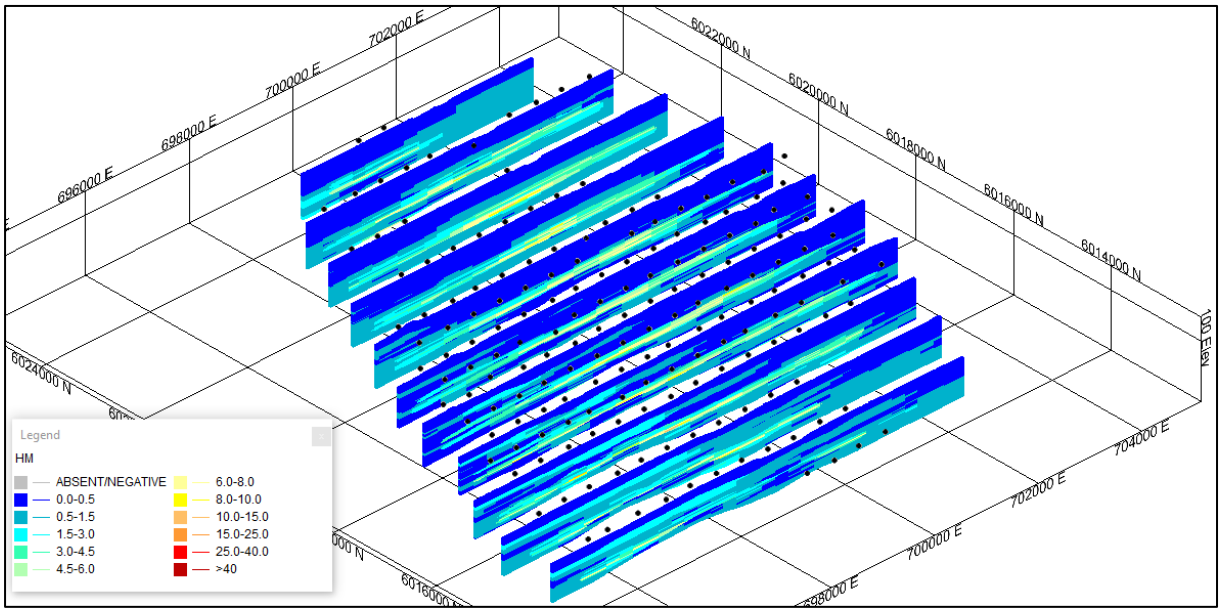


Figure 8: Vertical slices through the Goschen South block model showing HM grade (20x vertical exaggeration; filtered to remove basement cells).

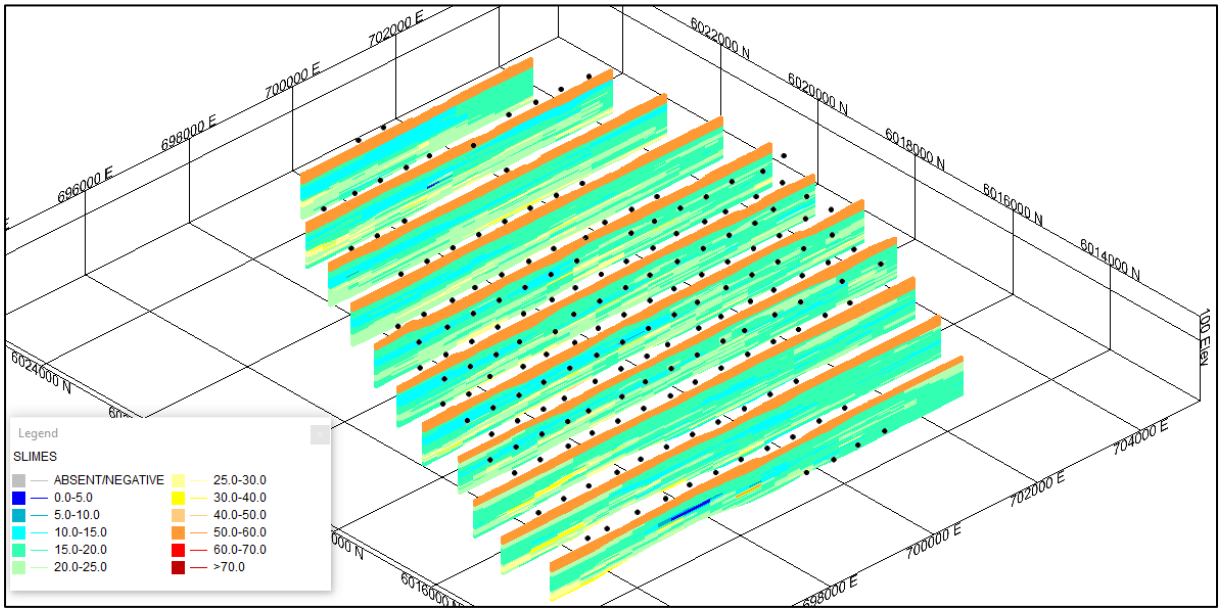


Figure 9: Vertical slices through the Goschen South block model showing Slimes grade (20x vertical exaggeration; filtered to remove basement cells).

