

Tuesday, 18 June 2013

The Manager (Companies)
ASX Limited
Perth Western Australia

FOR IMMEDIATE RELEASE TO THE MARKET

Dear Manager,

**WIM150 Mineral Sand Project, portion of EL 4521, western Victoria
Maiden Measured, Indicated and Inferred Resources
as defined under the Joint Ore Reserves Committee 2012 Code**

1.65 billion tonnes at 3.7 % total heavy mineral

As previously reported to ASX, Australian Zircon the Company holds an entitlement to earn an 80% participating interest in the WIM150 project by completing a Bankable Feasibility Study as defined in the relevant Farming Agreement.

Mineral Resource and Reserve estimation experts Optiro Pty Limited have recently completed an analysis of the results of drilling at WIM150, using a cutoff grade of 1% total heavy mineral recoverable in the range 20-75 microns. Grain size recoverability criteria have been determined by an extensive program of bulk sample mineral processing testwork. The resources defined exclude areas of restricted access around waterways and the Western Highway.

Optiro's resource estimates have been based upon the following drill data

- CRA Exploration Pty Limited 1982-1992
- Australian Zircon 2006-2007
- Australian Zircon 2011
- Australian Zircon 2012-2013

and they report resources for two bodies of mineralisation . the St Helens body, which is the focus of ongoing reserve and feasibility studies . and the Danube body.

	Resource Classification	Millions of tonnes	Grade % THM	Particle Classification % within -75+20 µm THM						% Slimes (-20 µm)
				Zircon	Rutile	Ilmenite	Leucoxene	Monazite	Xenotime	
St Helens Resource	Measured	415	4.3	21.7	11.5	32.2	5.8	2.3	0.41	18.0
	Indicated	485	4.0	21.0	11.6	30.8	6.0	2.2	0.40	17.0
	Inferred	410	2.9	20.9	11.9	30.9	6.1	2.2	0.39	21.1
		1,310	3.8	21.2	11.6	31.3	6.0	2.2	0.40	18.6
Danube Resource	Measured	--	--	--	--	--	--	--	--	--
	Indicated	95	4.1	17.2	11.7	31.7	6.4	1.3	0.26	25.6
	Inferred	245	3.3	18.9	11.7	31.4	6.3	1.5	0.30	23.1
		340	3.6	18.3	11.7	31.5	6.3	1.5	0.28	23.8
Total WIM150 Resources	Measured	415	4.3	21.7	11.5	32.2	5.8	2.3	0.41	18.1
	Indicated	580	4.0	20.4	11.6	31.0	6.1	2.0	0.37	18.4
	Inferred	655	3.1	20.1	11.8	31.1	6.2	1.9	0.35	21.9
		1,650	3.7	20.7	11.7	31.4	6.0	2.1	0.38	19.6

Note: Inconsistencies in totals are due to rounding. %THM+ means Total Heavy Mineral (-75+20 µm).

Details are contained in the attachment.

Yours faithfully,

Jeremy D Shervington

Chairman

for and behalf of
Australian Zircon NL

Tuesday, 18 June 2013

WIM150 MINERAL SANDS PROJECT SIGNIFICANT MINERAL RESOURCE

- **Total Mineral Resource of 1,650 Mt @ 3.7% Total Heavy Mineral ("THM")**
- **415 Mt @ 4.3% THM of Measured Resource now defined**
- **-75 +20 µm THM fraction now considered recoverable**

Australian Zircon NL (ASX:AZC) advises that an updated Mineral Resource estimate for the WIM150 Mineral Sands Project has resulted in a significant increase in the contained valuable heavy mineral and confidence in the Mineral Resource.

The WIM150 Project, located in the Wimmera region of Victoria, has been explored since the early 1980s for heavy minerals. The mineralisation in the deposit is a typical WIM or fine-grained style of mineral sands deposit within the Parilla Sand formation of South Australia and Victoria. The data used for the Mineral Resource estimate is from CRA Exploration Pty Ltd (CRAE) drilling from 1982 to 1992, extracted from the Victorian Government database, and three drilling programmes conducted by Australian Zircon NL (AZC) during 2006/07, 2011 and 2012/13.

As part of Australian Zircon's Bankable Feasibility Study (BFS) Optiro Pty Ltd has recently completed a Mineral Resource estimate for the WIM150 Mineral Sands deposit. On completion of the BFS as detailed in the WIM150 farm-in agreement with Orient Zirconic, AZC will earn an 80% right to the WIM150 Project.

