

# Boonanarring Mineral Sands Project: The next cab off the mineral sands rank?

Noosa Mining & Exploration Conference

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Noosa, QLD



**Patrick Mutz**

*Managing Director*

**Image Resources NL**

**ASX: IMA**

Certain statements made 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 be correct.

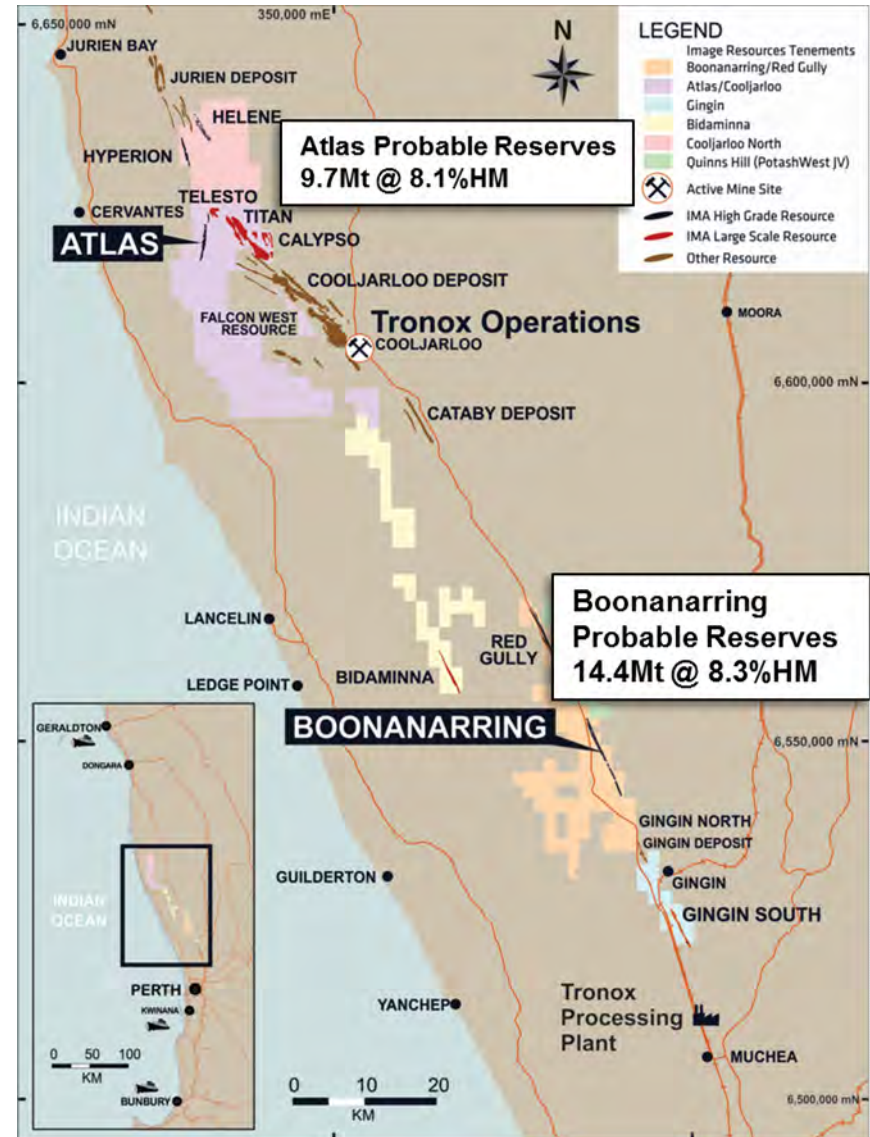
Accordingly, results could differ materially from those set out in the forward looking statements as a result of, among other factors, changes in economic and market conditions, success of business and operating initiatives, changes that could result from future acquisitions of new tenements, the risks 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 future events or circumstances or to reflect the occurrence of unanticipated events.



*Australia's next mineral sands miner?*

## ADVANCED EXPLORER

- LOCATION?
- QUALITY RESOURCES?
- RESOURCES UPSIDE?
- INFRASTRUCTURE?
- WORK FORCE?
- COMMUNITY SUPPORT?
- PROJECT APPROVALS?
- FEASIBILITY STUDY?

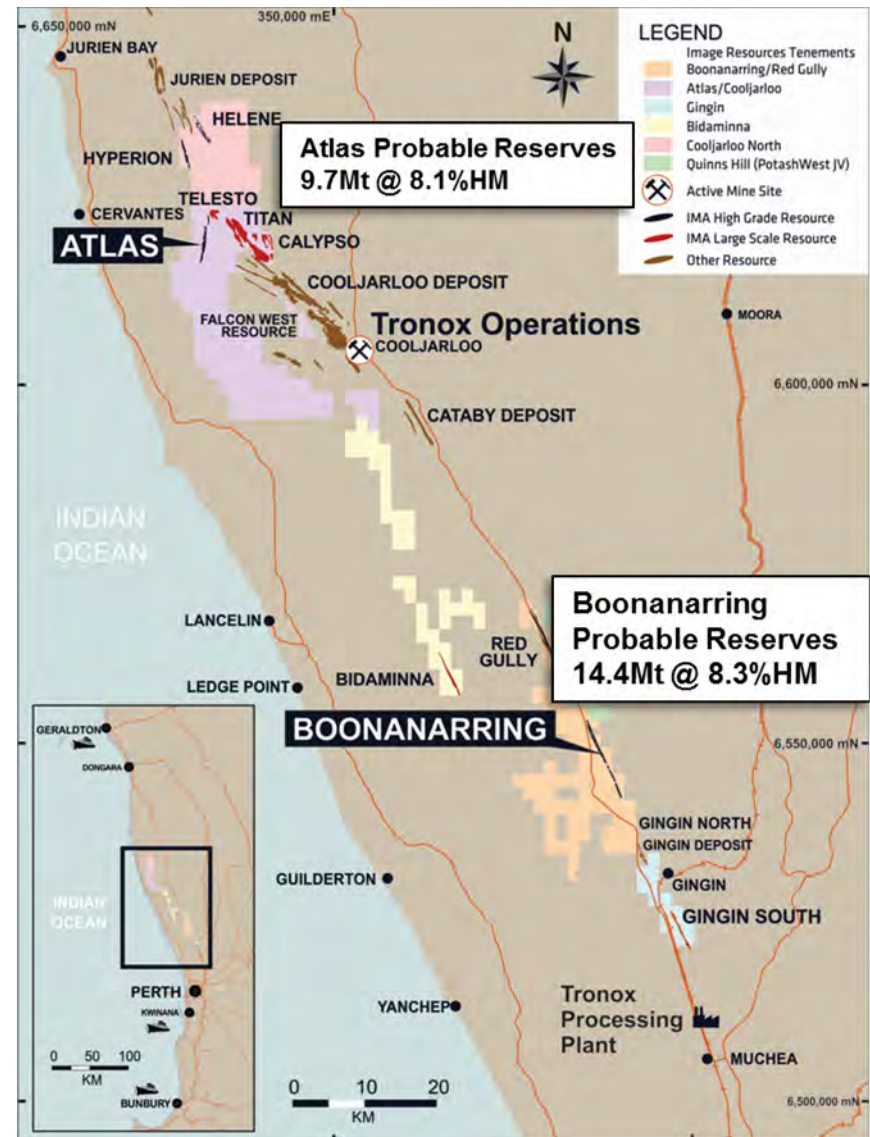


## ADVANCED EXPLORER

### LOCATION

North Perth Basin in WA; proven mineral sands address; home of majors Iluka and Tronox.

- QUALITY RESOURCES?
- RESOURCES UPSIDE?
- INFRASTRUCTURE?
- WORK FORCE?
- COMMUNITY SUPPORT?
- PROJECT APPROVALS?
- FEASIBILITY STUDY?



## ADVANCED EXPLORER

LOCATION

QUALITY RESOURCES

High HM grade, high VHM, high zircon

RESOURCES UPSIDE?

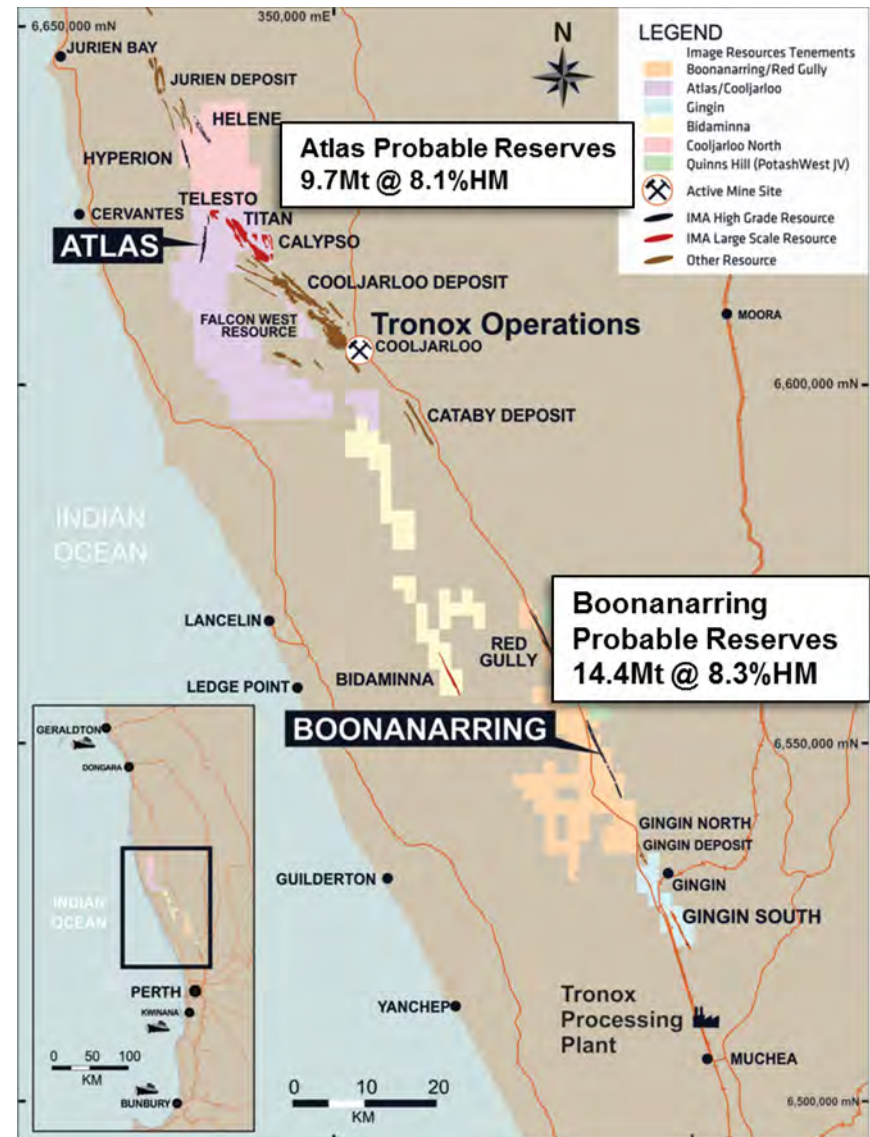
INFRASTRUCTURE?

