ASX Code: IMA 24 November 2015

# Bidaminna Heavy Mineral composites show remarkable and atypically high levels of Leucoxene

#### Highlights

Composites were taken over three sections across the length of the Bidaminna Resource (Figures 1 to 4). Mineral Abundance Table 1 shows extraordinary and atypically elevated levels of leucoxene content within the contained heavy mineral (HM). In detail, the HM suite is dominated by the more valuable high Titanium minerals - High Titanium Leucoxene, Low Titanium Leucoxene<sup>1</sup> and Altered Ilmenite and is broken up into:

Leucoxene 28% to 69% of the HM which includes:

High Ti Leucoxene 7% to 24% of the HM Low Ti Leucoxene 15% to 47% HM

- Altered Ilmenite 13% to 37% HM
- Ilmenite 2% to 22.3% HM

The Bidaminna Resource of 44Mt @ 3% HM and the adjacent Exploration Target<sup>2</sup> has circa 100-110Mt, averaging 3-4% HM with potential of between 3.0Mt to 5.8Mt of contained HM and extends northwards.

More land pegged to cover the interpreted northern and southern extension of this deposit.

Approximately 98 km<sup>2</sup> covered by the three new tenement applications, give a total of 276 km<sup>2</sup> in the Bidaminna region and a total in the North Perth Basin of 1,022 km<sup>2</sup>.

The Leucoxene range of 28 to 69% of the HM in the 7 Bidaminna composites is much higher than any of the eight deposits between Gingin South and the Cooljarloo Mine where the Leucoxene range is between 1 to 10% of the HM³. This makes the Bidaminna Resource very unusual and, as a result, Image has recently applied for additional land to cover the northern and southern extensions of the Bidaminna Resource.

The commodity pricing for Leucoxene is not readily reported however according to recent presentations from MZI Resources Ltd (27<sup>th</sup> May and 18<sup>th</sup> November 2015), the L70 Leucoxene (65-85% TiO<sup>2</sup>) price was reported to be US\$352/tonne whilst the L88 Leucoxene (85-95% TiO<sup>2</sup>) price was reported as US\$1,166/tonne.

This augers well for the potential economics of the Bidaminna project, as the mineral suite is dominated by the much higher value Leucoxene products, whilst North Perth Basin deposits are commonly dominated by the lower value Ilmenite products which are currently fetching between US\$100 to US\$150.

 $<sup>^{1}</sup>$  High Ti Leucoxene greater than or equal to 75% TiO $_{2}$  but less than 95% TiO $_{2}$ , Low Ti Leucoxene greater than or equal to 65% TiO $_{2}$  but less than 75% TiO $_{2}$ 

<sup>&</sup>lt;sup>2</sup> It is important to note that these estimates are conceptual in nature and there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

<sup>&</sup>lt;sup>3</sup> Image Presentation ASX November 2015

## Bidaminna Project

Extensive re-interpretation of historical drilling, Image drilling and ground magnetics has shown that the lower mineralised zone is much more extensive than previously thought. The Bidaminna Resource, 44Mt@3 % HM, is 5.3km long and ranges from 100 to 300m in width (Figure 1 and Table 5). Seven composites were sent for analysis of the Zircon, Rutile, Ilmenite and Leucoxene contents across 3 sections through the Bidaminna Deposit (Figures 1 to 4).

The current interpretation shows the Exploration Target is 11.2km in length and ranges from 600 to 1300m in width. The Exploration Target (not including the Bidaminna Resource) is estimated to contain between 100-110Mt with potential to contain 3.0Mt to 5.8Mt of contained HM (based on a range of 3 or 4% HM).

The Bidaminna Resource and Exploration Target, differs from the Boonanarring Deposit, in that they are amenable to large volume dredge mining with a very low slime content of around 3.6%, the mineralised horizon is below the water table and have thick zones of mineralisation – 35 metres thick (Figure 2).

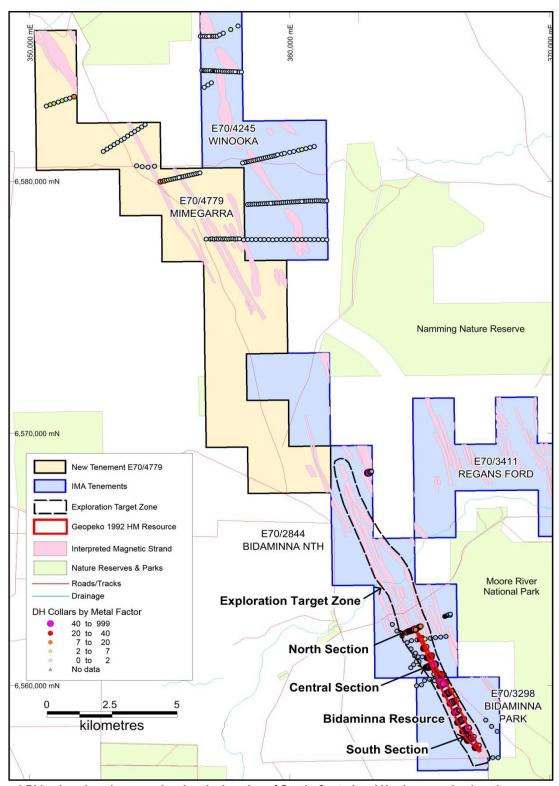


Figure 1 Bidaminna location map showing the location of South, Central and Northern section locations.

Existing (Pre-Image and Image) drilling coloured by metal factor (see legend) showing the Bidaminna Resource (red outline) and exploration target area (black dashed outline), Image tenements and regional location.