Resource classification assignment

The Mineral Resource estimate for Goschen South 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 on a 500m by 500m grid and there is robust supporting composite data, an Indicated Classification was assigned to the reported Mineral Resource. Where drilling has been completed at 1000m by 500m or greater an Inferred Classification was assigned. There is limited extrapolation of mineralisation up to distances of 500m from drillholes along strike to the south and north at Goschen South. Less than 2% of the reported Mineral Resource for Goschen South is based on the extrapolation of geological continuity beyond the limit of current drill hole information.

There is no prospect that it would be economically feasible to relocate the Calder Highway and adjacent rail line which run through the length of the deposit. As such, the area of the combined rail and road reserve was expanded a further 40m east and west into the adjacent properties and this area was excluded from the reported Mineral Resource. The Tyrell Creek area was also excluded from the reported Mineral Resource due to potential sensitivities regarding cultural heritage, ecological and surface water issues. The creek is host to vegetation of high ecological value and there are many known scarred trees of cultural heritage value. The extent of the dense vegetation within the creek reserve was digitised and expanded 40m outwards and this area was excluded from the reported Mineral Resource. The exclusion zones are shown in Figure 2 above.

Mining and metallurgical methods and parameters

The Goschen South deposit comprises a large horizontal, lobate and consistently mineralised horizon within the LPS. It is covered by unmineralised sediments varying from 13.5m to 25m in thickness that would need to be removed as overburden during mining. The geomorphology and unconsolidated nature of the resource allows for large scale low cost earthmoving options to be deployed in open pit scenarios.

The Goschen South 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 are being investigated in conjunction with the definitive feasibility study (DFS) currently being undertaken on Iluka's WIM100 fine-grained HM deposit.

It is expected a rare earth mineral concentrate (monazite and xenotime) would be transported to Iluka's Eneabba refinery, through which saleable rare earth oxides will be produced.

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 Oliver Hughes under the supervision of Mr Brett Gibson who are both permanent employees of Iluka. Mr Gibson 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 Gibson 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 Gibson and Mr Hughes are both shareholders of Iluka.