WORK FORCE?

COMMUNITY SUPPORT?

PROJECT APPROVALS?

FEASIBILITY STUDY?

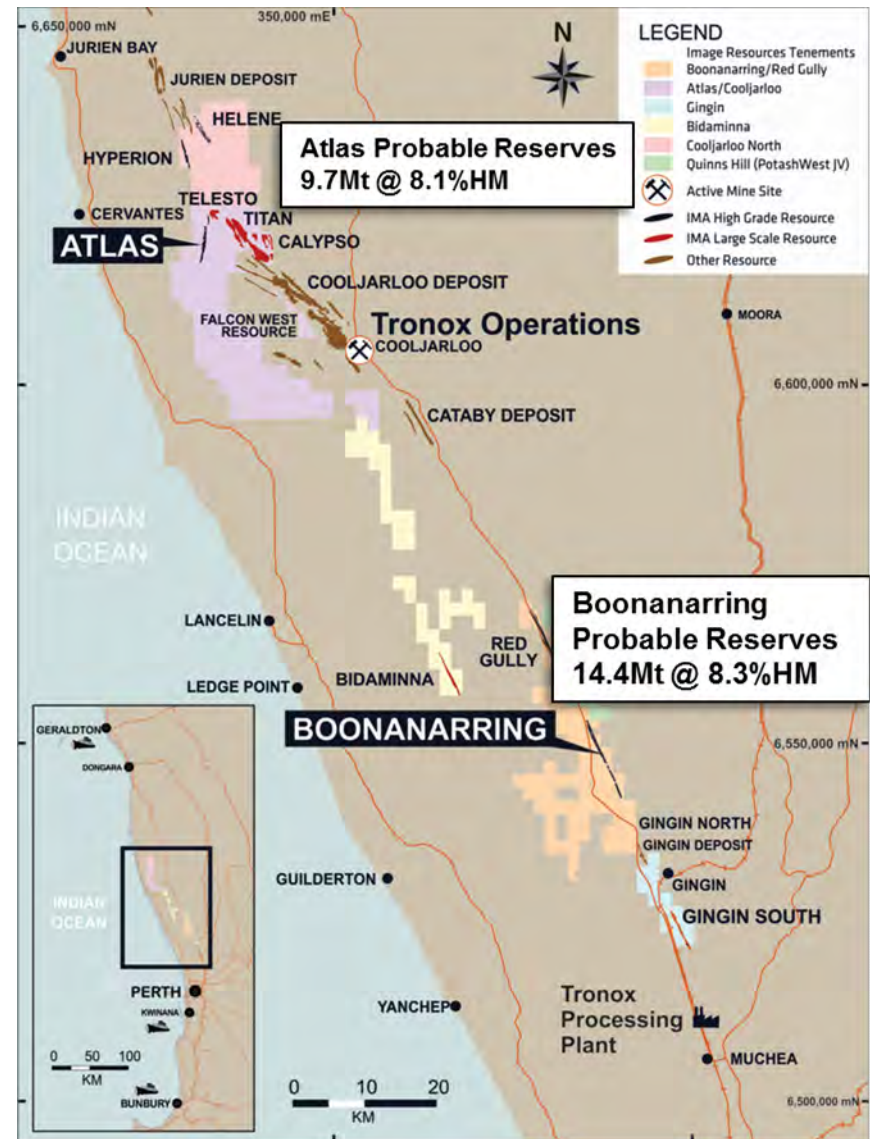


## ADVANCED EXPLORER

- LOCATION
- QUALITY RESOURCES
- RESOURCES UPSIDE

900 km<sup>2</sup> with significant potential for extensions of known resources and discovery of new deposits.

- INFRASTRUCTURE?
- WORK FORCE?
- COMMUNITY SUPPORT?
- PROJECT APPROVALS?
- FEASIBILITY STUDY?

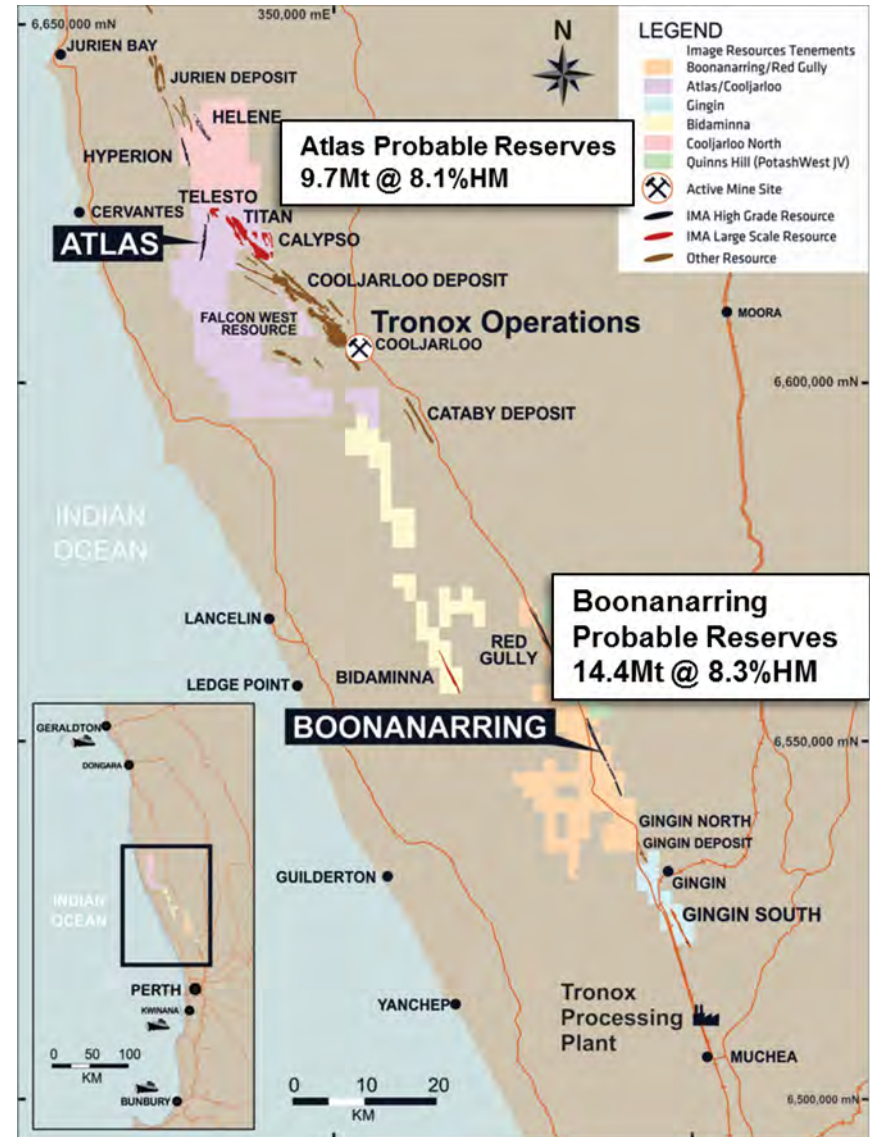


## ADVANCED EXPLORER

- LOCATION
- QUALITY RESOURCES
- RESOURCES UPSIDE
- INFRASTRUCTURE

Paved roads, power, gas pipeline and water available to/on mining lease.

- WORK FORCE?
- COMMUNITY SUPPORT?
- PROJECT APPROVALS?
- FEASIBILITY STUDY?