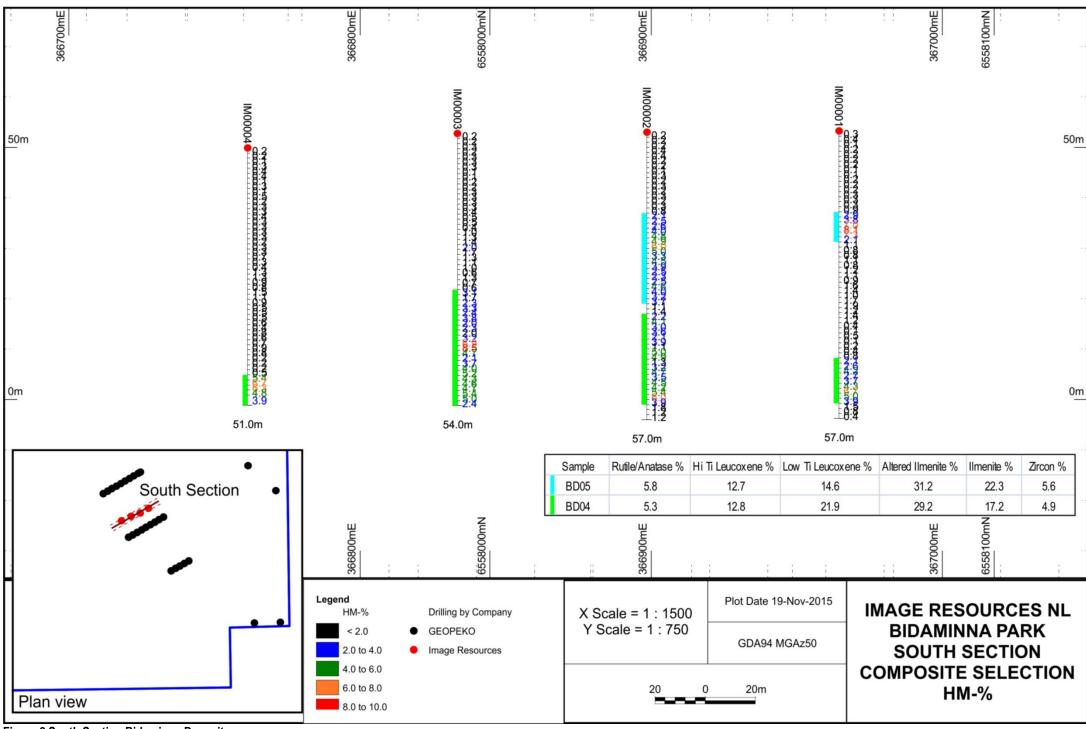


Figure 2 South Section Bidaminna Deposit:

Composite BD05 (South Upper) returned QEMSCAN mineral abundance of 5.8% Rutile/Anatase, 12.7% Hi Ti Leucoxene ( $\geq$ 75 <95% TiO<sup>2</sup>), 14.6% Low Ti Leucoxene ( $\geq$ 65 <75% TiO<sup>2</sup>), 31.2% Altered Ilmenite ( $\geq$ 55 <65% TiO<sup>2</sup>), 22.3% Ilmenite ( $\geq$ 40 <55% TiO<sup>2</sup>), 5.6% Zircon and 7.9% other minerals.

Composite BD04 (South Lower) returned QEMSCAN mineral abundance of 5.3% Rutile/Anatase, 12.8% Hi Ti Leucoxene (≥75 <95% TiO²), 21.9% Low Ti Leucoxene (≥65 <75% TiO²), 29.2% Altered Ilmenite (≥55 <65% TiO²), 17.2% Ilmenite (≥40 <55% TiO²), 4.9% Zircon and 8.7% other minerals.