Appendix 1

JORC Code 2012 edition – Table 1 report

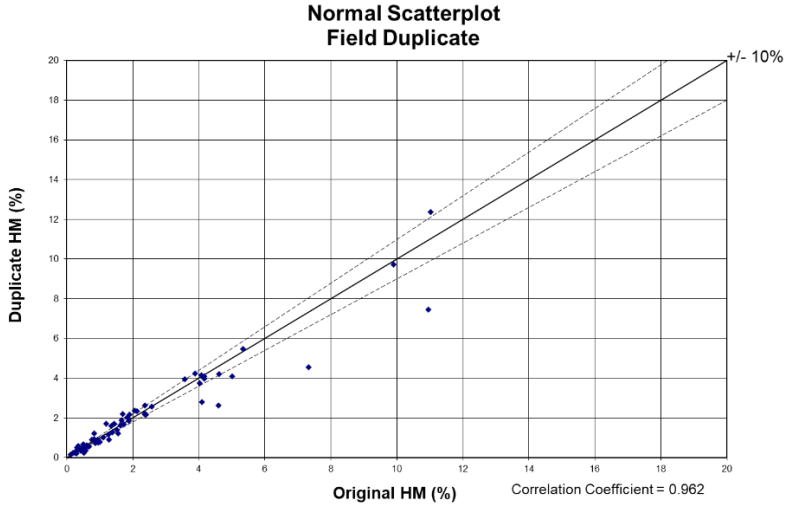
Section 1 Sampling Techniques and Data

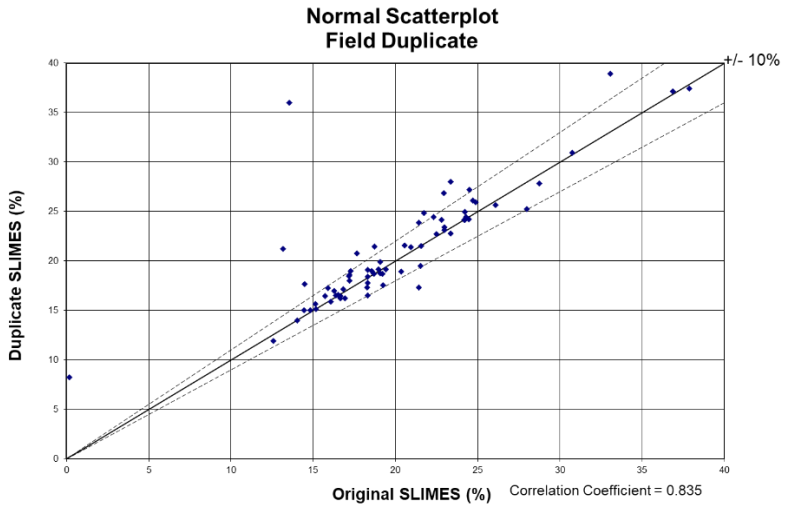
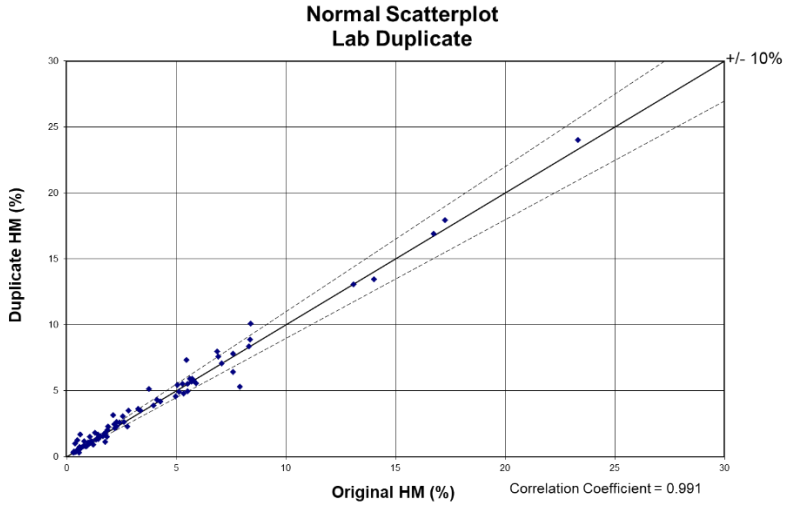
(Criteria in this section apply to all succeeding sections)

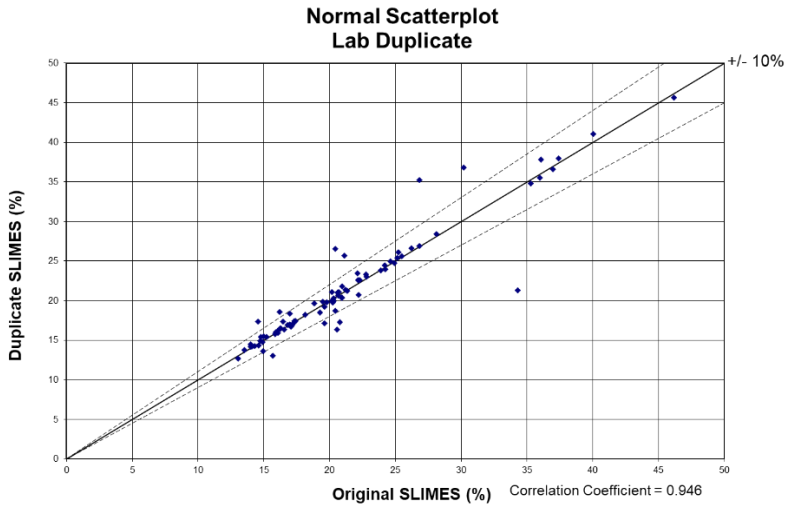
Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	The Goschen South Deposit was sampled using Reverse Circulation Air-Core (AC) drill holes. AC drill rigs with NQ (76mm) diameter drill rods were used. All 185 drill holes were drilled vertically which is essentially perpendicular to the mineralisation. Gamma logging data was obtained from seven AC holes drilled in 2024. Gamma logging was completed using a Reflex EZ-Gamma probe that was run inside the AC inner tubes on completion of the drill hole.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	All phases of AC drilling have utilised the same drilling methodology and assay techniques. AC drilling was used to obtain 1.0m length samples from within the mineralised intervals from which a sub sample of approximately 1.0-2.0 kg was collected using a rotary splitter. Samples estimated to contain greater than 0.5% heavy mineral were submitted for analysis. All samples submitted for analysis have been assayed at Iluka internal laboratories using industry standard techniques for heavy mineral determination. The samples were dried, weighed, de-slimed (material <38µm removed) and oversize (material +2mm) was removed. About 100g of the 38µm to 2000µm sand fraction was sieved at 710µm and the 38µm to 710µm (sand) fraction subjected to float/sink analysis using Lithium-Sodium-Tungsten (LST, SG=2.85t/m^3). The resulting HM concentrate was dried and weighed to determine the in situ HM percentage.
	Aspects of the determination of mineralisation that are Material to the Public Report.	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 to determine the mineral assemblage. This separation technique was used to isolate a zircon rich fraction to determine grain size and indicative quality for zircon. For 36 out of the 37 composite samples used in the estimation, another split of about 10 grams of HM was sent to an external

