

Australia's Next Bauxite Producer

Investor Presentation – October 2017



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Competent Person Statement

Urquhart Bauxite

The Mineral Reserve estimate and Production Target estimates were undertaken by Mr Stewart Lewis, Mining Engineer, who is a Member and Chartered Professional of the Australasian Institute of Mining and Metallurgy and the CEO of IMC Mining Pty Ltd. Mr Lewis has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Lewis consents to the inclusion of this information in the form and context in which it appears in this release/report.

The Mineral Resource estimate was undertaken by Mr John Horton, Principal Geologist, who is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy and an associate at IMC Mining Pty Ltd. Mr Horton has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Horton consents to the inclusion of this information in the form and context in which it appears in this release/report.

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by John Cameron (a geologist of over 25 years experience), and a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and is a contract consultant to Metallica Minerals Ltd. Mr Cameron has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Cameron consents to the inclusion of this information in the form and context in which it appears in this release/report.



Investment Highlights



Fully funded
through to
production



Global bauxite
supply and demand
fundamentals supporting
development



On track to commence
bauxite production
in 2017 with
minimal capex



Sale of SCONI Project¹
A\$10 m



Secured logistics
through Hey
Point de-risks delivery



Ramp up to
1.5Mtpa to deliver
average annual
EBITDA of
A\$18.8M



Base Case
Pre-Tax NPV₁₀
A\$78.4M



Development Capital
A\$1.1M

"Metallica has a vision is to be producing 5-7Mtpa of bauxite over the coming 3 to 5 years"

¹ See ASX Release 5 September 2017 "Sale of SCONI project for \$10m"

Corporate Snapshot

Metallica listed on the ASX in 2004 with 61.9M shares on issue



322M

Shares on Issue

39M

Options on Issue

A\$0.054

Share Price
as at 16 October 2017

A\$17.4M

Market
Capitalisation

A\$3.7M

Cash

A\$2M

Standby credit
facility secured

A\$3.5M

Cash from
settlement of
SCONI sale

35.4%

Top 20 Shareholders

Corporate Snapshot

Experienced and Rejuvenated Board and Management



Peter Turnbull
Non-Executive Chairman
Appointed 12 Dec 2016

Peter has significant experience as an independent non-executive director and chair across a range of sectors including over a decade in the resources, energy and technology commercialisation sectors. Peter is a non-executive director, Life Member and former President, of the Governance Institute of Australia and is an active contributor, writer and speaker on governance related issues within Australian and international governance circles. Peter is currently a non-executive director of Karoon Gas Australia Limited.



Steve Boulton
Non-Executive Director
Appointed 25 Jan 2017

Steve Boulton is an experienced funds management and infrastructure specialist with over 40 years experience that has covered complex fund, asset and investment management and utility and infrastructure enterprises, including experience in the mining/minerals sector in Australia and New Zealand. This has included executive and board positions with CP2 Funds Management, Port of Brisbane, Dalrymple Bay Coal Terminal, PD Ports, Nova Group and Infrastructure Partnerships Australia. He was also the CEO of Hastings Funds Management and Power Co.



Shu Zhang alternate for Wang Ruobing
Non-Executive Director
Wang Ruobing appointed 6 March 2017

Dr Shu Zhang represents Jien Mining (40m shares) and has over 40 years experience in mining operations and executive management in Australia, China and Canada. He was a key part of the success Sino Gold Mining Ltd and is a director of Jilin Jien Nickel's Canadian subsidiaries; Canadian Royalties Inc and the TSX listed Northern Sun Mining Corporation.



Simon Slesarewich
Chief Executive Officer
Appointed 13 July 2015

Simon Slesarewich is a mining engineer with over 20 years of experience in operational and executive roles. He was instrumental in all facets of the development of the large Middlemount Coal mine and has been a senior manager in 4 other mine developments. Simon has experience across various jurisdictions and commodities and was previously the CEO of Boardwalk Resources and a director of Larkham Resources which was backed by a large international private equity group.