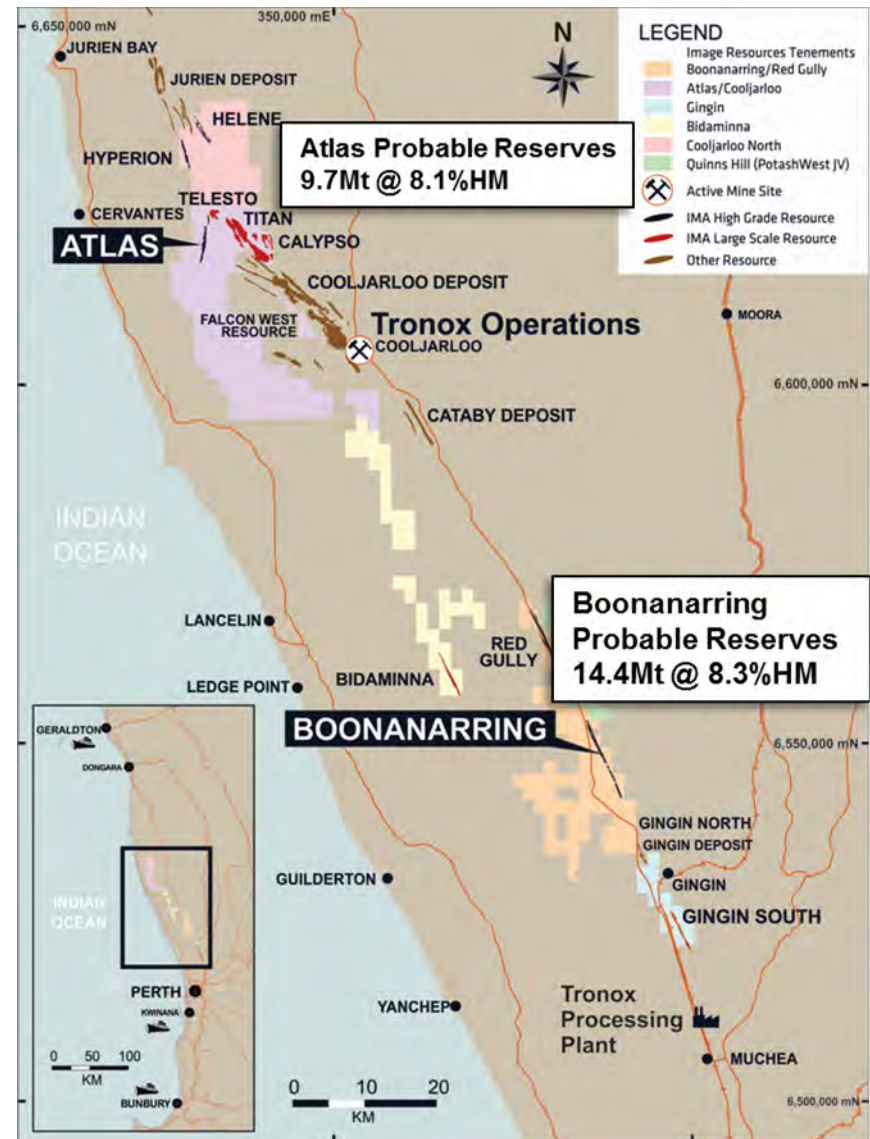


## ADVANCED EXPLORER

- LOCATION
- QUALITY RESOURCES
- RESOURCES UPSIDE
- INFRASTRUCTURE
- WORK FORCE

Experienced work force available in immediate area due to downturn in commodities market; 80 km from Perth.

- COMMUNITY SUPPORT?
- PROJECT APPROVALS?
- FEASIBILITY STUDY?

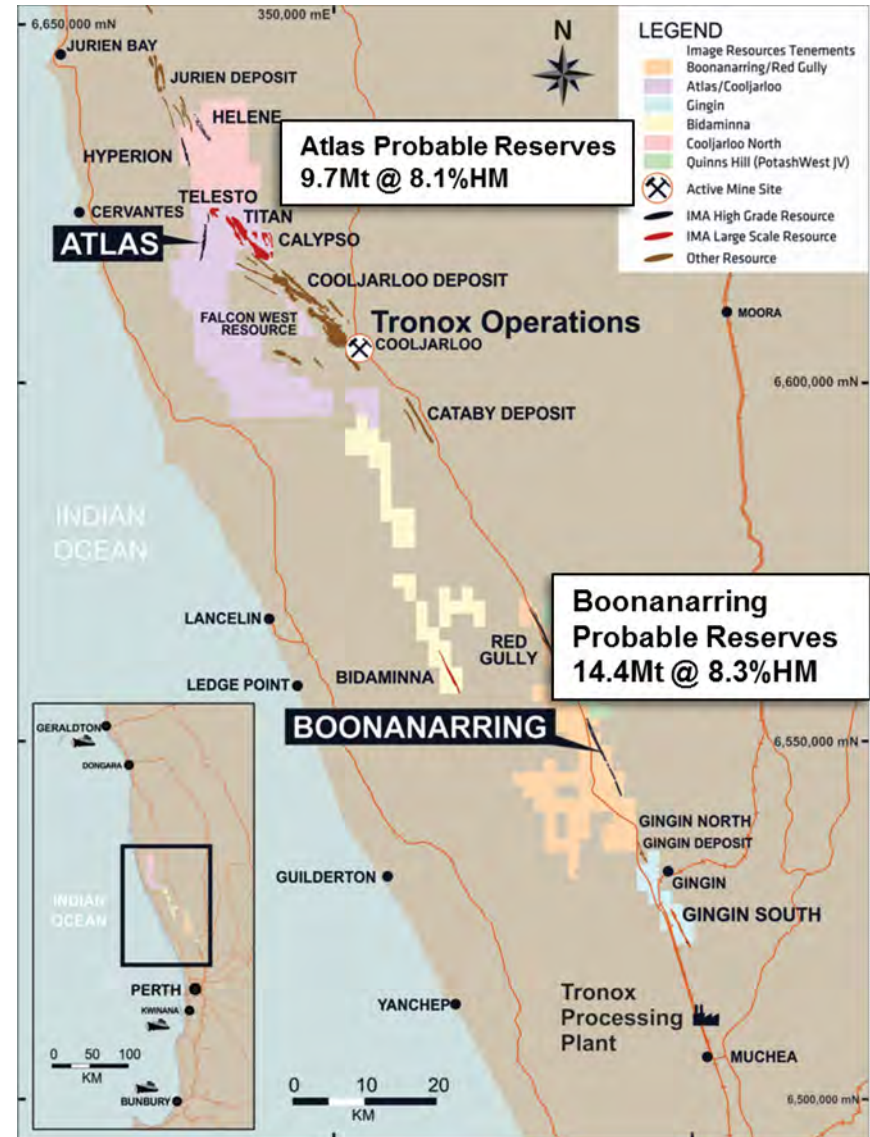


## ADVANCED EXPLORER

- LOCATION
- QUALITY RESOURCES
- RESOURCES UPSIDE
- INFRASTRUCTURE
- WORK FORCE
- COMMUNITY SUPPORT

Community of Gingin experienced with and supportive of mineral sands industry.

- PROJECT APPROVALS?
- FEASIBILITY STUDY?

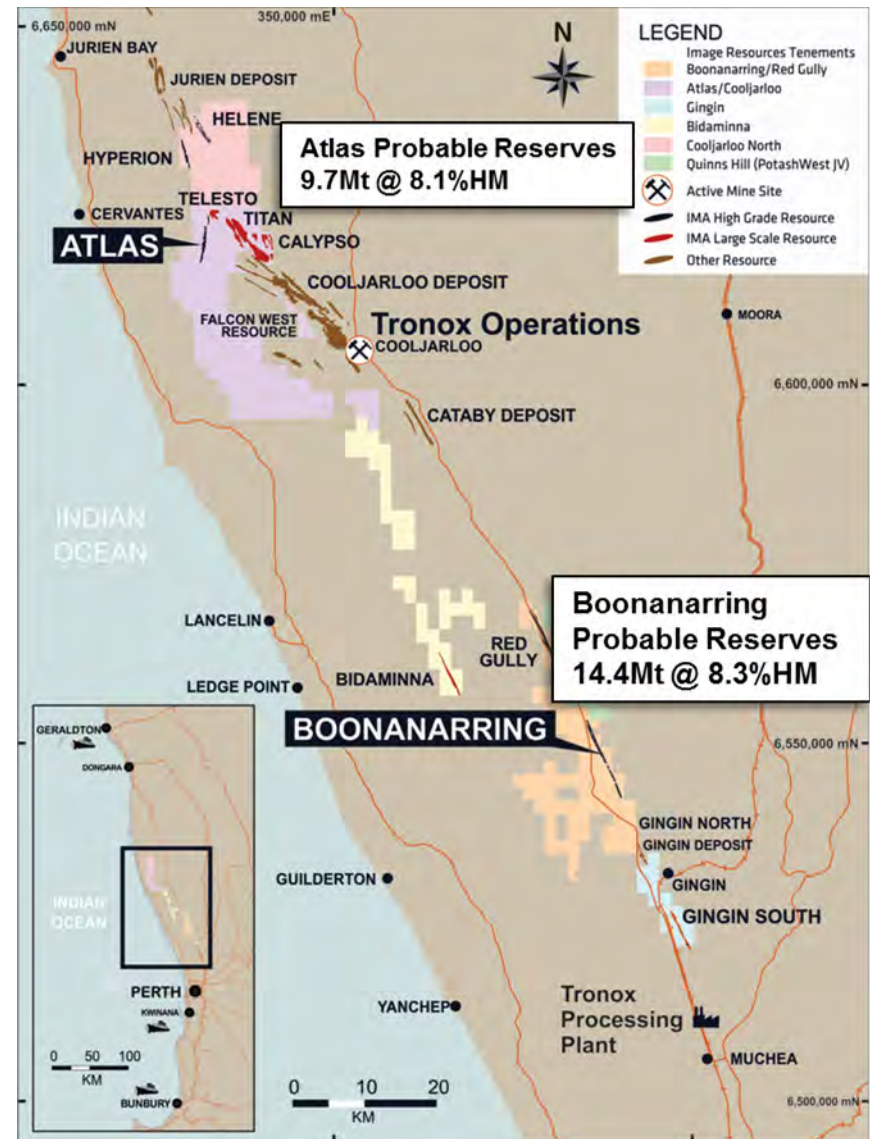


## ADVANCED EXPLORER

- LOCATION
- QUALITY RESOURCES
- RESOURCES UPSIDE
- INFRASTRUCTURE
- WORK FORCE
- COMMUNITY SUPPORT
- PROJECT APPROVALS

Mining and general purpose leases,  
Environmental, EPBC and groundwater  
approvals in hand.