Criteria	JORC Code explanation	Commentary
		laboratory for QEMSCAN Analysis as well as XRF and Laser Ablation. The QEMSCAN analysis was used to assign the mineral assemblage to the composite. The Laser Ablation analysis supports the determination of the rare earth oxide (REO) content.
	In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	*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).*	All AC sampling was based on vertical drilling with a NQ (76 mm) hole diameter.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	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.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Sub sample weights were recorded for every assayed sample. AC samples were visually checked for recovery, moisture and contamination and there was constant oversight of the drilling process to ensure a consistent rate of penetration was maintained during the drilling. Sample weights recorded at the laboratory indicate reasonable sample quality and representativity.
	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.	The mineralised samples were not typically affected by the presence of rock or induration and no sample bias is evident from this. Minor slimes loss may have occurred associated with groundwater moisture seeping through the calico sample bags. No Sonic or diamond core twin verification testing has been completed at Goschen South, however a Sonic twin verification program completed at Iluka's geologically similar WIM100 deposit in 2023 indicated that there was a low slimes bias is the AC sample data, no bias for HM, and verified that the 1m length AC samples had adequately defined the mineralised interval.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Geological logging was carried out for all AC samples. Logging recorded colour, lithology, grainsize, 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.

Criteria	JORC Code explanation	Commentary
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	
	The total length and percentage of the relevant intersections logged.	
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	No diamond coring or sonic coring was used for the Mineral Resource estimate.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Sampling was done at 1.0m intervals with a rotary splitter used to produce 25% sub samples. 28% of the mineralised samples were logged as being wet or moist and 11% of the mineralised samples required water injection to assist with sample return.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sample preparation is consistent with industry best practice and is deemed to be appropriate for Heavy Mineral determination.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Duplicate samples were collected from the rotary splitter at the drill rig at the same time as the primary samples. A total of 71 field duplicate samples were collected at a rate of 1 in 46 samples. Duplicate samples were also split from dried samples at the laboratory using either riffle splitters or rotary splitters. A total of 87 lab duplicate samples were analysed at a rate of 1 in 38 samples.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Field and laboratory duplicate HM assay data collected demonstrate good correlation with primary sample data.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample size collected at the time of drilling is deemed appropriate for the fine grain sand material intersected at Goschen South to provide a reliable representation of the HM, slime, sand and oversize characteristics.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	The assay method used is appropriate for assessment of the mineralisation at Goschen South. 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 current level of study. The technique is considered a total analysis.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Gamma logging data was obtained from seven AC holes drilled in 2024. Gamma logging was completed using a Reflex EZ-Gamma probe that was run inside the AC inner tubes on completion of the drill hole.
	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.	Reference standards were inserted with assayed samples both in the field and in the laboratory. There have been 86 reference standards (1:38 submission rate) inserted in the field during drilling at Goschen South and 123 reference standards (1:27 submission rate) inserted at the laboratory. Poor results were

Criteria	JORC Code explanation	Commentary
		attained for the in-house prepared standards used in the 2012 generation of drilling, which likely reflects the quality of the preparation of the reference standards. In some cases, the standards are not homogeneous and expected values are not appropriate. A low slimes bias is evident in the initial laboratory reference standards processed in 2012. The primary driver for the low slimes bias is that the expected slimes values for these standards were set using 53µm screens for desliming, whereas the Goschen South samples are deslimed using 38µm screens. HM results outside the 3SD failure limits triggered re-split and re-assay of the standard and selected samples that were processed at same time as the standard. The repeat assays were assessed and if the standard returned HM results within specifications, then all the repeat assays replaced the original results in the database. A total of 71 field duplicate samples were analysed synchronously with the Goschen South samples at a rate of 1 in 46 samples. 