John Haley
Chief Financial Officer / Company Secretary

John Haley has over 35 years experience in senior corporate roles in Australia and Canada. John has a diverse career across a range of industries and has been integral as an investor and executive in the launch of various resource companies. Previously John held roles with Coopers & Lybrand and Arthur Andersen & Co., and with listed and unlisted companies in general management, financial reporting and company secretarial positions.

Project Overview



Urquhart Bauxite

1

4

3

2

Brisbane

1. CAPE YORK JOINT VENTURE – 50%
Urquhart Direct Shipping Bauxite project
Urquhart Point HMS project

2. SCONI – 100%
Nickel Cobalt
& Scandium

3. ESMERALDA – 100%
Graphite

4. CAPE FLATTERY – 100%
Silica Sands

Metallica is focused on building a sustainable bauxite business with the Urquhart Bauxite project forming the foundation.

The Company remains committed to continuing to unlock value in its non-core assets.

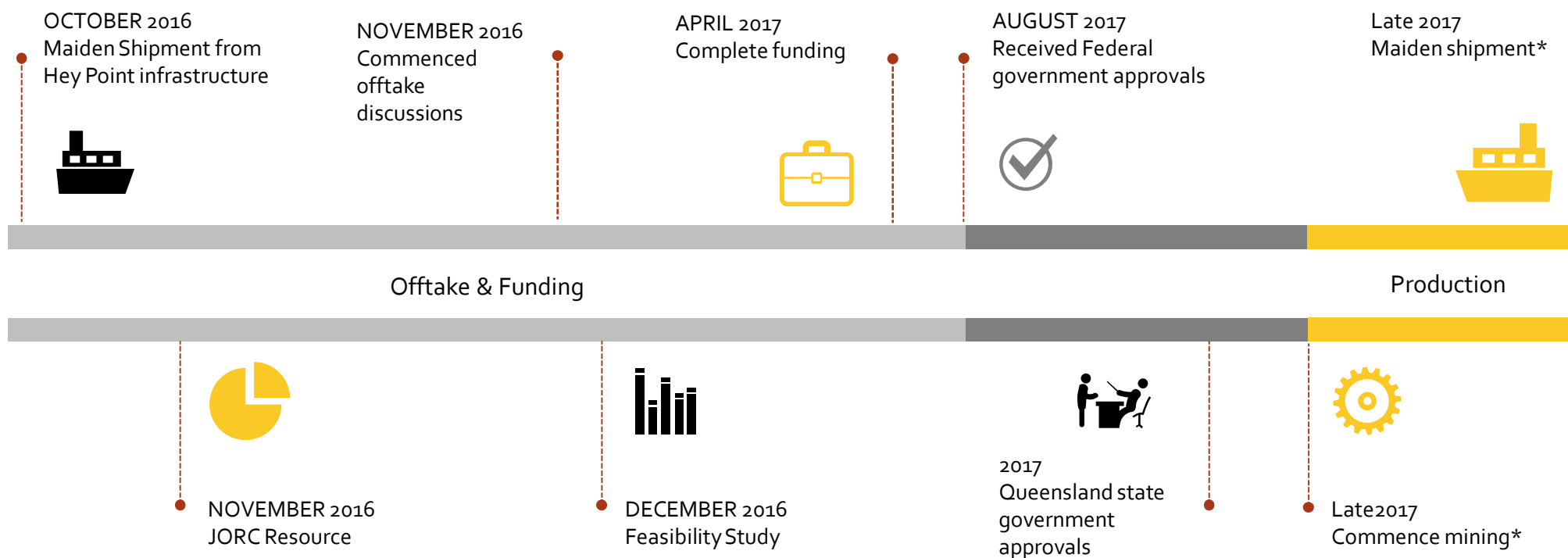
Urquhart Bauxite – Operations Video



go to www.metallicaminerals.com.au to view video

Urquhart Bauxite

Development Timeline



* Subject to final approvals and agreements



Urquhart Bauxite – Key PFS Findings²

Item	Unit	Scenario 1 (Base Case)	Scenario 2	Scenario 3
		Mining Proved & Probable Reserves in Area A	Additional mining of Inferred resource in both Area A and Area B	At end of mine life, screening transitional stockpiled material
Total Saleable Product	dry kt	6,532	8,672	10,296
Total Al ₂ O ₃	%	52.7	51.6	51.2
Total SiO ₂	%	13.3	14.7	15.4
AAI*	%	40.6	39.1	38.1
RSi**	%	5.7	6.1	6.1
Total Revenue	A\$m	295.5	364.5	416.9
EBITDA	A\$m	81.8	82.6	90.8
NPV ₁₀ Pre Tax	A\$m	78.4	78.9	86.9
NPV ₁₀ Post Tax	A\$m	53.9	54.2	59.9
LOM Capital	A\$m	2.7	3.0	3.1
Avg FOB Cost***	A\$ tonne	32.72	32.51	31.67