The total Mineral Resource now stands at **1,650 Mt at 3.7% THM containing 20.7% zircon, 2.1% monazite, 0.38% xenotime, 31.4% ilmenite, 11.7% rutile and 6.0% leucoxene** (see Table 1). This has been classified and reported in accordance with the guidelines of the JORC Code (2012) and has been reported above a 1.0% THM cut-off grade to reflect current commodity prices. The Mineral Resource has been reported within EL4521 and excludes areas with restricted access around waterways and the Western Highway (see Figure 1). An estimated 6.1% of oversize (+1 mm) material is contained within the Mineral Resource. The WIM150 Project comprises two main areas, referred to as the St Helens and the Danube. St Helens encompasses the majority of the mineralisation and Danube is located within the south-eastern area of the WIM150 Project.

The St Helens area is the focus of the current mining reserve work and bankable feasibility study and has a mineral resource of 1,310 Mt at 3.8% THM, including **a Measured Resource of 415 Mt at 4.3% THM containing 21.7% zircon, 2.3% monazite, 0.41% xenotime, 32.2% ilmenite, 11.5% rutile and 5.8% leucoxene.**

Table 1. WIM150 deposit – Mineral Resource statement reported above a cut-off grade of 1.0% THM

Classification	Million tonnes	% THM (-75+20 µm)	% Slimes (-20 µm)	Particle Classification % within -75+20 µm THM					
				Zircon	Monazite	Xenotime	Ilmenite	Rutile	Leucoxene
St Helens									
Measured	415	4.3	18.0	21.7	2.3	0.41	32.2	11.5	5.8
Indicated	485	4.0	17.0	21.0	2.2	0.40	30.8	11.6	6.0
Inferred	410	2.9	21.1	20.9	2.2	0.39	30.9	11.9	6.1
Sub-total	1,310	3.8	18.6	21.2	2.2	0.40	31.3	11.6	6.0
Danube									
Measured	-	-	-	-	-	-	-	-	-
Indicated	95	4.1	25.6	17.2	1.3	0.26	31.7	11.7	6.4
Inferred	245	3.3	23.1	18.9	1.5	0.30	31.4	11.7	6.3
Sub-total	340	3.6	23.8	18.3	1.5	0.28	31.5	11.7	6.3
Total									
Measured	415	4.3	18.1	21.7	2.3	0.41	32.2	11.5	5.8
Indicated	580	4.0	18.4	20.4	2.0	0.37	31.0	11.6	6.1
Inferred	655	3.1	21.9	20.1	1.9	0.35	31.1	11.8	6.2
Total	1,650	3.7	19.6	20.7	2.1	0.38	31.4	11.7	6.0