Criteria	JORC Code explanation	Commentary
		 A total of 87 laboratory duplicate samples were analysed synchronously with the Goschen South samples at a rate of 1 in 38 samples. 

Criteria	JORC Code explanation	Commentary
		 The results from the QAQC are considered acceptable although there appears to be scope for improvement in the determination of the slimes content. The precision shown by the slimes data does not materially impact on the estimate of the contained HM.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	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 the majority of samples was verified by examining the sinks after LST separation under a microscope and comparison to adjacent samples within the drill hole and drill holes on the same section.
	The use of twinned holes.	There have been 4 pairs of twin AC holes drilled at Goschen South at a rate of 1 in 46 holes. A comparison of assay grades between twinned holes shows acceptable correlation within the mineralised domain.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Logging of drill samples was input directly into a laptop computer using acQuire software with data verification routines enabled. Data was then transferred into Iluka's geological data management system (based on a SQL database) which incorporated further verification routines.
	Discuss any adjustment to assay data.	No bias or errors were identified in the assay data and no adjustments were made.

Criteria	JORC Code explanation	Commentary
		Of the 37 mineralogical composite samples used in estimation, 36 composites were analysed by QEMSCAN to determine the mineral assemblage. An additional split of the composite was analysed by XRF and LA to provide a composite head HM analysis while further splits were taken of the +4.38sg non-magnetic fraction and were analysed by XRF to provide information on the zircon quality. One composite was analysed by a similar method with additional magnetic and densometric separation which provided information on the +4.05sg magnetic fraction to predict ilmenite quality. For this one composite the xenotime content was estimated based on the overall deposit monazite to xenotime ratio given the absence of a Y_2O_3 value at the time of analysis and the absence of QEMSCAN analysis.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Of the 108 holes drilled in 2012, 94 holes were surveyed with RTK_DGPS and 14 holes were surveyed with DGPS. The 70 AC holes drilled in 2018 were surveyed using GPS equipment. Of the seven AC holes drilled in 2024, six holes were surveyed using RTK_DGPS and one hole was surveyed using GPS equipment. The DGPS and GPS located drill holes are considered to have a horizontal accuracy of +/- 5m which is adequate considering the spatial extent of the fine-grained HM deposits such as Goschen South. The RTK_DGPS located holes are considered to have a horizontal accuracy of +/- 1cm and vertical accuracy of +/- 2cm. The RL for all drill holes was taken from the topographic surface generated from the Vicmap Elevation DEM 10m dataset. This dataset is provided by the Victorian Department of Sustainability and Environment and is derived from a number of sources. The data has a stated positional accuracy of 12.5m horizontally and 5m vertically or better.
	Specification of the grid system used.	The eastings and northings were recorded in GDA94 MGA Zone 54.
	Quality and adequacy of topographic control.	The topographic surface used for the Goschen South deposit is generated from the Vicmap Elevation DEM 10m dataset. This dataset is provided by the Victorian Department of Sustainability and Environment and is derived from a number of sources. The data has a stated positional accuracy of 12.5m horizontally and 5m vertically or better.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	The drilling was completed on a 500m by 500m grid within the central 4km of strike length of the deposit, and 500m by 1000m spacing spanning approximately 3km strike length at the southern margin and approximately 4km strike length at the northern margin. 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.

Criteria	JORC Code explanation	Commentary
	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.	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.
	Whether sample compositing has been applied.	No compositing was used for assay data however assemblage and mineral quality information was derived from composites of HM sinks.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	No bias has been identified or expected as the vertically orientated drill holes are effectively perpendicular to the horizontal mineralisation of the Goschen South deposit.
	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.	No sampling bias is noted.
Sample security	*The measures taken to ensure sample security.*	Samples were stored at secure Iluka compounds when not in transport.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits have been conducted of sampling conducted at Goschen South, however the sampling techniques used have been audited for Iluka during exploration over other HM deposits. A similar sampling and assay process support Iluka's current and previous mining operations and is a standard method used widely in the exploration for mineral sands.