Avg FOB Received	A\$ tonne	45.24	42.03	40.49
Payback	months	5	5	5

Does not take into account MLM's accumulated tax losses

Notes:

- Unless otherwise indicated all figures are on a 100% project basis
- Metallica confirms all material assumptions underpinning production targets and corresponding financial information continue to apply and have not materially changed as per Listing Rule 5.19.2

² See ASX Release 21 December 2016 "Strong PFS for Urquhart Bauxite project"

* AAI – Available Alumina @ 150°C ** RSi – Reactive Silica @ 150°C *** Includes all operating costs, royalties and other payments



Urquhart Bauxite – Key PFS Findings

Average Operating Costs³

Item	Unit	Scenario 1 (Base Case)
Total Saleable Product	dry kt	6,532
Average Price Received (FOB)	A\$/dry t	45.24
AUD:USD		0.71
Mining Costs	A\$/dry t	5.63
Haulage Costs	A\$/dry t	3.06
Transshipping Costs	A\$/dry t	14.13
Contractor Overheads	A\$/dry t	1.49
Other Costs	A\$/dry t	1.92
GnA	A\$/dry t	0.83
Royalties	A\$/dry t	5.66
EBITDA	A\$/dry t	12.52

Average EBITDA of \$18.8m per annum at 1.5mtpa

- Start-up capital limited to working capital ~A\$1.1M (no contingency)
- Metallica accumulated tax losses ~A\$20M (30 June 2017)
- LCR Group appointed as mining and haulage contractor. Contract prices in line with PFS⁴
- LCR Group have confirmed that they will partially defer Haul Road and Mobilisation capex⁴
- Average price received estimated by London based independent metal analyst CRU International utilising mine plan volumes and grades

³ See ASX Release 16 January 2016 "Quarterly Activities Report"
⁴ See ASX Release 22 May 2017 "Mining and Haulage Contractor Appointed"

Notes:

- Metallica confirms all material assumptions underpinning production targets and corresponding financial information continue to apply and have not materially changed as per Listing Rule 5.19.2