Note: inconsistencies in totals are due to rounding

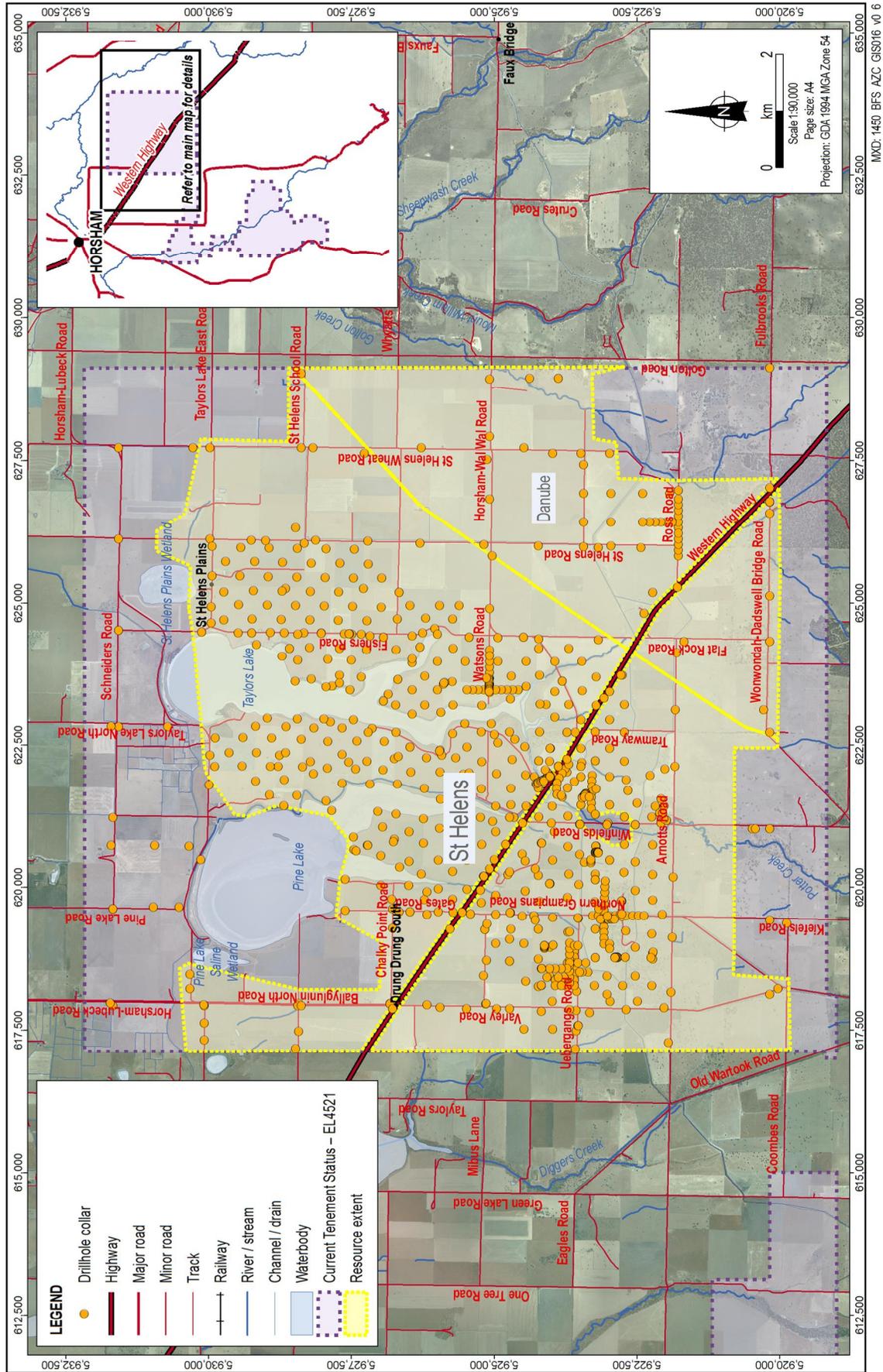
The AZC 2012/13 drilling programme was designed to define a Measured Resource within St Helens and drillholes were spaced on a 400 m offset grid. The orebodies have been defined by a combination of aircore and reverse circulation drilling. During the AZC 2012/13 drilling programme one metre samples were recovered in their entirety from the drill rig and sent to the laboratory. The samples were composited to represent a two metre interval and riffle split to 500g for screening and heavy mineral analysis.

Assay data from 1,000 drillholes (for a total of 19,919 m) within EL4521 was used to interpret a mineralised horizon that was defined above a nominal cut-off grade of 1% THM. The mineralisation forms a flat sheet that extends for 10 km north-south by 12 km east-west, with an average thickness of 11.2 m. The overlying Shepparton Formation has an average thickness of 6.8 m but ranges from 1 m to 13 m.

THM analysis from the CRAE, AZC 2006/07 and AZC 2011 drilling was from the -75+38 µm particle size fraction. Metallurgical testwork by CPG Resources - Mineral Technologies Pty Ltd in 2012 indicated that **the resource can be processed to recover material of +20 µm.**

In 2012, 134 samples from the AZC 2011 drilling programme were re-screened at 20 µm and the results indicated that 14.2% of the THM is contained within the -38+20 µm fraction. This sample data was used to determine the % THM within the -75+20 µm particle size fraction using the % THM measured in the -75+38 µm particle size fraction for the CRAE, AZC 2006/07 and AZC 2011 drilling data. THM analysis from AZC 2012/13 drilling was from the -75+20 µm particle size fraction.

Figure 1. WIM150 Mineral Sands Project Mineral Resource outline



In 2013, AZC carried out QEMSCAN analysis on 65 samples of heavy mineral concentrates to define the valuable heavy mineral (VHM) components within the THM from the -75+20 µm fraction. The CRAE data includes 479 mineral assemblage data determined from optical mineralogy of the THM from the -75+38 µm fraction. The mineral assemblage data from the QEMSCAN analysis was used to calibrate the CRAE data, and the AZC and calibrated CRAE mineral assemblage data were collectively used to estimate the percentage of zircon, monazite, xenotime, rutile, ilmenite and leucoxene contained within the THM from the -75+20 µm fraction.