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	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The Goschen South deposit is located approximately 55km southeast of the Victorian township of Sea Lake. Goschen South is located within Retention Licence 6037 (RL 6037) which is owned by Basin Minerals Holding Pty Ltd, a wholly owned subsidiary of Iluka Resources. RL 6037 was granted on 03/07/2017 for a period of 7-years, and a further renewal application was lodged on 24/04/2024 for a period of 7-years and is currently being assessed.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement covers privately owned freehold land with some crown land under road reserves. The Calder Highway road and rail reserve runs through the length of the deposit. The Tyrell Creek is also present within the deposit area. These areas and areas within 40m either side have been excluded from the reported Mineral Resource. Iluka secured access agreements with a number of landholders within the tenement area, although some landowners have not granted access for exploration activities at this time. Iluka will continue to liaise with landowners to resolve any access impediments.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	The Goschen South deposit area was initially investigated by CRAE in the 1980's and early 1990's. While the CRAE data has assisted in targeting the mineralisation at Goschen South, no historical information from CRAE or any other company was used in the estimation of the Mineral Resource.
Geology	*Deposit type, geological setting and style of mineralisation.*	The fine-grained HM style deposits such as Goschen South 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 Loxton-Parilla Sands (LPS). These deposits are typically extensive with strike lengths of 5km to 20 km and widths of 2km to 5km. The mineralisation is generally between 5m and 10m in thickness and shows good lateral continuity. At Goschen South, the LPS is overlain by 3-10m of orange clays and sandy clays of the Shepparton Formation, and rests on top of the Geera Clay unit which consists of predominantly grey clays and silty clays.

Criteria	JORC Code explanation	Commentary
Drill hole Information	*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.*	The total drill hole dataset recorded in Iluka's Geological Database for Goschen South consists of 185 AC drill holes for a combined length of 7,240.8m. The dataset used in Mineral Resource estimation comprises of 180 AC drill holes and 3,213 sample assays. Due to the large number of drill holes, it is impractical to tabulate the collar and downhole information within this table. Representative sections are provided within the main text of this report. All drill holes were drilled vertically and the top of mineralisation intercepted at depths of 13.5m to 25m downhole. The mineralisation ranges from 1m to 12m in thickness and averages about 6.5m.
	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.	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.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	No weighting or bottom/top cuts were deemed necessary and have not been used in the estimation of Mineral Resources for the Goschen South deposit. Envelopes defining a >1% HM grade were used to constrain the grade interpolation and the Mineral Resource estimates were reported using a 1% lower HM cut-off grade.
	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.	Aggregation of intercepts is not considered applicable given the dataset almost exclusively comprises one metre sample intervalS.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents were used for reporting the Goschen South Mineral Resource estimate.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the 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').*	All holes were drilled vertically which is essentially perpendicular to the horizontally orientated mineralisation, so all intercepts represent true widths.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include,*	Figures and representative cross sections showing the distribution of drill hole and grade information are presented in the attached text.

Criteria	JORC Code explanation	Commentary
	but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Exploration results have not been presented as they are superseded by the reporting of the Mineral Resource estimate based on the available drill data.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Logging of the samples includes visually estimating the HM present and the results of which corroborate the presence of HM mineralisation. 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. Composite samples have been created from the HM sink fractions of the drill samples. The composited samples generate between 20g and 200g of HM which is subjected to a process of magnetic and heavy liquid separation followed with XRF analysis of various fractions to determine the assemblage and quality of the mineral present. For all bar one composite sample used in this estimation, another split of about 10 grams of HM was sent to an external laboratory for QEMSCAN analysis, XRF and Laser Ablation (LA) to support the determination of the mineral assemblage. The QEMSCAN analysis was used to assign the mineral assemblage for these composites. Gamma logging of seven AC holes drilled in 2024 was completed to verify the interpreted mineralised domain. The surveys are generally considered qualitative but high gamma responses corroborate the presence of radionuclides associated with the HM. No density test work has been completed to date at the Goschen South deposit. The bulk density applied to the model is based on testing of undisturbed triple diamond core samples from Iluka's WIM100 fine-grained HM deposit. WIM100 is a similar deposit type and style of mineralisation located within the Murray Basin geomorphological province and is located approximately 160km to the south-west of the Goschen South deposit. As with other fine-grained HM deposits, the effective recovery of the fine grained HM has been considered to be problematic for mine production. The Uranium and Thorium levels are also above the current typical specification for marketable premium zircon. Iluka is currently assessing options to process zircon from WIM style deposits.

Criteria	JORC Code explanation	Commentary
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Should feasibility studies commence at Goschen South, twinning a selection of AC drill holes with sonic or diamond core to validate the AC sample assays would be valuable given the mineralisation is located partially beneath the water table. Infill drilling as well as a density testing programme is also required to increase the Mineral Resource classification in future.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Mineralisation may extend to the north-east however due to access issues, there is limited data and some gaps in the drill grid in this area.