Urquhart Bauxite – JORC Resource⁵



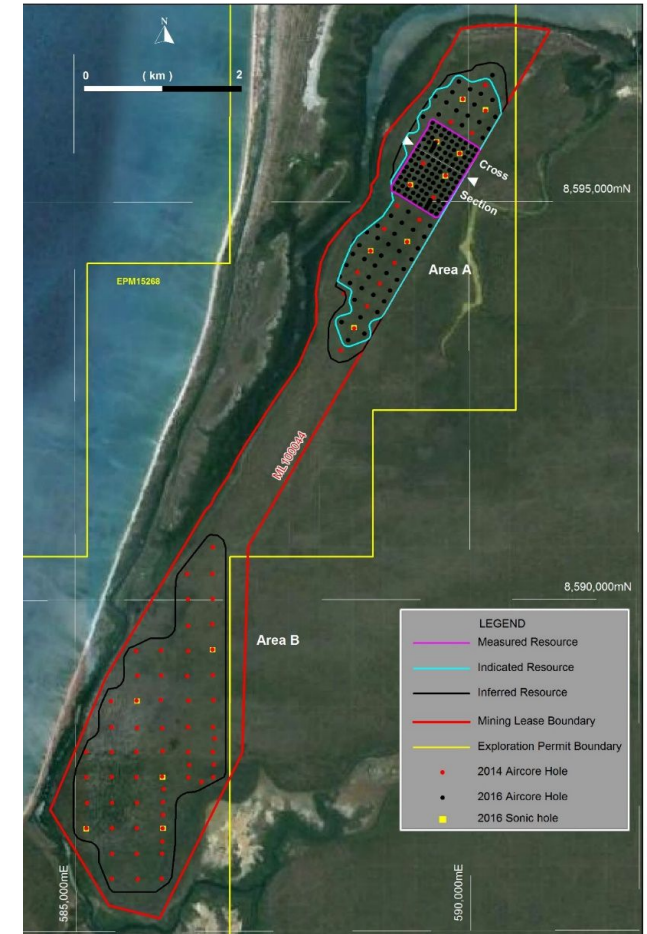
JORC Resource Estimate (48% Al₂O₃ cut-off)

Classification	Area	Mt	Al ₂ O ₃ %	SiO ₂ %	AAI%*	RSi %**
Measured	A	3.0	54.4	11.8	43.2	5.0
Indicated	A	3.9	53.3	13.1	40.8	5.2
Inferred	A	0.3	54.2	11.3	42.0	4.7
	B	2.3	49.9	17.4	37.2	6.0
	Subtotal	2.6	50.3	16.8	37.6	5.9
Total		9.5	52.8	13.7	40.7	5.3

Upside (not included in JORC Resource)

Classification	Tonnes	Total Al ₂ O ₃	Total SiO ₂
Measured	0.8 Mt	44.1%	27.3%
Indicated	1.8 Mt	42.0%	30.0%
Inferred	5.9 Mt	35.7%	37.9%
Total	8.5 Mt	37.8%	35.2%

- Potential to upgrade low grade material via conventional dry screening
- Material not contained in JORC Resource Estimate
- Capital allowed for drilling and screen test work



⁵ See ASX Release 14 November 2016 "Significant Increase to Mineral Resource at Urquhart Bauxite"

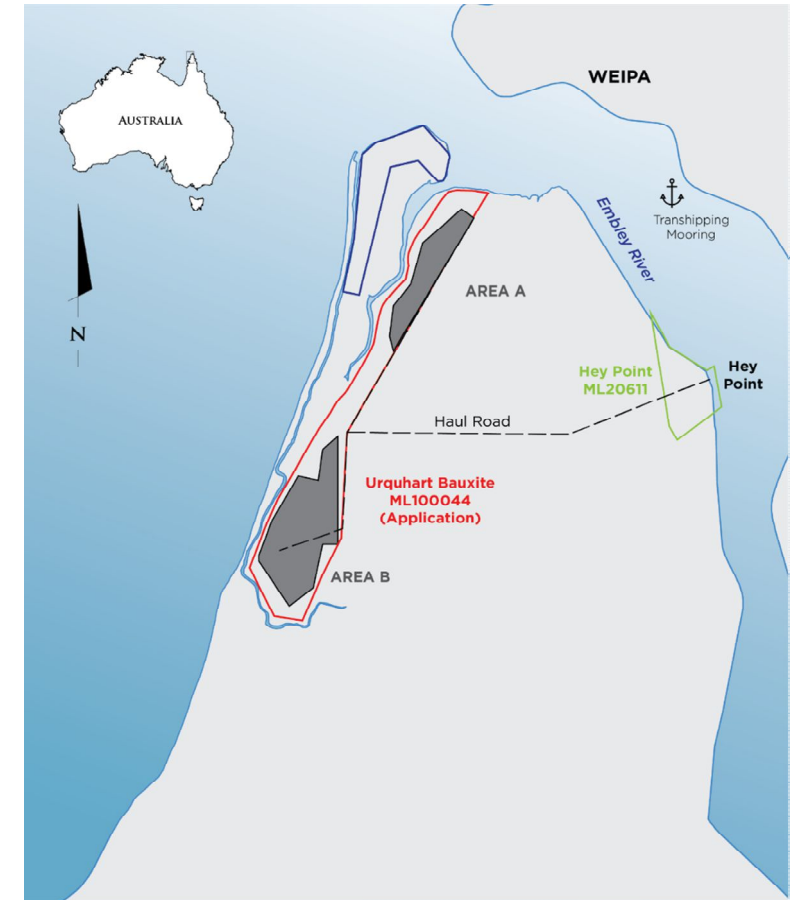
* AAI – Available Alumina @150°C ** RSi – Reactive Silica @ 150°C