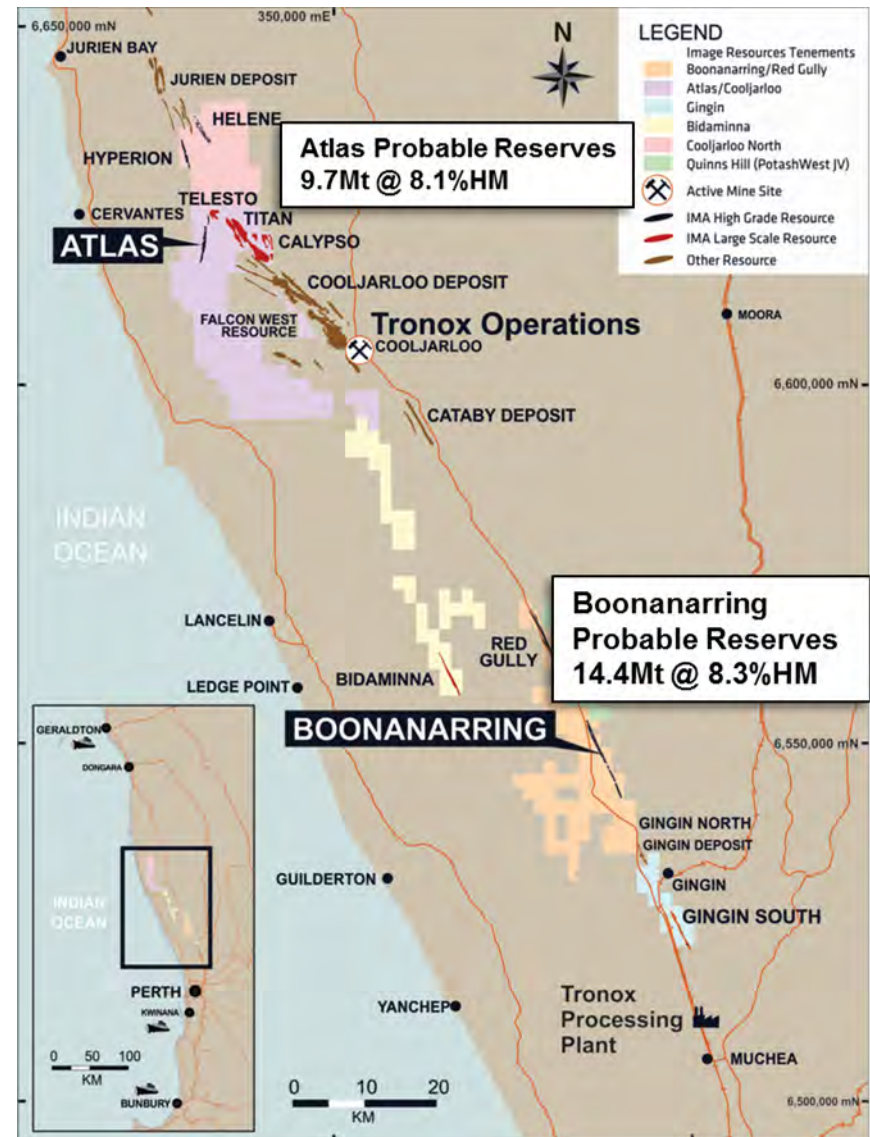
- FEASIBILITY STUDY?



## ADVANCED EXPLORER

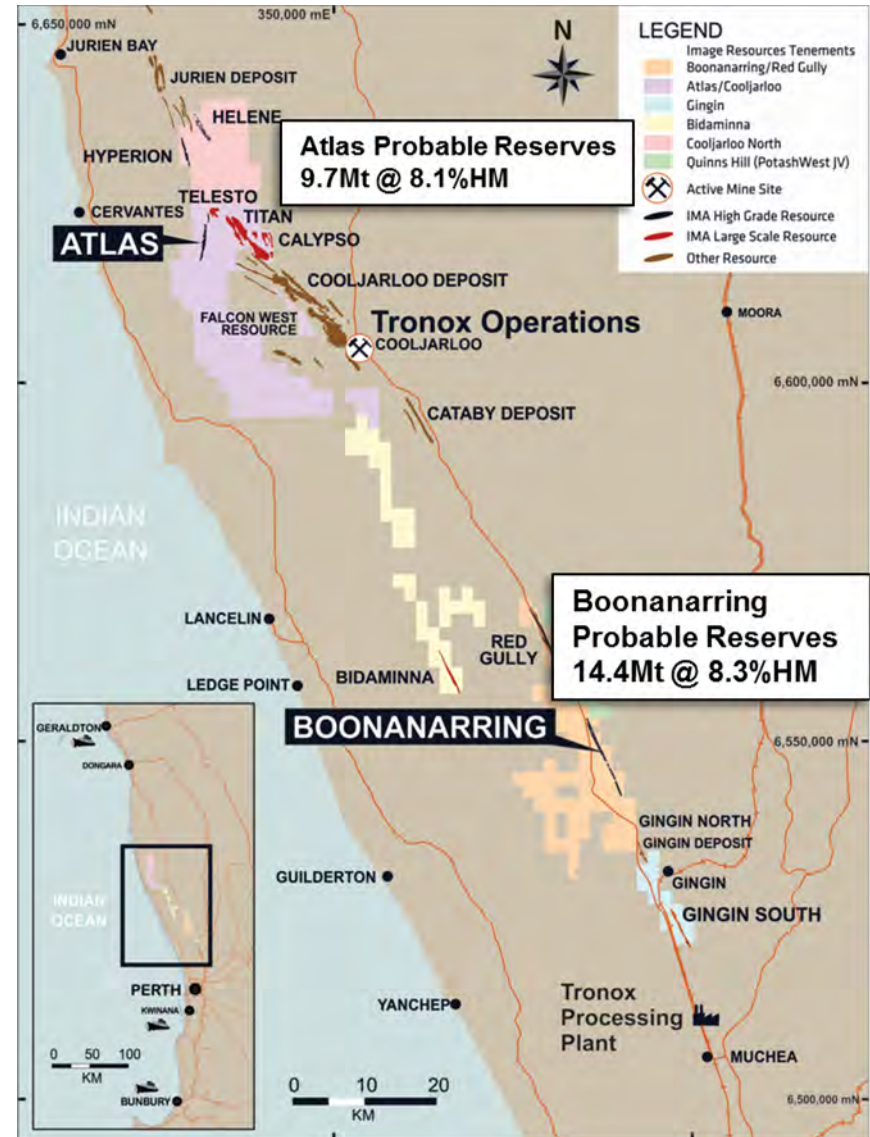
- ✓  LOCATION
- ✓  QUALITY RESOURCES
- ✓  RESOURCES UPSIDE
- ✓  INFRASTRUCTURE
- ✓  WORK FORCE
- ✓  COMMUNITY SUPPORT
- ✓  PROJECT APPROVALS
- ✓  FEASIBILITY STUDY

Original FS announced 16 July 2013 with \$145m NPV and \$64m capital; study is out of date and currently being updated.



## ADVANCED EXPLORER

- ✓  LOCATION
- ✓  QUALITY RESOURCES
- ✓  RESOURCES UPSIDE
- ✓  INFRASTRUCTURE
- ✓  WORK FORCE
- ✓  COMMUNITY SUPPORT
- ✓  PROJECT APPROVALS
- ✓  FEASIBILITY STUDY