The resource model for the WIM150 deposit was constructed using a parent block size of 200 mE by 200 mN on 2 m benches, and the parent blocks were allowed to sub-cell down to 50 mE by 50 mN by 0.5 mRL to more accurately represent the geometry and volumes of the geological and mineralisation horizons. Block grades were estimated using ordinary kriging techniques with appropriate top-cuts applied to the data. A dry density of 1.8 t/m³ based on laboratory analysis of field samples, was used for volume to tonnage conversion for the Mineral Resource estimate.

Areas with close spaced drilling that were tested by the AZC 2012/13 drilling programme and have higher estimation quality were classified as Measured; areas with wider spaced drilling (of up to 600 m) and poorer estimation quality were classified as Indicated or Inferred. Inferred Resources have been defined around the edges of the deposit areas. The variability of the VHM components is low and the classifications applied to the THM Mineral Resources have been applied to the VHM concentrations.

The table below summaries the assessment and reporting criteria used for the WIM150 Project Mineral Resource estimates and reflects the guidelines in Table 1 of The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012).

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <i>Nature and quality of sampling.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</i> 	<ul style="list-style-type: none"> For the AZC 2012/13 programme aircore drilling was used to obtain 1 m samples. Samples were selected from the Parilla Sand that were estimated to contain THM of over 1%. These samples were combined at the assay laboratory to form 2 m composited samples.
Drilling techniques	<ul style="list-style-type: none"> <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i> 	<ul style="list-style-type: none"> For the AZC 2012/13 programme aircore drilling was used. Previous exploration used reverse circulation and aircore drilling methods. All drillholes are vertical.
Drill sample recovery	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <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> 	<ul style="list-style-type: none"> AZC site geologist reported good recoveries for all samples.

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> • <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> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • All 2012/13 aircore samples were logged by the AZC site geologist for colour, lithology and induration (as qualitative data) and estimated heavy mineral content.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • All AZC 2012/13 aircore samples were collected over 1 m intervals. • Samples were selected from the Parilla Sand that were estimated to contain THM of over 1%. • These samples were riffle split and combined at the assay laboratory to form 2 m composited samples.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> • Industry standard method used for particle size separation. • Industry standard methods used for heavy liquid separation of the total heavy mineral fraction. • Field and laboratory duplicates submitted as blind samples indicated good levels of precision for the AZC 2012/13 drilling programme.
Verification of sampling and assaying	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • A twin drilling programme was completed by AZC in 2006. • Data from the CRAE drilling campaigns was extracted from the Victorian Government database. • The AZC 2006/07 and 2011 data was provided as Excel spreadsheets and imported by Optiro. • 2012/13 data was imported by Optiro from the laboratory datasheets. • Data validation included checking for out of range assay data and overlapping or missing intervals.
Location of data points	<ul style="list-style-type: none"> • <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> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • National MGA94 (54S) grid system used. • AZC 2012/13 drillholes were surveyed using DGPS by Ferguson Perry Surveying Pty. Ltd. to approximately ± 0.02 to 0.03 m for horizontal and ± 0.03 to 0.04 m for vertical accuracy. • AZC 2006/07 and 2011 drillholes were surveyed by a handheld GPS. • Previous CRAE drillholes were surveyed by chain and compass.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <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> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Not relevant . Mineral Resource defined for BFS.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <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> • <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> 	<ul style="list-style-type: none"> • All drillholes are vertical. • Flat sheet-like ore body and so no sampling bias.
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • All AZC samples were sorted and placed in sealed bags on private land. • Samples securely packed and sent to laboratory by courier.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • Twin hole drilling programme undertaken by AZC in 2006; results reviewed by Snowden mining Industry Consultants.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> • <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> • <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> 	<ul style="list-style-type: none"> • EL4521 and RL2007 (application). • In 2004, Austpac entered into a joint venture agreement with AZC (previously Southern Titanium NL) that requires AZC to complete a BFS in return for an 80% equity in the project. • In 2012, Orient Zirconic Resources (Australia) Pty Ltd purchased EL4521 from Austpac Resources NL and is now Australian Zircon's Farm-In partner
Exploration done by other parties	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • Drilling data collected by CRAE from 1979 to 1995.
Geology	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • WIM-style mineralisation, fine grained heavy mineral deposit within Parilla Sand.
Drillhole Information	<ul style="list-style-type: none"> • <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</i> easting and northing of the drillhole collar elevation or RL (elevation above sea level in metres) of the drillhole collar dip and azimuth of the hole down hole length and interception depth hole length. 	<ul style="list-style-type: none"> • Not relevant . Mineral Resource defined for BFS. • All drillholes are vertical.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Not relevant . Mineral Resource defined for BFS.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i> <i>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> 	<ul style="list-style-type: none"> Flat sheet like ore body intersected by vertical drillholes. Not relevant . Mineral Resource defined for BFS.
Diagrams	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Not relevant . Mineral Resource defined for BFS.
Balanced reporting	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Not relevant . Mineral Resource defined for BFS.
Other substantive exploration data	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Not relevant . Mineral Resource defined for BFS.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> 	<ul style="list-style-type: none"> Further work would involve drilling on a 400 m by 400 m to upgrade Indicated Mineral Resource to a Measured classification. Additional exploration work would involve aircore drilling around periphery of deposit.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <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> <i>Data validation procedures used.</i> 	<ul style="list-style-type: none"> Date entry by geologist, checked by geological supervisor and additional checking and validation by resource geologist. Data validation included checking for out of range assay data and overlapping or missing intervals.
Site visits	<ul style="list-style-type: none"> <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> 	<ul style="list-style-type: none"> Site visit undertaken during March 2013 by independent consultant (Competent Person for the Mineral Resource estimate). Site visit completed when large diameter core was obtained for the bulk density testwork.