Urquhart Bauxite – Permitting

- Federal Government Environmental approval received⁶
- Executed all Traditional Land Owner agreements⁷
- Conditions agreed with Queensland state government and awaiting final mining lease
- Liaising with stakeholders to finalise haul road approvals
 - Utilises previously completed work
 - Being run concurrently with final Queensland state approvals

⁶ See ASX Release 22 August 2017 "Federal Government Environmental approval received"

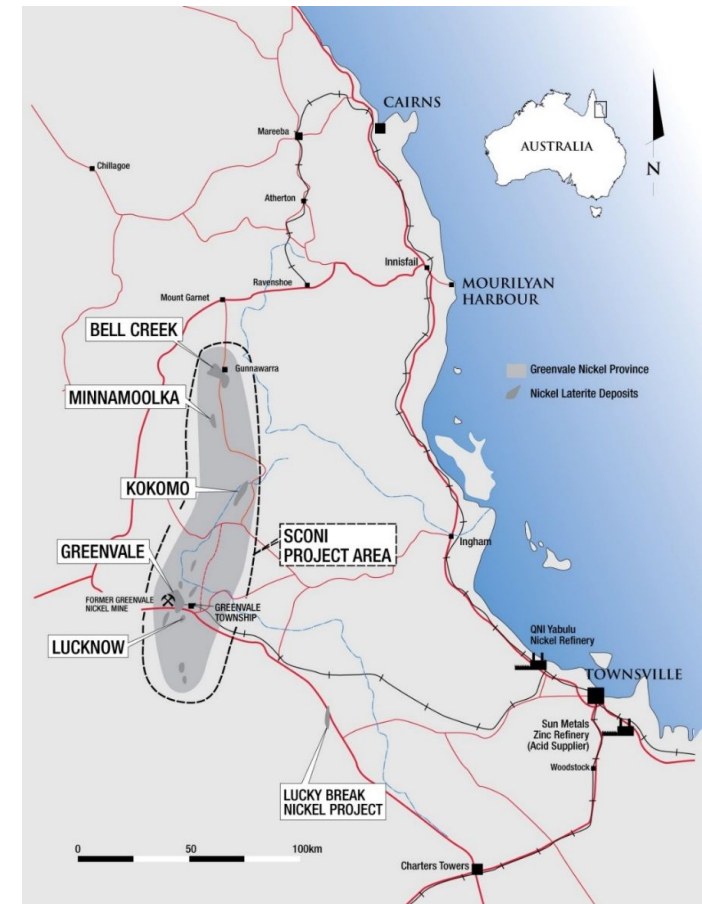
⁷ See ASX Release 21 June 2017 "Traditional Land Owner Compensation Agreement"



SCONI Nickel-Cobalt-Scandium Project (Qld)



- Executed binding agreements sale agreements with Australian Mines Ltd for \$10 million¹
- Key Terms:
 - *Completion Payment* - \$3.5 million in cash by Australian Mines to Metallica on the Completion Date;
 - *Consideration Shares* - Issuance of Australian Mines shares to Metallica to the value of \$1.5 million (based on a 30-day volume weighted average price) upon the earlier of the completion of a Definitive Feasibility Study by Australian Mines or 30 June 2018;
 - *Production Payment* - A further \$5 million in cash or issuance of Australian Mines shares (based on a 30-day volume weighted average price) following the commencement of commercial production