## High VHM and very high Zircon grade at Boonanarring

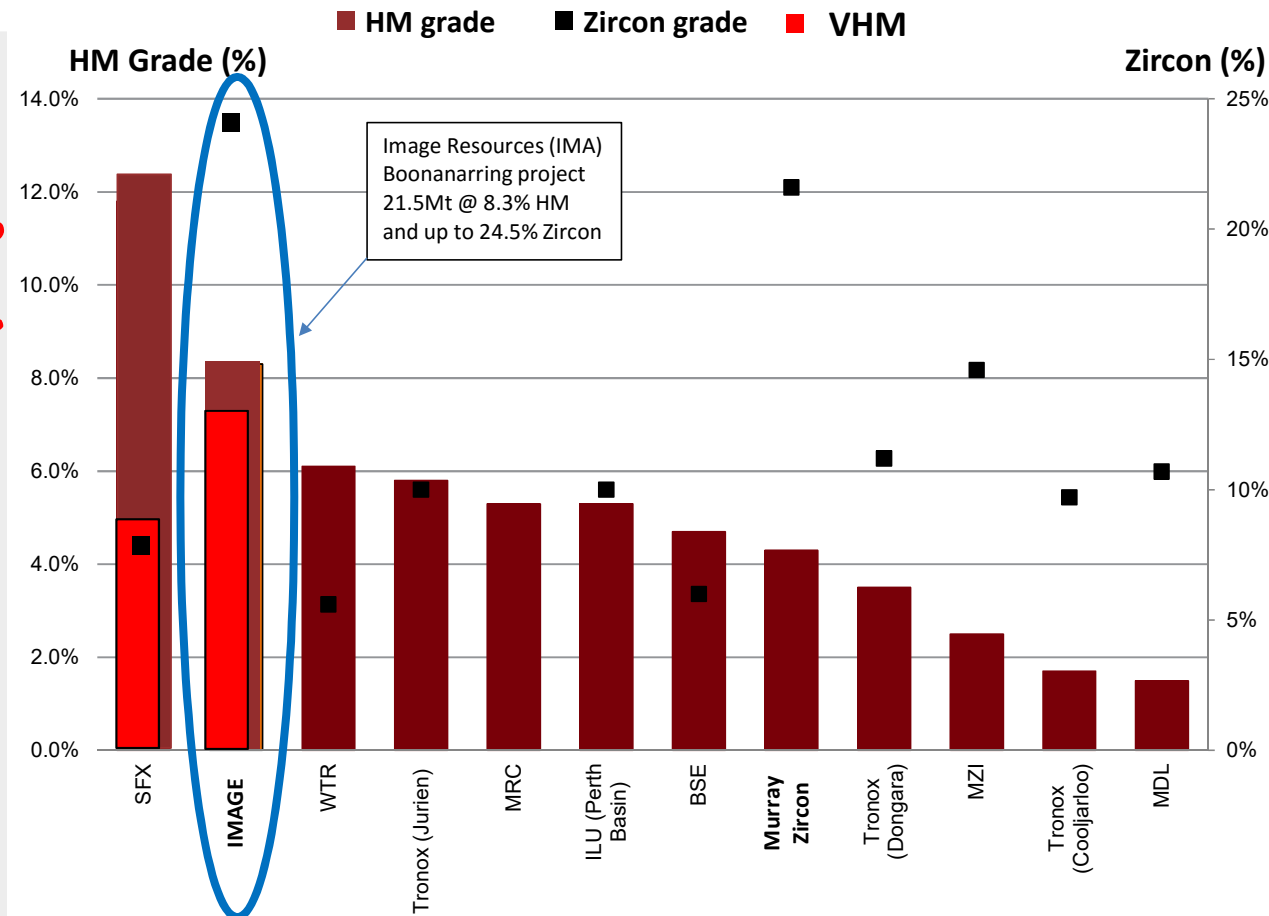
Probable Reserves	Ore (Mt)	HM (%)	Slimes (%)	VHM (%)	Zircon (%)	Rutile (%)	Leucoxene (%)	Ilmenite (%)
Boonanarring <sup>1</sup>	14.4	8.3	17.0	80	24	3	6	47
Atlas <sup>1</sup>	9.7	8.1	15.5	74	11	7	1	55
<b>TOTAL</b>	<b>24.1</b>	<b>8.2</b>	<b>16.4</b>	<b>78</b>	<b>19</b>	<b>5</b>	<b>4</b>	<b>19</b>

Resources	Ore (Mt)	HM (%)	Slimes (%)	VHM (%)	Zircon (%)	Rutile (%)	Leucoxene (%)	Ilmenite (%)
Boonanarring <sup>1</sup>	21.5	8.3	16.2	79	21	4	6	49
Atlas <sup>1</sup>	10.8	7.9	15.7	76	10	8	5	52
Red Gully <sup>1</sup>	6.0	7.7	11.2	90	12	3	8	66
Gingin North <sup>1</sup>	2.4	5.5	15.0	77	6	3	10	57
Cooljarloo <sup>2</sup>	191.6	1.9	17.8	85	10	1	2	71
Chandala / Gingin <sup>1</sup>	8.1	6.1	7.3	89	8	5	10	65
Cooljarloo North <sup>1</sup>	15.2	5.4	18.8	81	10	4	1	67
Bidaminna <sup>1</sup>	11.6	3.0	3.6	96	5	1	7	82
<b>TOTAL</b>	<b>300.2</b>	<b>3.2</b>	<b>15.1</b>	<b>86</b>	<b>10</b>	<b>2</b>	<b>3</b>	<b>70</b>

1 = 2.5% cut-off. 2 = 1.0% cut-off.

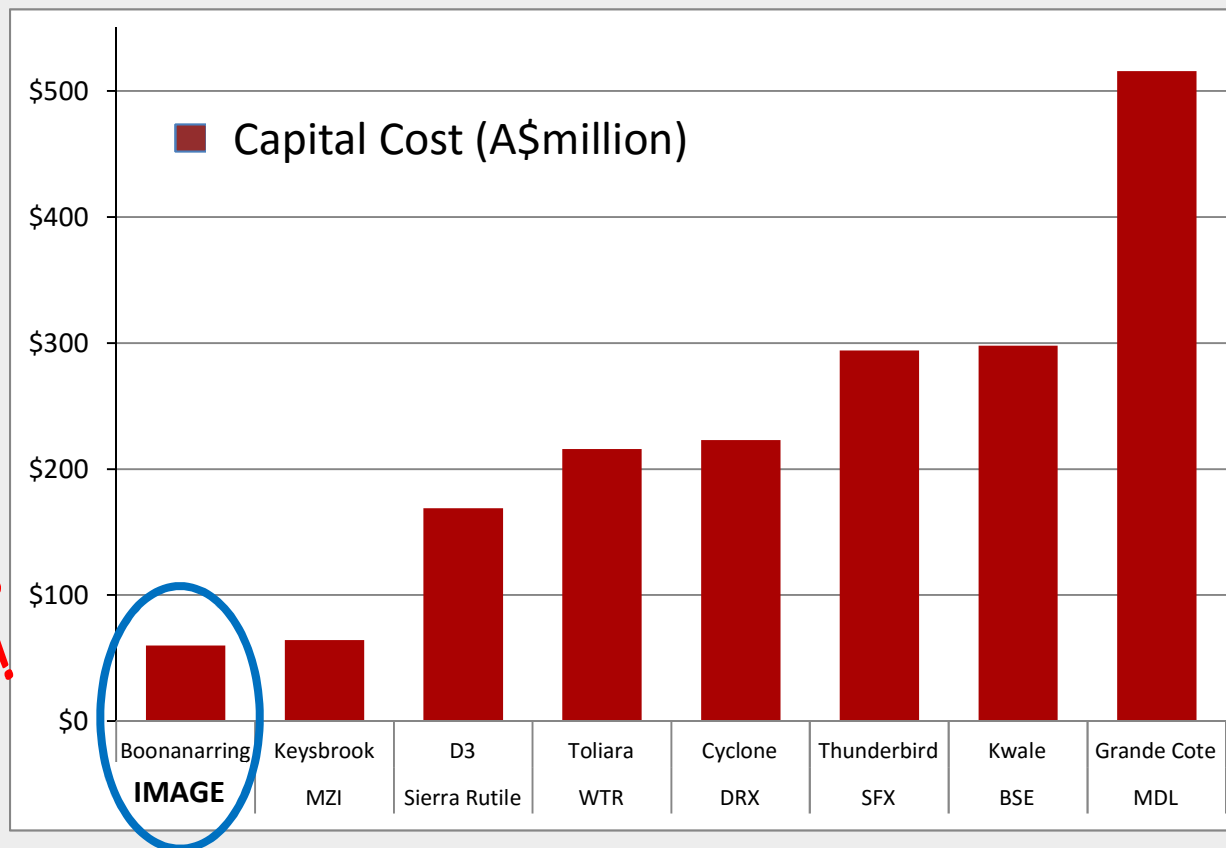
## High HM and Zircon grades relative to peers

Higher is Better!



Source: Released on 4<sup>th</sup> May 2015 – Morgan's Research Note

## Low Capital Cost relative to peers



Source: Released on 4<sup>th</sup> May 2015 – Morgan's Research Note



Seeking to extend mine life beyond 10 years – 60km prospective target zone

## Boonanarring North

- Targeting potential 5.2km extension; drilling 1.3km north of the deposit includes 14m @ 18% HM & 8m @ 22% HM; 50 drill holes planned (subject to access).

## Boonanarring to Gingin North

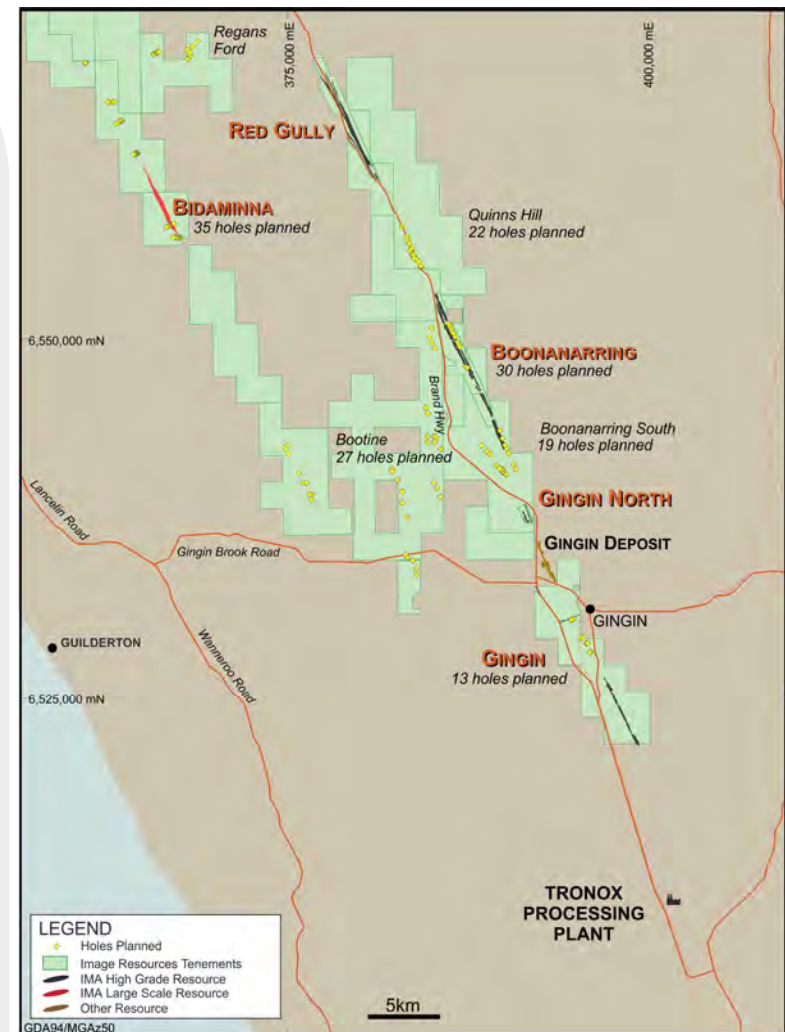
- Potential for 13km within 3 separate strands parallel and south of the Boonanarring deposit.