Criteria	JORC Code explanation	Commentary
Geological interpretation	<ul style="list-style-type: none"> • <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> • <i>Nature of the data used and of any assumptions made.</i> • <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> • <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> • <i>The factors affecting continuity both of grade and geology.</i> 	<ul style="list-style-type: none"> • High level of confidence in the interpretation of the mineralised horizon. • All available geological data used to interpreted overlying Shepparton Formation, Parilla Sand (that contains mineralisation) and underlying Geera Clay and localised coal. • THM mineralisation has been defined above a nominal cut-off grade of 1% THM.
Dimensions	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • Flat sheet like ore body that extends for 10 km north-south and 12 km east-west. • Thickness of mineralisation ranges from 2 m to 22 m with an average thickness of 11.2 m. • Thickness of overlying Shepparton Formation ranges from 1 m to 13 m with an average thickness of 6.8 m.
Estimation and modelling techniques	<ul style="list-style-type: none"> • <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> • <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> • <i>The assumptions made regarding recovery of by-products.</i> • <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i> • <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> • <i>Any assumptions behind modelling of selective mining units.</i> • <i>Any assumptions about correlation between variables.</i> • <i>Description of how the geological interpretation was used to control the resource estimates.</i> • <i>Discussion of basis for using or not using grade cutting or capping.</i> • <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> 	<ul style="list-style-type: none"> • Drillhole sample data was flagged from a three dimensional interpretation of the mineralised horizon. • Sample data was composited to a 2 m downhole length. • The influence of slimes and oversize high grades outliers was reduced by top-cutting. The top-cut level was determined using a combination of top-cut analysis tools including examination of grade histograms, log probability plots and the coefficient of variation. • THM mineralisation continuity was interpreted from variogram analyses to have an along strike range of 3,000 m and an across strike range of 1,200 m. • Zircon, monazite and xenotime have high to moderate positive correlations and rutile has a low, positive correlation with rutile. The VHM continuity was interpreted from variogram analyses to have an along strike range of 1,350 m and an across strike range of 600 m. • Kriging neighbourhood analysis was performed in order to determine the block size, sample numbers and discretisation. • Grade estimation was into parent blocks of 200 mE by 200 mN on 2 m benches. • Estimation was carried out using ordinary kriging at the parent block scale. • Three estimation passes were used for THM, slimes and oversize; the first search was based upon the variogram ranges that account for approximately 80% of the variability domain in the three principal directions; the second search was 1.5 times the initial search and the third search was two times the initial search, with reduced sample numbers required for estimation.