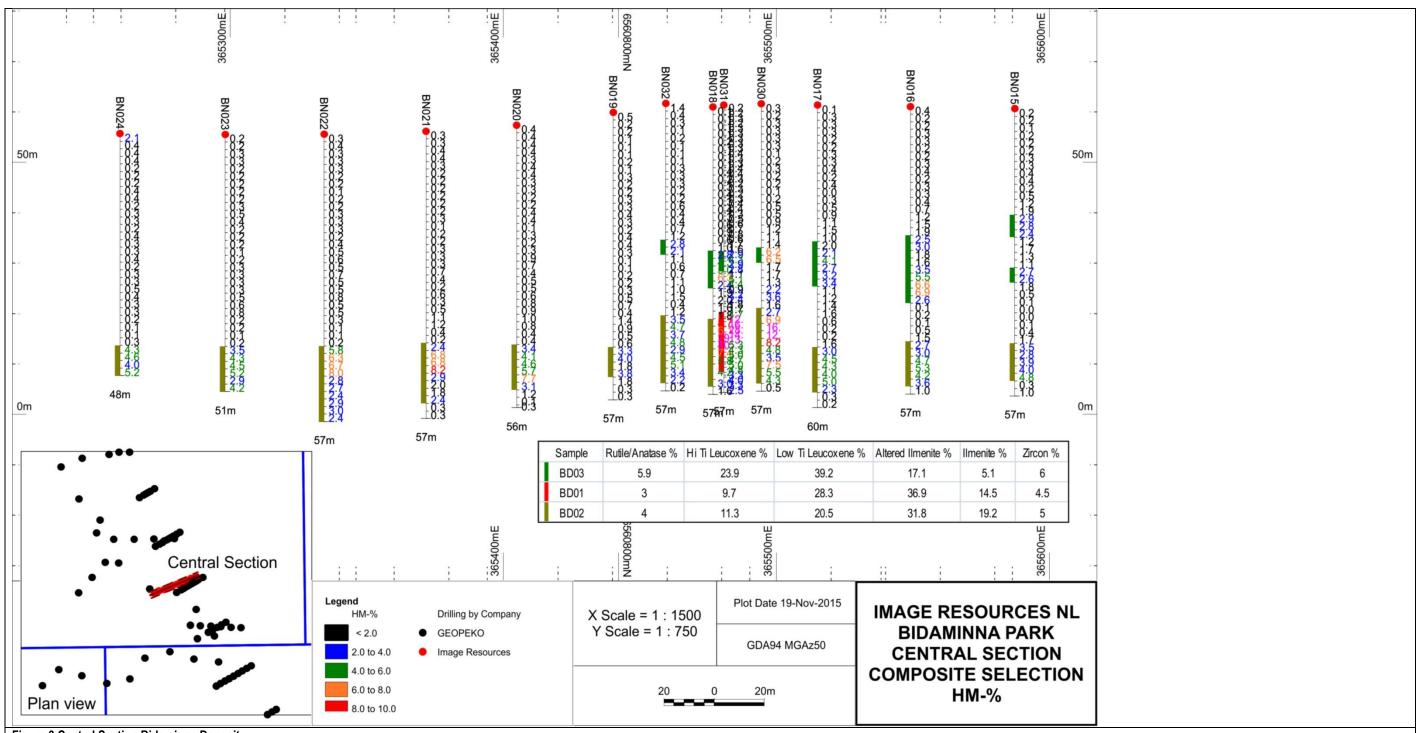


Figure 3 Central Section Bidaminna Deposit:

Composite BD03 (Central Upper) returned QEMSCAN mineral abundance of 5.9% Rutile/Anatase, 23.9% Hi Ti Leucoxene (≥75 <95% TiO²), 39.2% Low Ti Leucoxene (≥65 <75% TiO²), 17.1% Altered Ilmenite (≥55 <65% TiO²), 5.1% Ilmenite (≥40 <55% TiO²), 6% Zircon and 2.9% other minerals.

Composite BD01 (Central high grade) returned QEMSCAN mineral abundance of 3% Rutile/Anatase, 9.7% Hi Ti Leucoxene (≥75 <95% TiO²), 28.3% Low Ti Leucoxene (≥65 <75% TiO²), 36.9% Altered Ilmenite (≥55 <65% TiO²), 14.5% Ilmenite (≥40 <55% TiO²), 4.5% Zircon and 3% other minerals.

Composite BD02 (Central Lower) returned QEMSCAN mineral abundance of 4% Rutile/Anatase, 11.3% Hi Ti Leucoxene (≥75 <95% TiO²), 20.5% Low Ti Leucoxene (≥65 <75% TiO²), 31.8% Altered Ilmenite (≥55 <65% TiO²), 19.2% Ilmenite (≥40 <55% TiO²), 5% Zircon and 8.1% other minerals.

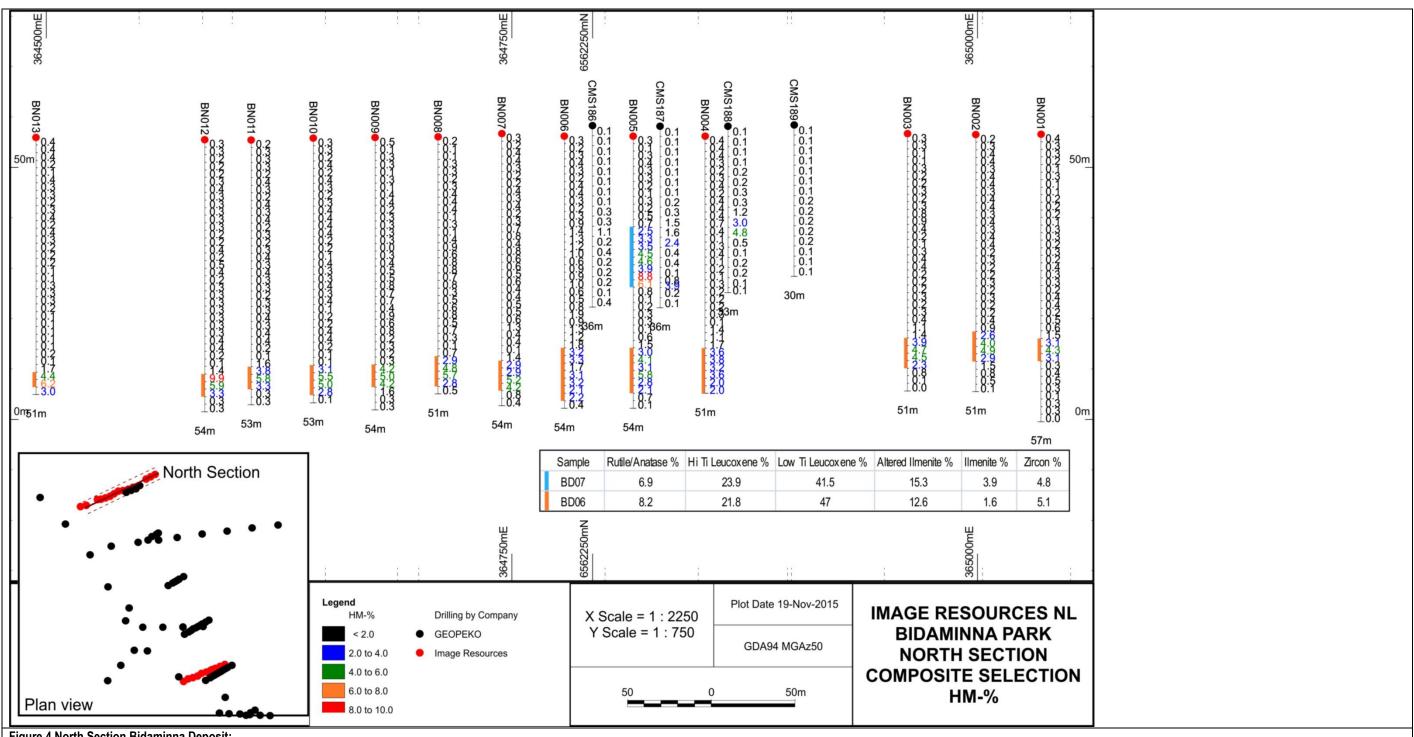


Figure 4 North Section Bidaminna Deposit:

Composite BD07 (North Upper) returned QEMSCAN mineral abundance of 6.9% Rutile/Anatase, 23.9% Hi Ti Leucoxene (≥75 <95% TiO²), 41.5% Low Ti Leucoxene (≥65 <75% TiO²), 15.3% Altered Ilmenite (≥55 <65% TiO²), 3.9% Ilmenite (≥40 <55% TiO²), 4.8% Zircon and 3.8% other minerals.