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
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	Logging of drill samples was input directly into a laptop computer using Micromine software pre 2015 and Acquire software after 2015, both with data verification routines enabled. Data was then transferred into Iluka's Geology Database at the time (custom tailored geological data management system based on a SQL database) which incorporated further verification routines.
	Data validation procedures used.	Drill data was manipulated to ensure no duplicate records were present and statistical evaluation was conducted to ensure all results were within acceptable ranges. Datamine Software was used to visually check the grade magnitude and spatial distribution of data was as expected.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	All AC programs at Goschen South were visited by experienced Iluka staff geologists.
	If no site visits have been undertaken indicate why this is the case.	The Competent Person has not visited site, however Iluka personnel that are deemed Competent Persons under the guidelines of the 2012 JORC Code for the reporting of Exploration Results and Mineral Resources visited the site during the 2012 and 2024 drilling programs. Drilling and sampling conditions were observed during the site visits, and are considered similar to the conditions observed at Iluka's WIM100 deposit. The Goschen South site is largely comprised of cleared agricultural land supporting broad acre grain cropping. The mineralisation is traversed by the Calder Highway and rail line. Significant native vegetation was observed flanking the Tyrell Creek.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	The geological framework for the Goschen South deposit is well understood from many years of exploration by Iluka and other exploration companies. The mineralisation is dominantly confined to very fine grained lower shore facies within the Loxton Parilla Sands (LPS) which is tabular and flat lying. At the current drill spacing, the geometry and continuity of the mineralisation is well defined.
	Nature of the data used and of any assumptions made.	All relevant information has been sourced from the drill samples and the interpretations have developed over successive drill campaigns. The density of drilling done by Iluka varies and some assumption of the continuity of mineralisation is made based on the typical continuity of grade for this style of mineralisation. The deposit shows consistent and continuous mineralisation over large areas.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	No alternative interpretations have been considered for Goschen South.

Criteria	JORC Code explanation	Commentary
	The use of geology in guiding and controlling Mineral Resource estimation.	Appropriate geological domaining and corresponding flagging of drill data has been used to control grade interpolation and distribution during resource estimation. The valid reportable mineralisation was restricted to that hosted in the lower shore LPS facies.
	The factors affecting continuity both of grade and geology.	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 block model.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The block model covers the full extent of drilling conducted by Iluka on the Goschen South deposit within tenure held by Iluka. The Goschen South mineralisation has a north-south strike extent of about 10.5km and an east-west across strike extent of about 6km. The depth to the top of mineralisation varies from 13.5m to 25m. The thickness of mineralisation varies from 1m to 12m and averages about 6.5m.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	The grade interpolation was carried out using the Estima super process 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. Mineralogical Bulk Sample Composite Identifier and Hardness values were interpolated using Nearest Neighbour (NN) method. No HM top cuts have 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 3-dimensional wireframes and surfaces generated from the geological and mineralisation interpretations. A primary search dimension of 750m*800m*3 m (X*Y*Z) was used for all assay data with the exception of the Mineralogical Bulk Sample Composite Identifier (BSNUM) which was assigned using a primary search dimension of 750m*800m*5m (X*Y*Z). Limitations were placed on the minimum and maximum number of samples used to inform model cells. Successive search volume factors of 2 and 7 have been adopted to interpolate grade in areas of lower data density.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	Nearest Neighbour grade interpolation was carried out which resulted in a similar grade distribution as the Inverse Distance Cubed results. Detailed comparisons were made with the previous estimate to identify the areas where discrepancies occurred and whether they were due to additional drilling or changes in the interpretation or modelling methodology.
	The assumptions made regarding recovery of by-products.	No by-products have been considered as part of this estimate.