Criteria	JORC Code explanation	Commentary
		<p>The majority of blocks (75%) were estimated in the first pass.</p> <ul style="list-style-type: none"> • The THM, slimes and oversize estimated block model grades were visually validated against the input drillhole data and comparisons were carried out against the declustered drillhole data and by northing, easting and elevation slices. • VHM data are from single drillhole composites. • Three estimation passes were used for VHM; the first search was based upon the variogram ranges the two principal horizontal directions; the second search was two times the initial search and the third search was seven times the initial search, with reduced sample numbers required for estimation. The majority of blocks (63%) were estimated in the first pass. • The VHM estimated block model grades were visually validated against the input drillhole data and comparisons were carried out against the declustered drillhole data and by northing and easting slices. • The global ordinary kriged THM estimate was compared to an inverse distance cubed estimate.
Moisture	<ul style="list-style-type: none"> • <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i> 	<ul style="list-style-type: none"> • Tonnages estimated using dry density measurements. • Moisture content determined from 2013 testwork of 58 samples taken from five wide diameter drillholes across the WIM150 deposit.
Cut-off parameters	<ul style="list-style-type: none"> • <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i> 	<ul style="list-style-type: none"> • The Mineral Resources are reported above a 1% THM cut-off grade, to reflect current commodity prices and open pit mining methods.
Mining factors or assumptions	<ul style="list-style-type: none"> • <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.</i> 	<ul style="list-style-type: none"> • Planned extraction is by open pit mining. Mining factors such as dilution and ore loss have not been applied. • The Mineral Resource has been reported within EL4521 and excludes exclusion zones relating to lakes and to the environmentally sensitive area at Potters Creek, and the Western Highway. • Mining study has been completed as part of the BFS.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> • <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.</i> 	<ul style="list-style-type: none"> • A processing study has been completed as part of the BFS. • Testwork undertaken by CPG Resources indicates recovery of THM from the +20 µm fraction can be achieved. • Mineralogical work for the BFS was carried out by Amdel using QEMSCAN with particle classification rules developed in conjunction with process engineers from CPG Resources.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Particle classification data used for Mineral Resource estimation of VHM components.
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. 	<ul style="list-style-type: none"> Environmental studies have been completed as part of the BFS. The Mineral Resource excludes exclusion zones relating to the lakes and to the environmentally sensitive area at Potters Creek, and the Western Highway.
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> Mineral Resource tonnages estimated using dry density measurements of the Parilla Sand from 2013 testwork of 58 samples of core of around 10 cm length taken from five wide diameter (200 mm) drillholes across the WIM150 deposit. No consistent trend with depth and geological logging indicates there is no trend with estimated THM contents. Data confirmed dry density measurements taken by AMC during 2011. Average density values determined for the Shepparton Formation, Parilla Sand and Geera Clay.
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> The THM Mineral Resources have been classified on the basis of confidence in geological and grade continuity using the drilling density, geological model, modelled grade continuity and conditional bias measures (kriging efficiency). Measured Mineral Resources have been defined generally in areas that were tested by the AZC 2012/13 drilling programme and where these drillholes are not more than 400 m apart. Indicated Mineral Resources have been defined generally in areas that were not tested by the AZC 2012/13 drilling programme, and have with a drill spacing of less than 600 m. Inferred Mineral Resources have been defined in areas with sparser drilling. The variability of the zircon, monazite, xenotime, rutile, ilmenite and leucoxene is low and the classifications applied to the THM Mineral Resources have been applied to the zircon, monazite, xenotime, rutile, ilmenite and leucoxene concentrations. The classification considers all available data and quality of the estimate and reflects the Competent Person's view of the deposit.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> The geological interpretation, estimation parameters and validation of the resource models were peer reviewed by Optiro staff.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The assigned classification of Measured, Indicated and Inferred reflects the Competent Person's assessment of the accuracy and confidence levels in the Mineral Resource estimate.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> The confidence levels have been assigned to the parent block size.

Competent Person's Statement

The information in this report which relates to Mineral Resources is based upon information compiled by Mrs Christine Standing, who is a Member of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Mrs Standing is an employee of Optiro Pty Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mrs Standing consents to the inclusion in the report of a summary based upon her information in the form and context in which it appears.

Australian Zircon NL is a publicly listed company on the Australian Securities Exchange Limited (ASX Code: AZC). The current focus of the Company is the completion of a Bankable Feasibility Study to earn an 80% interest in the extensive WIM150 Mineral Sands Project near Horsham in Western Victoria.