Composite BD06 (North Lower) returned QEMSCAN mineral abundance of 4% Rutile/Anatase, 8.2% Hi Ti Leucoxene (≥75 <95% TiO²), 21.8% Low Ti Leucoxene (≥65 <75% TiO²), 47% Altered Ilmenite (≥55 <65% TiO²), 1.6% Ilmenite (≥40 <55% TiO²), 5.1% Zircon and 3.8% other minerals.

#### **Appendix**

#### **Bidaminna Composites**

Image Resources submitted a total of 267 heavy mineral (HM) concentrate samples for targeted splitting into 7 composite samples (Table 1) for QEMSCAN analysis by Bureau Veritas Mineral Laboratories from three sections; the southern, central and northern portion of the Bidaminna deposit, classified by Geopeko as an Indicated Resource totalling 44Mt @ 3% HM in 1992<sup>4</sup> (refer Table 3).

The composite samples, collected from the upper and lower strands of the Bidaminna deposit, were prepared by micro-splitting concentrates retained from exploration air core drilling analyses, completed by Image during 2011 and 2014. Three dimensional wireframe volumes were prepared from drill sections of the mineralised horizons of interest and the micro splitting weights were then determined through a nearest neighbour volume weighting for each sample within the respective wireframes. In this way each composite sample was deemed to be spatially representative of the horizons sampled and analysed.

#### Mineral Abundance - QEMSCAN

QEMSCAN analysis indicated that all 7 samples mainly contained TiO<sup>2</sup> minerals, with a combined TiO<sup>2</sup> Minerals of between ~86-93%. Zircon accounted for between 4.5-6% of these samples. Minor amounts of Ti Intergrowths, REE, quartz and various silicate phases were also present. Mineral Abundance results from the QEMSCAN analysis carried out on the 7 composite samples are presented in Table 1 below and the composite locations are shown on the overall location map and Sections 1 through to 3 (Figures 1 to 4).

ľ	Table 1 Results of Mineral Abundance for selected minerals (as defined in the Main Mineral List) as a % of 7
	composite samples from the Bidaminna Deposit using QEMSCAN analysis by Bureau Veritas Mineral
	Laboratories, South Australia

Section	South Lower	South Upper	Central High Grade	Central Lower	Central Upper	North Lower	North Upper
Sample	BD04	BD05	BD01	BD02	BD03	BD06	BD07
Rutile	5.3	5.8	3	4	5.9	8.2	6.9
Leucoxene combined Hi & Low Ti	34.7	27.3	38	31.8	63.1	68.8	65.4
Hi Ti Leucoxene	12.8	12.7	9.7	11.3	23.9	21.8	23.9
Low Ti Leucoxene	21.9	14.6	28.3	20.5	39.2	47	41.5
Altered Ilmenite	29.2	12.6	36.9	31.8	17.1	12.6	15.3
Ilmenite	17.2	22.3	14.5	19.2	5.1	1.6	3.9
Zircon	4.9	5.6	4.5	5	6	5.1	4.8

For the mineral list definitions refer to Table 2 and the complete set of mineral abundance for the main mineral and expanded mineral lists

Composites were taken from the upper and lower mineralised zones on three sections over the Bidaminna deposit (South, Central and Northern sections) shown on Figure 1 which depicts existing (Pre-Image and Image) drilling coloured by metal factor (see legend), the Bidaminna Resource (red outline), exploration target area (black dashed outline) and interpreted magnetic strands (pink solid), Image tenements (blue solid area). Sections

<sup>&</sup>lt;sup>4</sup> Report No.WA93/3S Cataby J.V. E70/489 & E70/791 Annual Report Nabaroo and Bidaminna, North Perth Basin May 1991 – April 1992 by C.W. Rothnie, Geopeko. WAMEX report A36673.

#### **IMAGE RESOURCES NL**

South to North show HM% results of air core samples to the right of the drill hole trace which is coloured by HM% (see legend) and the bold colour to the left of the drill trace indicate the corresponding composite.

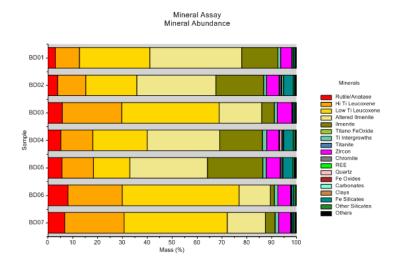
Samples included in the mineralogical composite are indicated by the corresponding solid coloured bar to the left of the drill hole trace and the QEMSCAN analysis mineral abundance results for Rutile, Hi and Low Ti Leucoxene, Altered Ilmenite and Ilmenite as defined by the mineral list (Table 2) are presented in the table to the lower right of the section.

Table 2 Main Minera	Table 2 Main Mineral List							
Mineral	Description							
Rutile	includes rutile (≥95% TiO2)							
Hi Ti Leucoxene	includes Ti Oxide phases with ≥75 <95% TiO2							
Low Ti Leucoxene	includes Ti Oxide phases with ≥65 <75% TiO2							
Altered Ilmenite	includes Ti Oxide phases with ≥55 <65% TiO2							
Ilmenite	includes Ti Oxide phases with <55% TiO2							
Titano Fe Oxide	includes fine textures, cracks, intergrowths and boundary phases containing Ti, Fe and Si							
Ti Intergrowths	Includes titanite							
Titanite	Includes zircon							
Zircon	Includes chromite							
Chromite	Includes REE minerals							
REE	Includes quartz							
Quartz	Includes Fe Oxide group minerals which may also be boundaries / intergrowths with carbonates, Fe Silicates and Other Silicates							
Fe Oxides	Includes calcite, dolomite, ankerite and Ca Fe-Mg intergrowths							
	Includes various clays which may also be boundaries / intergrowths with Fe Oxides, Fe Silicates and Other							
Carbonates	Silicates							
	Includes what the QEMSCAN classifies as mainly almandine, andradite-grossular which may also be boundaries /							
Fe Silicates	intergrowths with Fe Oxides, clays and Other Silicates							
Other Silicates	Includes other silicate minerals, generally of indeterminate mineralogy							
Others	Includes all phases not listed above and occurring in trace form							