Scorecard

- ✓ Secured preferred logistics solution at the operational Hey Point facility⁵
 - ✓ Received \$1.9 from sale of non-core limestone assets^{8 9 10}
 - ✓ Metallurgical test results from Esmeralda¹⁷
 - ✓ Significant increase in volume and category to mineral Resource⁵
 - ✓ SCONI JV delivers cash, reduces cost and preserves previous investment¹⁰
 - ✓ Deliver Pre-Feasibility Study²
 - ✓ Funding secured via underwritten Renounceable Rights Issue and Options¹⁶
 - ✓ LCR Group appointed as mining and haulage contractor. Costs and deferred capex in line with PFS
 - ✓ Executed Traditional Land Owner Agreements⁷
 - ✓ Federal Government Environmental approval received⁶
 - ✓ Sale of SCONI for \$10 million¹
- Secure Offtake for Urquhart Bauxite
 - Grant of Urquhart bauxite outstanding approvals
 - Production from Urquhart bauxite
 - Unlock value from non-core assets
 - Pipeline of new opportunities

⁸ See ASX Release 16 November 2016 "Option to sell Boyne Limestone for \$1,000,000"

⁹ See ASX Release 9 July 2015 "\$550k sale of Ootann Limestone Project"

¹⁰ See ASX Release 28 July 2016 "\$370,000 Sale of Star Limestone Project"

¹¹ See ASX Release 10 March 2017 "Renounceable Issue"

Key Take Away



Funded

Cash + Standby credit
facility + SCONI sale
proceeds

~ \$9.2 m

Production

On target for 2017
production*

Value

Cash flow + Unrealised
value in other non-core
projects

* Subject to final approvals and agreements

Thank You



SUBSIDIARY COMPANIES

NORNICO Pty Ltd ACN 065 384 045

Oresome Australia Pty Ltd ACN 071 762 484

Oresome Bauxite Pty Ltd ACN 606 362 252

Lucky Break Operations Pty Ltd ACN 126 272 580

Phoenix Lime Pty Ltd ACN 096 355 761

Greenvale Operations Pty Ltd ACN 139 136 708

Scandium Pty Ltd ACN 138 608 894

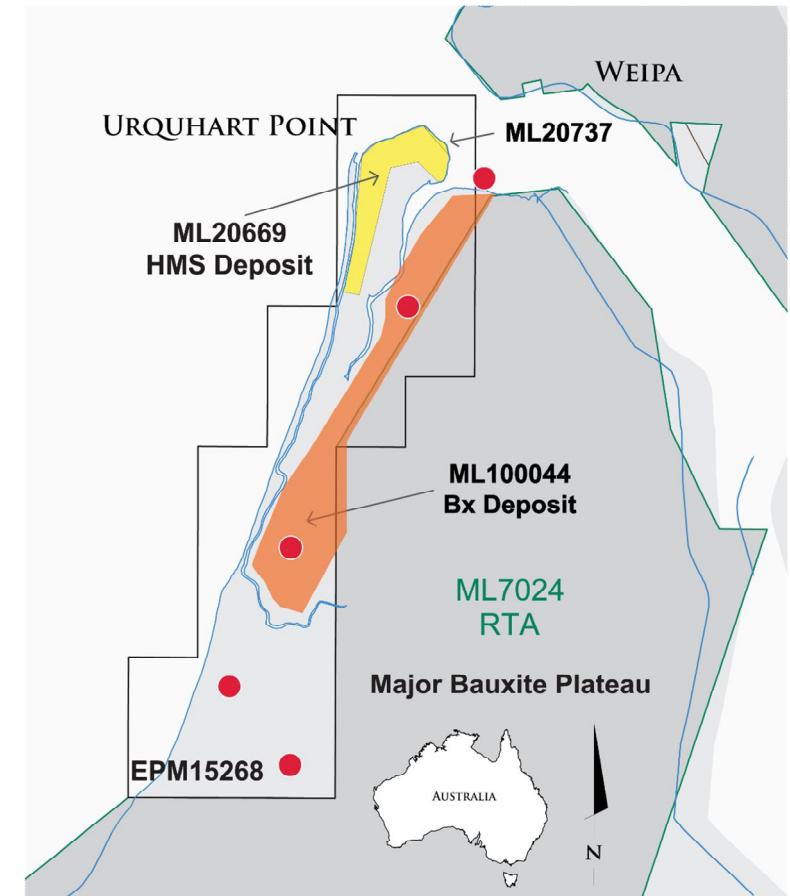
Touchstone Resources Pty Ltd ACN 126 306 018