## Gingin

- Targeting a further 1.3-1.5mt HM @ 5-6% HM; 7km strand; previous drilling includes 6m @ 10% HM from 27m; 13 additional drill holes planned to follow up results along 7km strand.

## Red Gully

- Infill drilling proposed to increase grades and upgrade resource category in the southern half of deposit. Zircon grades elevated at 12-15%. The deposit is shallow starting at 15 meters.



Note: The potential quantity and grade of the Exploration Targets are conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Project approvals are well-advanced

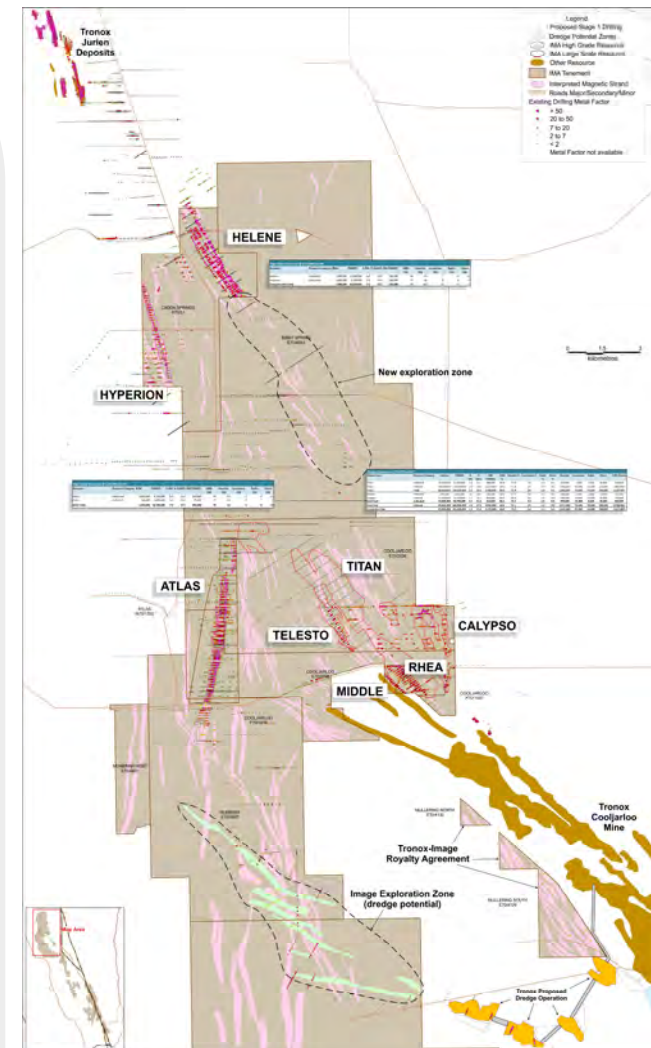
- Mining Lease & General Purpose Lease
- Part IV, Environmental Protection Act (WA) – PER
- EPBC Act (Commonwealth)
- Landowner agreements
- Groundwater Abstraction Licence (Dept of Water and Dept Parks & Wildlife)
- Project Management Plan/Radiation Management Plan **50% Complete**
- Works Approval (EPA)
- Mining Proposal (includes Mine Closure Plan)

## Potential near term royalty cash flows from Mullering

### Royalty deal and extension potential

- A\$50,000 cash payment has been received;
- Sliding-scale royalty:
  - at 2.5% average grade the royalty will be 1.25%
  - at 3.0% average grade the royalty will be 2.50%
  - at 3.5% average grade the royalty will be 3.75%
  - at 4.0% average grade the royalty will be 5.00%

Arrangement is first of possible future deals with Tronox or others based on extensive dredge potential zone within Image's tenements in the vicinity of Tronox's dredge operations.



**Effective 8 June 2016**

**Asset Sale and Purchase Agreement**

transaction completed with

**Murray Zircon Pty Ltd**

and

**Guangdong Orient Zirconic Ind Sci & Tech Co., Ltd**

- Completion of this transaction allows Image to tick the boxes on a number of critical project development issues and focus squarely on the path to production.

## **CAPITAL EQUIPMENT**

- All plant & equipment and internal infrastructure items necessary to construct a complete heavy mineral recovery operation; from slurry unit in the mine to wet concentration plant for HMC.

## **SHORT TERM FUNDS**

- \$4M Short-Term loan funds with very favourable terms;

## **OFFTAKE AGREEMENT**

- Contracted off-take agreement with Orient Zirconic for 90% of zircon at market price (~70% of revenue);

## **WORKING CAPITAL**

- 2ndary working capital loan funds of US\$8M following First Production;

## **MINERAL SEPARATION SERVICES**

- Access to mineral separation services in China;
- Purchase option for a Mineral Separation Plant in SA; and
- Local toll-processing option;

## **CORNERSTONE SHAREHOLDER**

- New cornerstone shareholder with 20 years zircon processing and global zirconium products sales;

## **INDEPENDENT CHAIRMAN**

- New very experienced independent Chairman;

## **NEW DIRECTORS WITH PRODUCTION EXPERIENCE**

- 3 new Board members including Managing Director, all with mineral sands operations experience;

## **EXPERIENCED MANAGEMENT**

- Project development and operations experienced senior management team;

## **MINORITY SHAREHOLDER PROTECTIONS**

- Contracted protections for two years;
- No interference with 3 incumbent Directors or replacements;
- No vote on merger related issues;
- Mandatory equity raising support for 1 year; and
- Additional board seat for shareholder with >10% shareholding.

## **LOW CAPITAL COSTS**

- Significantly lower remaining capital requirements with acquisition of wet plant and equipment.

# Plant and Equipment (select examples)

image resources

24



Wet Concentration Plant



Mineral Separation Plant (Option)



Slurry Booster Stations  
& pipelines



HMC Stackers



Power poles, wires  
& transformers

Plus much, much more.



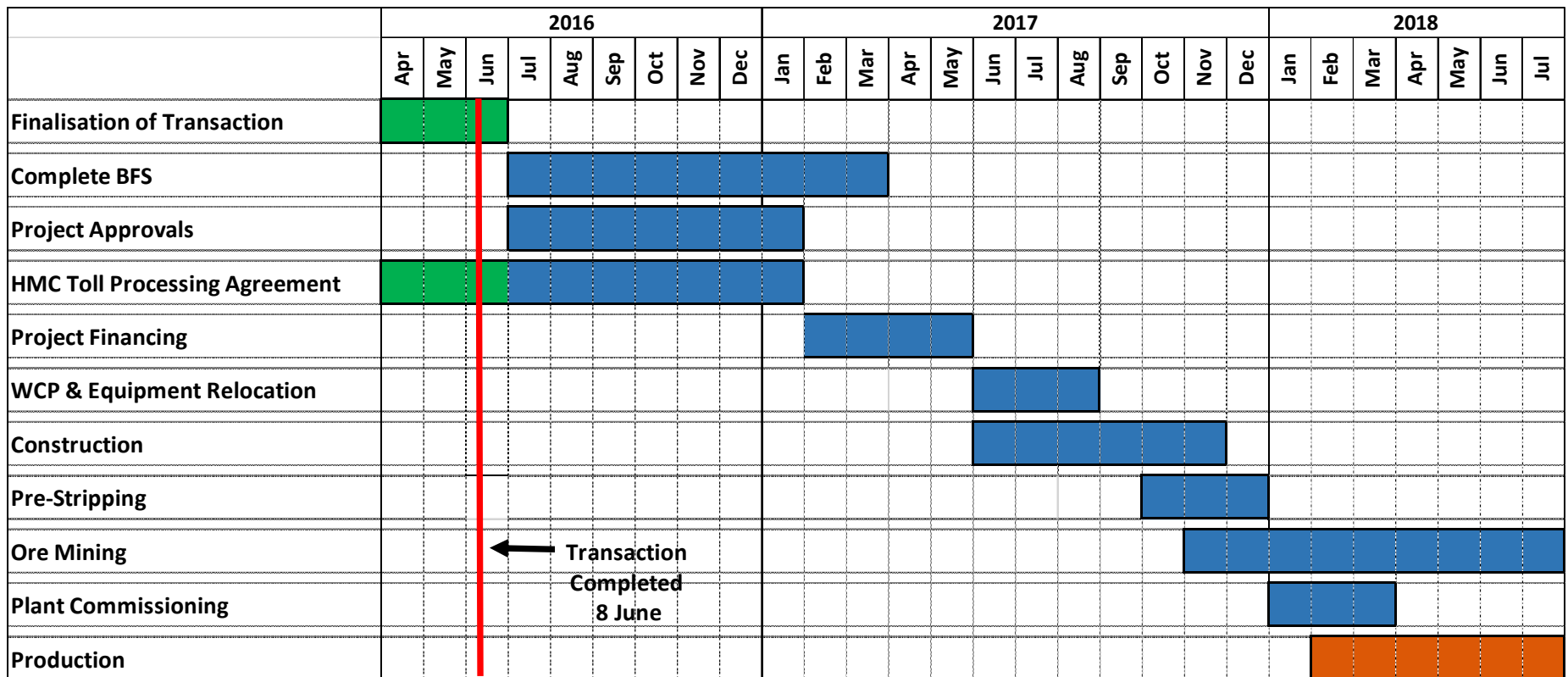
Mine Slurry Unit



### Bankable Feasibility Study

- Re-assess resources model in accordance with **JORC 2012**;
- **Incorporate additional resources** delineated since 2013;
- Conduct **geotechnical assessment** to optimise pit wall slopes;
- **Optimise mine design** based on new resource model, geotechnical analysis and best practices for cost control;
- Update economic model and capital requirements to include:
  - newly acquired **capital equipment**;
  - **innovative tailings management** practices;
  - current **favourable pricing for labour, fuel, energy, contractor and mining services rates**;
  - more favourable **foreign exchange rate**; and
  - Updated **commodity prices**.