## **IMAGE RESOURCES NL**

Table 3 Mineral Abundance Main Mineral List - QEMSCAN

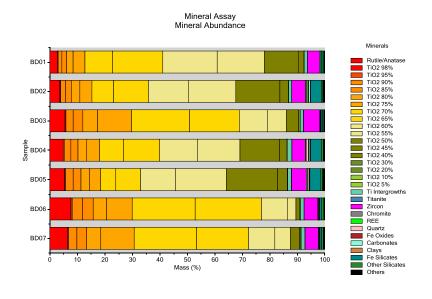
	Sample	BD01	BD02	BD03	BD04	BD05	BD06	BD07
	Rutile/Anatase	3.0	4.0	5.9	5.3	5.8	8.2	6.9
	Hi Ti Leucoxene	9.7	11.3	23.9	12.8	12.7	21.8	23.9
	Low Ti Leucoxene	28.3	20.5	39.2	21.9	14.6	47.0	41.5
	Altered Ilmenite	36.9	31.8	17.1	29.2	31.2	12.6	15.3
	Ilmenite	14.5	19.2	5.1	17.2	22.3	1.6	3.9
	Titano FeOxide	0.0	0.0	0.0	0.0	0.0	0.0	0.0
_	Ti Intergrowths	1.1	1.1	1.1	1.7	1.4	1.4	1.4
8	Titanite	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mineral Mass	Zircon	4.5	5.0	6.0	4.9	5.6	5.1	4.8
Σ	Chromite	0.1	0.0	0.0	0.0	0.0	0.0	0.0
eLa	REE	0.4	0.4	0.2	0.3	0.4	0.2	0.3
E	Quartz	0.1	0.4	0.1	0.8	0.5	0.2	0.2
_	Fe Oxides	0.0	0.3	0.0	0.2	0.1	0.1	0.1
	Carbonates	0.0	0.6	0.0	0.4	0.1	0.0	0.0
	Clays	0.0	0.0	0.1	0.1	0.1	0.0	0.1
	Fe Silicates	0.6	3.9	0.5	3.9	4.0	0.8	0.6
	Other Silicates	0.4	0.6	0.4	0.8	0.7	0.8	0.7
	Others	0.2	0.7	0.3	0.5	0.8	0.3	0.5
	TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0



## **IMAGE RESOURCES NL**

Table 4 Mineral Expanded Mineral List - QEMSCAN

	Sample	BD01	BD02	BD03	BD04	BD05	BD06	BD07	
	Rutile/Anatase	2.9	3.7	5.6	4.9	5.4	7.7	6.5	
	TiO2 98%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	TiO2 95%	0.2	0.3	0.3	0.4	0.4	0.4	0.4	
	TiO2 90%	1.3	1.7	2.6	2.4	2.8	3.7	3.0	
	TiO2 85%	1.7	2.2	3.5	2.6	2.8	3.9	3.5	
	TiO2 80%	2.4	3.1	5.3	3.2	3.2	4.9	5.2	
	TiO2 75%	4.3	4.4	12.4	4.7	3.9	9.3	12.2	
	TiO2 70%	10.0	7.8	21.1	8.6	5.6	22.9	22.7	
	TiO2 65%	18.3	12.7	18.1	13.2	9.0	24.1	18.9	
	TiO2 60%	19.8	14.5	10.2	13.8	12.8	9.4	9.6	
	TiO2 55%	17.1	17.3	6.9	15.4	18.5	3.1	5.6	
	TiO2 50%	12.4	16.0	4.4	14.4	18.6	1.4	3.4	
(	TiO2 45%	2.1	3.1	0.7	2.7	3.6	0.2	0.5	
Mineral Mass (%)	TiO2 40%	0.1	0.1	0.0	0.1	0.1	0.0	0.0	
ass	TiO2 30%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Σ	TiO2 20%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ēra	TiO2 10%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Ē	TiO2 5%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Ti Intergrowths	1.1	1.1	1.1	1.7	1.4	1.4	1.4	
	Titanite	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Zircon	4.5	5.0	6.0	4.9	5.6	5.1	4.8	
	Chromite	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
	REE	0.4	0.4	0.2	0.3	0.4	0.2	0.3	
	Quartz	0.1	0.4	0.1	0.8	0.5	0.2	0.2	
	Fe Oxides	0.0	0.3	0.0	0.2	0.1	0.1	0.1	
	Carbonates	0.0	0.6	0.0	0.4	0.1	0.0	0.0	
	Clays	0.0	0.0	0.1	0.1	0.1	0.0	0.1	
	Fe Silicates	0.6	3.9	0.5	3.9	4.0	0.8	0.6	
	Other Silicates	0.4	0.6	0.4	0.8	0.7	0.8	0.7	
	Others	0.2	0.7	0.3	0.5	0.8	0.3	0.5	
	TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	



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## COMPETENT PERSON'S STATEMENT - EXPLORATION RESULTS AND MINERAL RESOURCES AND RESERVES

Information in this report that relates to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by George Sakalidis BSc (Hons) who is a member of the Australasian Institute of Mining and Metallurgy. At the time that the Exploration Results, Mineral Resources and Mineral Reserves were compiled, George Sakalidis was a director of Image Resources NL. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. George Sakalidis consents to the inclusion of this information in the form and context in which it appears in this report.