Appendix



Urquhart Point HMS Project (Qld) – 50%

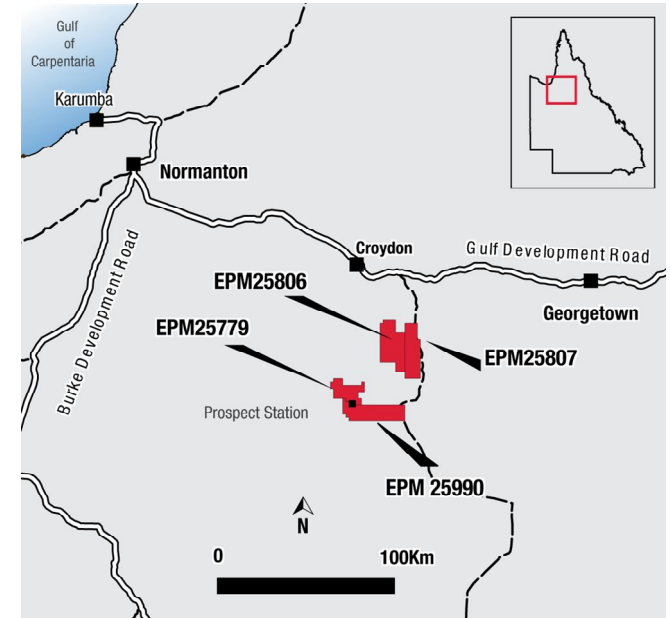
- Project currently on hold
- Fully permitted
- HMS processing plant constructed and in storage near Brisbane
- Over \$4.5m spent on design and manufacture of the processing plant alone
- Able to bring into production in 3-4 months from an internal decision to proceed with development
- Highly leveraged to a rebound in heavy mineral sand prices
- Heavy mineral sands prices have continued to recover
- Simple dry mining and processing plant



Esmeralda Graphite Project (Qld) – 100%



- Spectacular¹⁷ high grade graphite intersections at the 100% owned Esmeralda Project
 - WD001 – 95 m @ 6.5% Cg¹³ from 71m
 - WD002 – 29.1 m @ 7.8% Cg¹³ from 71.9m, including 7.1 m @ 12.9% Cg
- 91.5% graphite concentrate produced with a 91% recovery via conventional flotation tests¹⁴
- Upgrade of concentrate to 97.8% via single stage caustic bake¹²
- Petrology confirms the same mineralisation style hosted within hydrothermally altered granite is present in both holes which are 1.2km apart
- 2016 Electromagnetic survey over 3.5% of the project area failed to identify near surface mineralisation¹⁵



¹² See ASX Release 10 December 2015 "Assays strongly support potential for large graphite deposit"

¹³ Using a cut-off grade of 3% Cg

¹⁴ See ASX Release 24 May 2016 "High Purity and Recovery from Esmeralda Graphite testwork"

¹⁵ See ASX Release 16 January 2016 "Quarterly Activities Report"

Cape Flattery Silica Sands Project (Qld) – 100%



- Located adjacent to Mitsubishi's large silica sands mine (Cape Flattery Silica Mines)
- Large silica sands dune field that has been producing since 1967
- Jetty and ship loading facility in place
- Large exploration tenement – 54 km²
- *Seeking JV partner or other transaction to unlock value from the project*