Targeting first production in early 2018\*



\* Conditional on feasibility results

## Diverse and experienced Board and Management

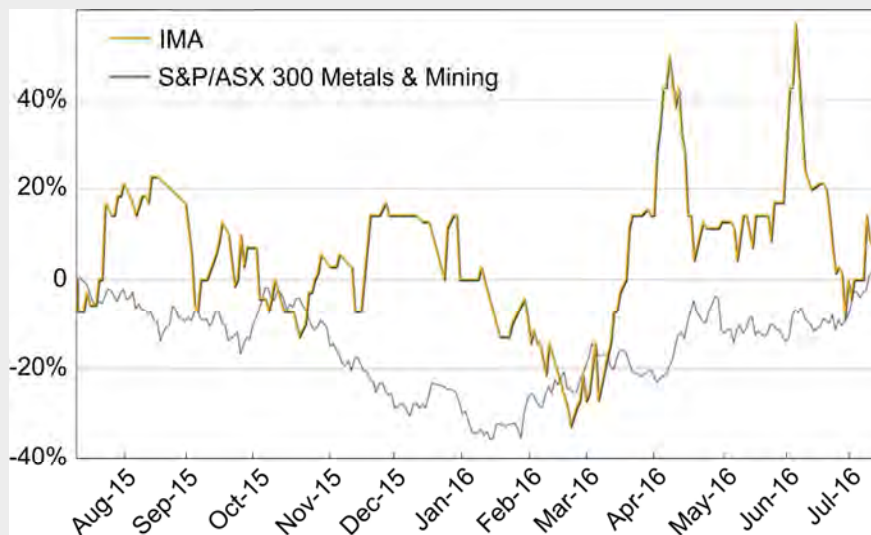
<b>Share Code:</b>	<b>IMA</b>
<b>Share Price:</b>	<b>A\$0.08*</b>
<b>12 Month Price Range:</b>	<b>A\$0.05 – 0.11</b>
<b>Shares on Issue:</b>	<b>379.5m</b>
<b>Market Cap:</b>	<b>A\$30m*</b>
<b>Cash at end of June:</b>	<b>A\$3.8m**</b>
<b>Debt:</b>	<b>A\$4.0m</b>
<b>Top 20 Shareholders:</b>	<b>68%</b>

### Board of Directors

**Bob Besley** – Independent Chairman  
**Patrick Mutz** – Managing Director  
**Chaodian Chen** - Non-Executive Director  
**Aaron Chong Veoy Soo** – Non-Executive Dir  
**George Sakalidis** – Executive Director  
**Peter Thomas** – Non-Executive Director  
**Fei (Eddy) Wu** – Non-Executive Director

### Key Management

**Collis Thorp** – Chief Development Officer  
**John McEvoy** – Chief Financial Officer  
**Todd Colton** – Project Manager  
**Jarrold Pye** – Mining Engineer  
**Wayne Oliver** – Mechanical Manager



\* - as at 14 July 2016

\*\* - as at 30 June 2016



**Patrick Mutz**  
*Managing Director*  
**Image Resources NL**

[info@imageres.com.au](mailto:info@imageres.com.au)

Office: +61 8 9485 2410

Ground Floor, 23 Ventnor Avenue  
West Perth, WA 6005  
PO Box 469, West Perth, WA 6872

[www.imageres.com.au](http://www.imageres.com.au)

# Additional Information

- **Owner/operator Mindarie Minerals Sands Project**, Murray Basin, South Australia;
- Successfully redeveloped, commissioned and operated Mindarie 2011-2015 followed by rapid and successful mine rehabilitation;
- Developed **strong relations with landowners, community, regulators and government**; earning its **social licence** to operate in South Australia;
- Developed a number of **innovative approaches to productivity and cost control**;
- Operationally **proven wet plant and equipment** of right design and capacity;
- Demonstrated **project development and operations management experience**;
- 79% owned by **Orient Zirconic**.

- **One of China's largest zircon processing companies with one of the most diverse range of zirconium products in the world;**
- **Global sales of zirconium products ranging from bulk commodities to nuclear grade zirconium sponge for nuclear reactors;**
  - Products used in special ceramics, biological ceramics, optical communication devices, solid-fuel batteries, aerospace fields, electronic ceramics, jewel, ceramic glaze colour, high fireproofing, and many new materials. Bulk commodities including zirconium oxychloride, zirconium dioxide, fused zirconia and others.
- **Listed on the Shenzhen Stock Exchange under ID 002167;**
- **Market capitalisation** approximately RMB7.2billion\* (**AUD1.4billion**);
- **Approximately 1,200 employees across five factory locations across China;**

\* - as at 12 July 2016



Orient Zirconic headquarters, Shantou, Guangdong, China





Chaoyang Branch, Liaoning

Leiyang Branch, Hunan

Lechang Branch, Guangdong

Yanhong Branch, Shantou, Guangdong

Headquarters, Shantou, Guangdong

Orient Zirconic factory locations in China

**Mr Robert Besley – Independent Chairman**

Robert Besley is a Director of KBL Mining Limited (ASX:KBL) and Chairman of Silver City Minerals Ltd (ASX:SCI) and has more than 40 years' experience in the mining industry. Mr Besley has served in a number of Government advisory roles including several years as Deputy Chairman of the NSW Minerals Council. He holds a BSc (Hons) in Economic Geology from the University of Adelaide and he is a Member of the Australian Institute of Geoscientists. He managed the creation, listing and operation of two successful mining companies; CBH Resources Limited which he led as Managing Director from a small exploration company to Australia's 4th largest zinc producer; and Australmin Holdings Limited (acquired by Newcrest) which brought into production a gold mine in WA and mineral sands mine in NSW. More recently he was a founding Director of KBL Mining Limited which operates the Mineral Hill copper-gold mine in NSW, is Chairman of Silver City Minerals Limited, which is actively exploring for silver-lead-zinc in the Broken Hill District and was previously a Non-Executive Director of Murray Zircon from commencement of development and production from the Mindarie Mineral Sands Project. Prior to this Mr Besley's early career was involved in the exploration and development of mineral deposits for Unocal's (now Chevron) mineral activities in S.E. Asia, North America, Latin America, Australia and the Pacific. His activities have covered projects in precious metals, base metals, ferroalloys, mineral sands, speciality metals, uranium and coal. Through his corporate management roles Mr Besley has played a central role in project and corporate financing covering a wide range of capital structures as well as acquisitions, mergers and asset sales.

**Mr Patrick Mutz – Managing Director**

Patrick Mutz has more than thirty years of international mining industry experience in technical (metallurgist), managerial, consulting and executive roles in all aspects of the industry from exploration through project development, mining and mine rehabilitation. He has operational experience in open cut, underground, and in-situ mining and related processing, on projects in the USA, Germany, Africa and Australia. Since his arrival in Australia from the USA in 1998, he has served as CEO / Managing Director of a number of publicly listed and private mining companies based in South Australia, Victoria and Western Australia, primarily involved with project development and company transitioning from exploration to production. Mr Mutz is a Fellow of the AusIMM and a member of the Australian Institute of Company Directors. He holds a Bachelor of Science (Honours) and an MBA from the University of Phoenix in the US. Patrick worked with Murray Zircon as a senior advisor in early 2012 and served as its Chief Operating Officer during the pivotal transition period from development to operational status in the latter part of 2012 and served as CEO of mining operations from early 2013 until joining Image in June 2016.

**Mr Chaodian Chen – Non-Executive Director**

Mr Chen founded Orient Zirconic in 1995 and has built the company into a leading company in the zirconium industry. He served as President and Chairman of the company until mid-2013 when China National Nuclear Corporation (CNNC) became the largest shareholder in Orient Zirconic. He became the Chairman of Murray Zircon when the company was founded in 2011 as a result of Orient Zirconic's first investment in mining in Australia. Mr Chen is the Vice President of China non-ferrous metals industry association titanium zirconium & Hafnium Branch. He holds an EMBA degree and is a Certified Engineer. He also owns a number of patents involving the processing of zircon.

**Aaron Chong Veoy Soo – Non-Executive Director**

Mr Soo has been a long term supporter and shareholder in Image Resources. Mr Soo is an advocate & solicitor practising in West Malaysia with 16 years of experience in legal practice and currently a partner in Stanley Ponniah, Ng & Soo, Advocates & Solicitors.

**George Sakalidis – Exploration Director**

George Sakalidis is an exploration geophysicist with over 25 years' industry experience, during which time his career has included extensive gold, diamond, base metals and mineral sands exploration. Mr Sakalidis has been involved in a number of significant mineral discoveries. He was also instrumental in the design of the magnetic surveys and exploration drilling program that led to the discovery of the large mineral sands resources at Magnetic Minerals Limited's Dongara Project. Magnetic Minerals were taken over by Ticor in early 2003. The geophysical techniques used by Image and George Sakalidis' proven ability to interpret the results in order to find economic mineralisation which has been missed by other companies, gives Image a significant competitive advantage in this field.

**Peter Thomas – Non-Executive Director**

Mr Thomas was a practising solicitor from 1980 until June 2011, specialising in the provision of corporate and commercial advice to the resource industry. Since the mid-1980s, he has served on the boards of various listed companies including as non-executive founding chairman of Sandfire Resources NL.