#### COMPETENT PERSON'S STATEMENT - RESOURCE ESTIMATES

The information in this report that relates to mineral resources and is based on information compiled by Lynn Widenbar BSc, MSc, DIC MAIG, MAusIMM employed by Widenbar & Associates who is a consultant to the Company. Lynn Widenbar has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he 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'. Lynn Widenbar consents to the inclusion of this information in the form and context in which it appears in.

#### FORWARD LOOKING STATEMENTS

Certain statements made during or in connection with this communication, including, without limitation, those concerning the economic outlook for the mining industry, expectations regarding prices, exploration or development costs and other operating results, growth prospects and the outlook of Image's operations contain or comprise certain forward looking statements regarding Image's operations, economic performance and financial condition. Although Image believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct.

Accordingly, results could differ materially from those set out in the forward looking statements as a result of, among other factors, changes in economic and market conditions, success of business and operating initiatives, changes that could result from future acquisitions of new exploration properties, the risks and hazards inherent in the mining business (including industrial accidents, environmental hazards or geologically related conditions), changes in the regulatory environment and other government actions, risks inherent in the ownership, exploration and operation of or investment in mining properties, fluctuations in prices and exchange rates and business and operations risks management, as well as generally those additional factors set forth in our periodic filings with ASX. Image undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events.

**Table 5 Reserve and Resource Summary** 

Reserve Summary											
Project Area	Category	Volume	Tonnes	% HM	% SLIMES	HM Tonnes	VHM	Ilmenite	Leucoxene	Rutile	Zircon
							(%)	(%)	(%)	(%)	(%)
Boonanarring	Probable	7,160,000	14,420,000	8.3%	17.0%	1,190,000	80.3%	46.9%	5.5%	3.3%	24.5%
Atlas	Probable	4,760,000	9,600,000	8.1%	15.5%	780,000	74.1%	55.0%	1.0%	7.0%	11.0%
Total NPB Reserve		11,920,000	24,020,000	8.2%	16.4%	1,970,000	77.8%	50.1%	3.7%	4.8%	19.1%
Mining Inventory (incl Inferred)		13,330,000	26,880,000	8.0%	16.5%	2,135,000	78.3%	50.1%	4.2%	5.1%	19.0%

High Grade Resources @											
Resource	Resource Category	ВСМ	TONNES	% HM	% SLIMES	HM TONNES	VHM	Ilmenite	Leucoxene	Rutile	Zircon
							(%)	(%)	(%)	(%)	(%)
Atlas	Measured	4,810,000	9,700,000			820,000	76	52	5	8	3 11
Atlas	Indicated	520,000	1,080,000	3.2	19.2	34,000	74	53	8	7	7 6
Atlas Total		5,330,000	10,780,000	7.9	15.7	854,000	76	52	5	8	3 10
Boonanarring	Measured	1,680,000	3,000,000	7.8	10.1	230,000	70	49	1	3	3 17
Boonanarring	Indicated	7,000,000	14,300,000	9	17.2	1,270,000	80	49	6	3	3 22
Boonanarring	Inferred	2,100,000	4,200,000	6.5	17.4	270,000	83	51	8	7	7 18
Boonanarring Total		10,780,000	21,500,000	8.3	16.2	1,770,000	79	49	6	4	1 21
Gingin Nth	Indicated	680,000	1,320,000	5.7	15.7	80,000	75	57	9	3	3 5
Gingin Nth	Inferred	580,000	1,090,000	5.2	14	60,000	78	57	11	4	ι <i>ε</i>
Gingin Nth Total		1,260,000	2,410,000	5.5	15	140,000	77	57	10	3	3 6
Gingin Sth	Measured	870,000	1,530,000	4.4	7.2	67,000	79	51	15	$\epsilon$	5 8
Gingin Sth	Indicated	3,240,000	5,820,000	6.5	7.1	380,000	91	68	10	5	5 8
Gingin Sth	Inferred	400,000	730,000	6.5	8.4	48,000	92	67	8	$\epsilon$	5 11
Gingin Sth Total		4,510,000	8,080,000	6.1	7.3	495,000	89	65	10	5	5 8
Helene	Indicated	5,600,000	11,500,000	4.6	18.6	520,000	84	70	1	3	3 11
Hyperion	Indicated	1,800,000	3,700,000	7.8	19.3	290,000	71	56	0	$\epsilon$	5 9
Cooljarloo Nth Total		7,400,000	15,200,000	5.3	18.7	810,000	79	64	0	4	1 9
Red Gully	Indicated	1,930,000	3,410,000	7.8	11.5	270,000	90	66	8	3	3 12
Red Gully	Inferred	1,455,000	2,570,000	7.5	10.7	190,000	90	66	8	3	3 12
Red Gully Total		3,385,000	5,980,000	7.7	11.2	460,000	90	66	8	3	3 12
Grand Total		32,665,000	63,950,000	7.1%	13.9%	4,529,000	80	57	6	5	5 13

Dredge Resources at 1.0% HM cut-o	off										•					
Project Area	Resource Category	Volume	TONNES	%	%	НМ	VHM	Ilmenite %	Leucoxene %	Rutile	Zircon	Ilmenite	Leucoxene	Rutile	Zircon	VHM Tonnes
				НМ	Slime	TONNES	%			%	%					
Titan	Indicated	10,300,000	21,200,000	1.8	22.1	380,000	84.4	71.9	2.0	1.0	9.5	270,000	7,000	5,000	36,000	318,000
Titan	Inferred	58,500,000	115,400,000	1.9	18.9	2,210,000	84.3	71.8	2.0	1.0	9.5	1,592,000	45,000	22,000	210,000	1,869,000
Titan	Total	68,800,000	136,600,000	1.9	19.4	2,590,000	84.4	71.9	2.0	1.0	9.5	1,862,000	52,000	27,000	246,000	2,187,000
Telesto	Indicated	1,700,000	3,500,000	3.8	18.4	130,000	82.6	67.5	3.4	2.2	9.5	100,000	5,000	3,000	13,000	121,000
Calypso	Inferred	27,100,000	51,500,000	1.7	13.7	850,000	84.6	68.8	3.5	1.6	10.6	585,000	30,000	14,000	90,000	719,000
Sub Total	Indicated	12,000,000	24,700,000	2.1	21.6	510,000	86.1	72.5	2.4	1.6	9.6	370,000	12,000	8,000	49,000	439,000
Sub Total	Inferred	85,600,000	166,900,000	1.8	17.3	3,060,000	84.6	71.1	2.5	1.2	9.8	2,177,000	75,000	36,000	300,000	2,588,000
Cooljarloo Total		97,600,000	191,600,000	1.9	17.8	3,570,000	84.8	71.3	2.4	1.2	9.8	2,547,000	87,000	44,000	349,000	3,027,000
Bidaminna	Inferred	26,300,000	44,600,000	3.0	3.6	1,350,000	96.0	82.4	7.2	1.0	5.4	1,113,000	97,000	13,000	73,000	1,296,000
Total Dredge	·	123,900,000	236,200,000	2.1	15.1	4,920,000	84.3	65.6	4.6	2.9	11.3	3,660,000	184,000	57,000	422,000	4,323,000