Criteria	JORC Code explanation	Commentary
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	Deleterious minerals (trash minerals) were identified as part of the mineralogical composites. Various mineral quality attributes are also included in the grade interpolation which inform the marketability of the Goschen South HM. The zircon contains elevated uranium and thorium which is typical for fine-grained HM deposits. Options for producing saleable zircon product(s) are being studied in conjunction with the DFS currently being undertaken on the WIM100 Deposit.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The parent cell dimensions employed are half the dominant drill spacing for the deposit. The dominant drill spacing over the central 4 km strike length of the deposit is 500m by 500m. The parent cell size used was 250*250*1m (X*Y*Z). Sub-celling of 5/5/10 (X/Y/Z) was used to improved volume resolution along domain boundaries.
	Any assumptions behind modelling of selective mining units.	No assumptions were made regarding the modelling of selective mining units however it is assumed that a form of open cut mining such as truck and shovel or dredge would be employed.
	Any assumptions about correlation between variables.	No correlation between variables has been considered. All variables have been estimated independently.
	Description of how the geological interpretation was used to control the resource estimates.	Appropriate geological domaining and corresponding flagging of drill data and model cells has been used to control the interpolation of grade during the resource estimation process. Closed wireframes outlining the extent of >1% HM grade was used to constrain the extent of mineralisation.
	Discussion of basis for using or not using grade cutting or capping.	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.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	The model was validated on-screen against the geology wireframes to ensure zone allocation has been correctly assigned and that adequate resolution was obtained with the use of sub-celling. The coded drill hole file was also validated on-screen against the geology wireframes and volume model. The model and drill hole files were evaluated to ensure they both had the same domains present. Validation of the grade interpolation was done by comparing model statistics to sample statistics and a visual comparison of drill to model grades using Datamine Studio Software. The modelled grades are considered to be an appropriate reflection of input assay data. Given no mining has taken place, no reconciliation data is available.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	The tonnages are estimated on a dry basis.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	A nominal grade cut-off of 1.0% HM was applied. An Iluka in-house grade*thickness to depth of burial ratio process was used to identify and exclude material above the 1.0% HM cut-off grade but which attracts a prohibitive stripping ratio.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	Mining is likely to be by open cut methods using suitable excavation machinery or dredging. The geometry of the deposit makes it amenable to bulk open cut mining methods currently employed in other open cut mines operated by Iluka and in other mineral sands mines with similar geomorphology. The unconsolidated nature of the sediments allow for a range of options to be considered including the use of scrapers, large scale truck and shovel, dredging or dozer trap.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	The metallurgical assumptions are based on composite mineralogical data. Comprehensive testing of metallurgical bulk samples including analysis of recovery and quality of various marketable mineral species has not been completed at this time. Iluka is currently undertaking a DFS at WIM100 which hosts mineralisation in the same geological setting. It is expected that the results of the metallurgical testing at WIM100 will provide relevant assumptions to the Goschen South mineralisation.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. 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.*	If open cut mining takes place all material mined will be returned to the mine void following extraction of the HM component, which is typical for mineral sands mining operations. Overburden would be removed and stockpiled. The ore would be processed and waste returned to the mine void and the overburden would then be replaced. The site would then be returned to a land use consistent with that prior to mining or what may be deemed appropriate to the landholder.
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	No density test work has been completed to date at the Goschen South deposit. The bulk density applied to the lower LPS is based on test work completed on Iluka's WIM100 fine-grained HM deposit. WIM100 is a similar deposit type and style of mineralisation located within the Murray Basin geomorphological province approximately 160 km to the south-west of the Goschen South deposit. The WIM100 in-situ dry bulk density is based on testing of 127 samples selected from undisturbed triple tube diamond core acquired in early 2022. The density formula comprises a regression formula taking into account the Slime and HM content which impact on the in-situ dry density. Sections of high quality core varying in length from 20cm to 50cm were selected for testing. The core was

Criteria	JORC Code explanation	Commentary
		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.
	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.	Iluka's proprietary density formula is appropriate for high clay and coarse grained sedimentary material. This Iluka standard formula was applied to the Shepparton Formation, coarse-grained upper LPS and Geera Clay domains.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	It is assumed that the material at Goschen South has the same density relationship that is seen at WIM100 in the Murray Basin. This assumption is considered appropriate for the current Mineral Resource classification as the deposit is geologically similar to WIM100.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	In consideration of the JORC Code Mineral Resource classification of Indicated or Inferred, the following aspects were considered: • 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.
	Whether appropriate account has been taken of all relevant factors (i.e. 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).	The Goschen South Mineral Resource estimate is considered to have taken into account all pertinent factors including but not limited to: quality of input data, spatial density and reliability of the input data, confidence in the continuity of mineral grade and the controlling geological framework, possible mineral pricing and potential mining scenarios.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	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.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	Internal review processes within Iluka assisted with the estimation of the Goschen South Mineral Resource. External review of the Goschen South Mineral Resource estimate was undertaken by IHC Mining in 2024 which corroborated the Mineral Resource estimate and Resource classification assigned.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. 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.*	No geostatistical process was done (such as kriging or conditional simulation) for the resource estimation of Goschen South. Variography was undertaken on the HM grade distribution to support the Mineral Resource classification assigned given the current sample spacing and quality. Validation of the model against drill grades by visual assessment, swath plot and statistical comparison supports the integrity of the resource estimates for the Goschen South deposit.
	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.	This statement refers to global estimates for the Goschen South deposit.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No production data is available for Goschen South or Iluka's other fine-grained HM deposits.