**Mr Fei (Eddy) Wu – Non-Executive Director**

Mr Wu has solid operational experience in the Australian resource and mining industry. He specialises in combining the strengths of Australian upstream mining with Chinese downstream processing and end use to optimise the strategy for resource development and maximise the resource value. As the first CEO of Murray Zircon, he built and led the team to complete the development and start-up at the Mindarie mineral sands project in late 2012. Mr Wu was appointed as a Non-Executive Director of Murray Zircon in early 2013. He is currently the CEO and a Director of Queensland Mining Corporation Limited and the CEO of WIM Resources Pty Ltd. Eddy graduated from the University of Science and Technology, Beijing. He holds a Master's Degree in Commerce (Finance) from the Australian National University and a Master's Degree in Science from Cass Business School, City University London.

**Collis Thorp (FAICD)** – Chief Development Officer

Collis joined Image in May 2014. He has enjoyed a career of over 45 years in the resources industry, encompassing a broad range of commodities. His 18 years of mineral sands experience includes seven years as Managing Director of Cable Sands RZM Group through to 2005 as well as at Jennings Mineral Sands. His most recent position, prior to joining Image, was as Chief Executive Officer of Moly Mines Limited. Collis played a major role in more than ten feasibility studies for mineral sands projects, including responsibility for putting in place project finance and off-take arrangements, as well as bringing into production in the order of twenty mines.

**John McEvoy** – Chief Financial Officer

John has extensive experience in senior finance roles in both the public and private sector with 25 years experience in the mining industry. John has experience in the full mining project lifecycle including project identification/review, mergers & acquisitions, equity/debt financings, project optimisation and asset disposals. John previously held senior finance roles at Barrack Mines (Gold/Copper), Asarco Australia (Gold), Wiluna Mines Limited (Gold), RZM/Cable Sands Group (Mineral Sands) and Moly Mines (Moly/Copper). Previously employed as Financial Controller and Company Secretary for Cable Sands Group (Mineral sands).

**Todd Colton** – Project Manager

Todd is a mining professional with over 23 years experience in the mining industry, predominately in mineral sands operations with WSL/Iluka, Gunson, AZC and Premier providing operational, technical and management support for project development and mining operations in Australia and overseas. Todd has held operational and senior management roles through feasibility studies, operations planning and design, construction and commercial production.

<b>PROBABLE RESERVES (2.5% cut off)</b>	<b>ORE</b>	<b>HM GRADE</b>	<b>CONTAINED HM</b>	<b>ZIRCON IN HM</b>
	<b>Mt</b>	<b>HM %</b>	<b>kt</b>	<b>% Zircon</b>
<b>Boonanarring</b>	<b>14.4</b>	<b>8.3%</b>	<b>1,200</b>	<b>24.5%</b>
<b>Atlas</b>	<b>9.7</b>	<b>8.1%</b>	<b>800</b>	<b>11.0%</b>
<b>TOTAL JORC RESERVES</b>	<b>24.1</b>	<b>8.2%</b>	<b>2,000</b>	<b>19.1%</b>

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

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

Information in this report that relates to Exploration Results, Mineral Resources 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.

<b>BOONANARRING/RED GULLY PROJECT (2.5% CUT OFF)</b>										
		<b>Ore (t)</b>	<b>HM (%)</b>	<b>Slimes (%)</b>	<b>HM (t)</b>	<b>VHM (%)</b>	<b>Ilmenite (%)</b>	<b>Leucoxene (%)</b>	<b>Rutile (%)</b>	<b>Zircon (%)</b>
<b><i>Boonanarring Deposit</i></b>										
	Measured	3,000,000	7.8	10.1	230,000	70	49	1	3	17
	Indicated	14,300,000	9.0	17.2	1,270,000	80	49	6	3	22
	Inferred	4,200,000	6.5	17.4	270,000	83	51	8	7	18
<b>Sub-total</b>		<b>21,500,000</b>	<b>8.3</b>	<b>16.2</b>	<b>1,770,000</b>	<b>79</b>	<b>49</b>	<b>6</b>	<b>4</b>	<b>21</b>
<b><i>Gingin North Deposit</i></b>										
	Indicated	1,320,000	5.7	15.7	80,000	75	57	9	3	5
	Inferred	1,090,000	5.2	14	60,000	78	57	11	4	6
<b>Sub-total</b>		<b>2,410,000</b>	<b>5.5</b>	<b>15.0</b>	<b>140,000</b>	<b>77</b>	<b>57</b>	<b>10</b>	<b>3</b>	<b>6</b>
<b><i>Red Gully Deposit</i></b>										
	Indicated	3,410,000	7.8	11.5	270,000	90	66	8	3	12
	Inferred	2,570,000	7.5	10.7	190,000	90	66	8	3	12
<b>Sub-total</b>		<b>5,980,000</b>	<b>7.7</b>	<b>11.2</b>	<b>460,000</b>	<b>90</b>	<b>66</b>	<b>8</b>	<b>3</b>	<b>12</b>
<b>TOTAL</b>		<b>29,890,000</b>			<b>2,370,000</b>					

**ATLAS/COOLJARLOO PROJECT (2.5% CUT OFF)**

		Ore (t)	HM (%)	Slimes (%)	HM (t)	VHM (%)	Ilmenite (%)	Leucoxene (%)	Rutile (%)	Zircon (%)
Atlas	Measured	9,700,000	8.5	15.3	820,000	76	52	5	8	11
Atlas	Indicated	1,080,000	3.2	19.2	34,000	74	53	8	7	6
<b>TOTAL</b>		<b>10,780,000</b>	<b>7.9</b>	<b>15.7</b>	<b>854,000</b>	<b>76</b>	<b>52</b>	<b>5</b>	<b>8</b>	<b>10</b>

**COOLJARLOO PROJECT (1% CUT OFF)**

		Ore (t)	HM (%)	Slimes (%)	HM (t)	VHM (%)	Ilmenite (%)	Leucoxene (%)	Rutile (%)	Zircon (%)
Titan	Indicated	21,200,000	1.8	22.1	380,000	84.4	71.9	2	1	9.5
Titan	Inferred	115,400,000	1.9	18.9	2,210,000	84.3	71.8	2	1	9.5
Telesto	Indicated	3,500,000	3.8	18.4	130,000	82.6	67.5	3.4	2.2	9.5
Calypso	Inferred	51,500,000	1.7	13.7	850,000	84.6	68.8	3.5	1.6	10.6
<b>TOTAL</b>		<b>191,600,000</b>	<b>1.9</b>	<b>17.8</b>	<b>3,570,000</b>	<b>84.8</b>	<b>71.3</b>	<b>2.4</b>	<b>1.2</b>	<b>9.8</b>

**CHANDALA/GINGIN PROJECT (2.5% CUT OFF)**

		Ore (t)	HM (%)	Slimes (%)	HM (t)	VHM (%)	Ilmenite (%)	Leucoxene (%)	Rutile (%)	Zircon (%)
<b>Gingin South Deposit</b>										
	Measured	1,530,000	4.4	7.2	67,000	79	51	15	6	8
	Indicated	5,820,000	6.5	7.1	380,000	91	68	10	5	8
	Inferred	730,000	6.5	8.4	48,000	92	67	8	6	11
<b>TOTAL</b>		<b>8,080,000</b>	<b>6.1</b>	<b>7.3</b>	<b>495,000</b>	<b>89</b>	<b>65</b>	<b>10</b>	<b>5</b>	<b>8</b>



**COOLJARLOO NORTH PROJECT (2.5% CUT OFF)**

		Ore (t)	HM (%)	Slimes (%)	HM (t)	VHM (%)	Ilmenite (%)	Leucoxene (%)	Rutile (%)	Zircon (%)
<i>Helene</i>	Indicated	11,500,000	4.6	18.6	520,000	84	70	1	3	11
<i>Hyperion</i>	Indicated	3,700,000	7.8	19.3	290,000	71	56	0	6	9
<b>TOTAL</b>		<b>15,200,000</b>	<b>5.4</b>	<b>18.8</b>	<b>810,000</b>	<b>81</b>	<b>67</b>	<b>1</b>	<b>4</b>	<b>10</b>

**BIDAMINNA (1% CUT OFF)**

	Ore (t)	HM (%)	Slimes (%)	HM (t)	VHM (%)	Ilmenite (%)	Leucoxene (%)	Rutile (%)	Zircon (%)
Inferred	44,600,000	3.0	3.6	1.35	96	82.4	7.2	1	5.4
<b>Total</b>	<b>44,600,000</b>	<b>3.0</b>	<b>3.6</b>	<b>1.35</b>	<b>96</b>	<b>82.4</b>	<b>7.2</b>	<b>1</b>	<b>5.4</b>

### **COMPETENT PERSON'S STATEMENT – EXPLORATION RESULTS**

The information in this presentation that relates to exploration results is based on information compiled by George Sakalidis who is a member of the Australasian Institute of Mining and Metallurgy. At the time that the exploration results were compiled, George Sakalidis was an employee 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'.

### **COMPETENT PERSON'S STATEMENT – RESOURCE ESTIMATES**

The information in this presentation that relates to mineral resources and reserves 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 this presentation.

### **COMPETENT PERSON'S STATEMENT – PROJECT EVALUATION**

The information in this presentation that relates to project evaluation and financial analysis is based on information compiled by Mr Ray Cary, BSc., who is a Fellow of the Australasian Institute of Mining and Metallurgy and a Fellow of the Australian Institute of Geoscientists. Ray Cary is the Director and Principal of Northwind Resources Pty Ltd, a Perth, Western Australia based minerals industry consultancy. Ray Cary has sufficient experience in the technical and economic evaluation of minerals development projects and mining operations which is relevant 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. Ray Cary consents to the inclusion of this information in the form and context in which it appears in this presentation.