<sup>1</sup> Refer to the 31 May 2013 release http://www.asx.com.au/asxpdf/20130531/pdf/42g6v9v0jxn3hg.pdf for full details of the Boonanarring Mineral Resource/Reserve Estimate for full details of the Boonanarring Mineral Resource/Reserve Estimate

## JORC Code, 2012 Edition – Table 1

# Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>The composites referred to in this release were collected from concentrates retained from exploration air core drilling analyses which were completed by Image.</li> <li>All drill holes reported in this release are vertically oriented, reverse-circulation air-core (RCAC) drill holes.</li> </ul>
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>All RCAC drill holes were drilled vertically using an NQ-sized (63.5 mm diameter) drill bit.</li> <li>Water injection was used to convert the sample to slurry so it can be incrementally sampled by a rotary splitter.</li> </ul>

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>Image Resources submitted a total of 267 heavy mineral (HM) concentrate samples (from aircore drilling) for targeted splitting into 7 composite samples for QEMSCAN analysis by Bureau Veritas Mineral Laboratories from the upper and lower mineralised zones from three sections; the southern, central and northern portion of the Bidaminna deposit. All HM samples that were included in the composites came from Image aircore drilling in 2011 and 2014.</li> <li>At the drill site, Image's geologist estimates sample recovery qualitatively (as good, moderate or poor) for each 1m* down hole sampling interval. Specifically, the supervising geologist visually estimates the volume recovered to sample and reject bags based on prior experience as to what constitutes good recovery.</li> <li>*For 2011 drilling the sample interval was 1.5m in overburden and 1 to 1.5m intervals in mineralised zones</li> <li>*For the 2013 drilling the sample intervals were taken at 1m intervals</li> <li>Image found that of the 267 samples that went into the preparation of the composites that are the subject of this release, 224 (84%) have good recovery, 22 (8%) have moderately good recovery and 21 (8%) have poor recovery.</li> </ul>
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.      Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.      The total length and percentage of the relevant intersections logged.	<ul> <li>Image's supervising geologist logs the sample reject (post 2011) material at the rig and pans a small sub sample of the reject, to visually estimate the proportions of sands, heavy mineral sands, 'slimes' (clays), and oversize (rock chips) in each sample, in a semi-quantitative manner.</li> <li>The geologist also logs colour, grainsize, an estimate of induration (a hardness estimate) and sample 'washability' (ease of separation of slimes from sands by manual attrition).</li> <li>To preclude data entry and transcription errors, the logging data is captured into a digital data logger at the rig, which contains pre-set logging codes. No photographs of samples are taken.</li> <li>The digital logs are downloaded daily and emailed to Image's head office for data security and compilation into the main database server.</li> <li>Samples visually estimated by the geologist to contain more than 0.5% HM (by weight) are despatched for analysis along with the 1 m intervals above and below the mineralised interval.</li> <li>The level and detail of logging is of sufficient quality to support any potential future Mineral Resource Estimates.</li> <li>All (100%) of the drilling is logged.</li> <li>Geotechnical logging is not possible for the style of drilling used, however the logging is acceptable for metallurgical sample selection if required.</li> </ul>

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Composites were prepared using Heavy Mineral concentrates were split to a targeted mass using a micro splitter by Bureau Veritas Mineral Laboratories to be representative of the upper and lower mineralised zones from three sections; the southern, central and northern portion of the Bidaminna deposit. All HM samples that were included in the composites used in the preparation of the seven composites concentrates were retained from exploration air core drilling analyses which were completed by Image in 2011 and 2014.</li> <li>All drilling samples are collected over either 1 m or 1.5 m down hole intervals, with sample lengths determined by 1 m or 1.5m marks on the rig mast with the exception of one 2m interval.</li> <li>*For 2011 drilling the sample interval was 1.5m in overburden and 1 to 1.5m intervals in mineralised zones</li> <li>*For the 2013 drilling the sample intervals were taken at 1m intervals</li> <li>The sample from the internal RC rods is directed to a cyclone and then through a 'rotating-chute' custom-built splitting device. This device allows different fraction splits from the cyclone sample stream to be directed to either 25 cm by 35 cm calico bags (as the laboratory despatch samples) or to large plastic polyweave bags for the sample rejects. The rotary splitter directs ≈10 increments from the stream to the laboratory despatch samples, for a specified sampling interval.</li> <li>For resource style drilling (2014 drilling), two (replicate) 1/8 mass splits (each ≈ 1.25 kg) are collected from the rotary splitter into two prenumbered calico bags for each 1 m down hole interval. A selection of the replicate samples are later collected and analysed to quantify field sampling precision, or as samples contributing to potential future metallurgical composites.</li> <li>To monitor sample representation and sample number correctness, Image weighs the laboratory despatch samples prior to despatch (post 2011). The laboratory then weighs the received sample. Graphite was add</li></ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>QEMSCAN analysis is an integrated automated mineralogy and petrography solution providing quantitative analysis of minerals, rocks and man-made materials.</li> <li>The data were processed using iDiscover v.5.3. 'Field stitching', 'Particulator', Area&gt;2 filter, 'touching particles' and 'Boundary phase' processors were applied. Please note that Boundary Phase Processing was not conducted on the TiO2 minerals but was conducted on Ti and Ti-Fe Intergrowth mineral categories.</li> <li>The composite samples were submitted for elemental assay to BV Mineral Chemistry in Cardiff, NSW as a quality control measure to ensure correct identification of minerals.</li> </ul>

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.  The use of twinned holes.  Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.  Discuss any adjustment to assay data.	QEMSCAN generates assays for each sample by assigning each pixel analysed chemical values and a 'specific gravity'. Chemical assays are compared to the QEMSCAN generated assays to determine if the QEMSCAN-generated analysis is valid. The line in the below graph is the 1:1 line.  There is generally a good correlation between the QEMSCAN generated assays and the chemical analyses. The QEMSCAN slightly overestimates Ti in all samples and this may be due to the close relationship between ilmenite and altered ilmenite, however further investigation would be needed to determine the cause.  Assay results from the laboratory are received by email in standard spreadsheet templates and merged with logging results in-house.  There are no adjustments to original laboratory results.
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.     Specification of the grid system used.     Quality and adequacy of topographic control.	<ul> <li>The drill hole collar locations were captured by one of Image's rig team following the completion of each drill hole, using a hand held GPS with nominal accuracy of ≈ ±15 m. Elevations have also been determined post program using DEM. More accurate locations will be determined in future by a registered surveyor using DGPS equipment.</li> <li>The grid system for reporting results is the MGA Zone 50 projection and the GDA94 elevation datum.</li> <li>No topographic control has been considered at this time.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Seven composite samples were prepared by micro-splitting concentrates, which were retained from exploration air core drilling analyses which were completed by Image. Three dimensional wireframe volumes were prepared from drill sections of the mineralised horizons of interest and the micro splitting weights were then determined through a nearest neighbour volume weighting for each sample within the respective wireframes. In this way each composite sample was deemed to be spatially representative of the horizons sampled and analysed.</li> <li>The composite samples were collected from the upper and lower strands of the Bidaminna deposit and were prepared by micro-splitting concentrates retained from exploration air core drilling analyses, completed by Image during 2011 and 2014. Three dimensional wireframe volumes were prepared from drill sections of the mineralised horizons of interest and the micro splitting weights were then determined through a nearest neighbour volume weighting for each sample within the respective wireframes. In this way each composite sample was deemed to be spatially representative of the horizons sampled and analysed.</li> </ul>

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	All drill holes from which the HM concentrates were taken are vertical and intersect sub-horizontal strata. As such Image considers that it is highly unlikely that the orientation of drilling relative to the well understood structure of minerals sands strands would result in a sampling bias.
Sample security	The measures taken to ensure sample security.	<ul> <li>Heavy mineral floats were delivered to Bureau Veritas Mineral Laboratories in Adelaide, South Australia by courier.</li> <li>Image considers there is negligible risk of deliberate or accidental contamination of samples.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	The results and logging have been reviewed internally by Images senior exploration personnel including checking of masses despatched and delivered, checking of SRM results, and verification logging of significant intercepts.

# Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	The 31 drill holes that are the subject of this public report are drilled within following prospect area tenements. Tenure details are given in each case: Bidaminna: 90% Image Resources NL; 10% Maslin Exploration licences: 27 holes within E70/2844 (expiry 31/3/2017) completed in 2011 4 holes within E70/3298 (expiry 25/3/2019) completed in 2014 All drilling that is the subject of this report was completed on Crown Land Image possess a Heritage agreement with Yued signed in 2007. At the time of this public report, Image has security of tenure for all tenements drilled, and is not aware of any material impediments to obtaining a licence to operate in the area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No work has been completed by other parties for this public report.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Image is targeting discovery of heavy mineral sands strand deposits that have formed on ancient shore lines on the eastern margin of the Swan Coastal Plain in sediments Pleistocene to Holocene age in the north of the Perth Basin.</li> <li>The Bidaminna deposit occurs in the Guildford Formation and Yoganup Formation and is interpreted to have formed during periods of sea level stability within a transgressive cycle.</li> </ul>
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:  a 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.  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.	<ul> <li>In this public report, Image has reported the Mineral Abundance results for seven composites that represent the upper and lower mineralised zones from three sections (South, Central and North) at the Bidaminna Deposit.</li> <li>The Competent Person does not consider a full listing of the samples that have been included in the composites, however, the figures attached to the public report do give the context of the composites with respect to previous public reports.</li> </ul>
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.  Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.  The assumptions used for any reporting of metal equivalent values should be clearly stated.	The 7 composite samples were prepared by microsplitting concentrates, which were retained from exploration air core drilling analyses which were completed by Image. Three dimensional wireframe volumes were prepared from drill sections of the mineralised horizons of interest and the micro splitting weights were then determined through a nearest neighbour volume weighting for each sample within the respective wireframes. In this way each composite sample was deemed to be spatially representative of the horizons sampled and analysed.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	All holes are drilled vertically through a horizontal stratigraphy. There is low risk of grade bias due to the angle of intersection and geometry of the style of mineralisation under consideration.
Diagrams	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.	Refer to the figures in the public report.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The Competent Person does not consider a full listing of barren and low grade mineralisation is material for the drill holes that are the subject of this public report. However, the figures attached to the public report do give the context of the composite intervals with respect to results reported by Image in previous public reports.
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.	All available meaningful and material exploration data to interpret the results has been reported in this release.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	<ul> <li>At the time of this public report, Image has planned further holes but actual locations may vary depending on results received as the Stage 1 programme progresses.</li> <li>Refer to the maps and diagrams in the ASX release where extents and new targets are identified.</li> </ul>