

QUARTERLY REPORT

FOR THE QUARTER ENDING 31 MARCH 2017 : DATED 27 APRIL 2017



METALLICA MINERALS LTD

Metallica Minerals Limited is primarily an Australian bauxite developer with interests in graphite, scandium, cobalt, nickel and mineral sands

ISSUED CAPITAL*

235,382,940 Ordinary Shares
22,864,386 Listed Options

SHAREHOLDERS*

2,174 shareholders
Top 20 shareholders hold 41.44%

LARGEST SHAREHOLDERS

Jien Mining Pty Ltd	16.74%
Plan-1 Pty Ltd	3.84%
Golden Breed Pty Ltd	3.82%

DIRECTORS

Peter Turnbull
Non Executive Chairman
Andrew Gillies
Non Executive Director
Steven Boulton
Non Executive Director
Wang Ruobing
Non Executive Director
Shu Zhang
Alternate Director to Wang Ruobing

SENIOR MANAGEMENT

Simon Slesarewich
Chief Executive Officer
John Haley
CFO & Company Secretary

CASH BALANCE*

MLM's cash balance is approximately \$1,137,000.
No debt.

*As at 31/03/17

HIGHLIGHTS

Fully Funded

- Completed (after 31 March) Renounceable Rights Issue - A\$3.05M (before costs)¹
- 30 June 2017 options underwritten - A\$1.3M²
- Negotiating stand-by credit facility
- A\$150,425 Research and Development refund received³
- Current cash position approximately A\$4M. No debt.

Board

- Mr Steven Boulton appointed as independent Non-Executive Director⁴
- Mr Wang Ruobing appointed as Non-Executive Director representing Jilin Jien Nickel Group

PROJECT HIGHLIGHTS

URQUHART BAUXITE PROJECT (QLD)

- Metallica's portion of mine development is now fully funded
- First bauxite production targeted for Q3 CY 2017
- **Maiden JORC Reserves** of 6.5Mt at 52.7% Al₂O₃, 13.3% SiO₂, 40.6% AAI%, 5.7% RSi
- Results of the Pre-Feasibility Study (PFS) support Urquhart Bauxite development⁵

- Pre-tax NPV₁₀ of A\$78.4M

- Low capital start up estimated to be ~\$1.1M
- Strong cash margins forecast
- Potential to increase pre-tax NPV₁₀ to \$86.9M via mining Inferred bauxite inventory and screening transitional lower grade material
- Project permitting and offtake negotiations are ongoing

SCANDIUM-COBALT-NICKEL SCONI PROJECT (QLD)

- Project being expedited by Joint Venture partner, Australian Mines Ltd (ASX:AUZ)⁶, to take advantage of the looming cobalt supply deficit
- Environmental licence granted by the Queensland Government⁷
- Definitive feasibility study underway⁷

1. ASX Release 13 April 2017 "Shortfall issue closes oversubscribed", available at asx.com.au
2. ASX Release 10 March 2017 "Renounceable Issue", available at asx.com.au
3. ASX Release 17 January 2017 "R\$150,426 R & D refund received", available at asx.com.au
4. ASX Release 25 January 2017 and 6 March 2017 "Appointment of Non Executive Director", available at asx.com.au
5. ASX Release 30 December 2016 "Urquhart Bx PFS-incl Inferred Resource assumptions-P4 & 5", available at asx.com.au
6. ASX Release 10 October 2016 "Metallica-Australian Mines SCONI Joint Venture", available at asx.com.au
7. AUZ ASX Release 2 March 2017 "Environmental Licences granted for mining operation at SCONI", available at asx.com.au

NOTICES

COMPETENT PERSON'S 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.

OTHER

The technical information contained in this report was compiled or supervised by Mr Andrew Gillies, BSc (Geol), a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and a non-Executive Director of Metallica Minerals Ltd. Mr Gillies has relevant experience in the mineralisation, exploration results and resources being reported 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 (JORC Code 2012). Mr Gillies consents to the inclusion of this information in the form and context in which it appears in this release.

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

Certain statements made in this announcement contain or comprise certain forward-looking statements. Although Metallica believes that the estimates and 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 in the regulatory environment and other government actions, fluctuations in commodity prices and exchange rates and business and operational risk management. Metallica undertakes no obligation to update publicly.

JUNE QUARTER OUTLOOK

With the Company now being fully funded for its maiden bauxite mining operations at Weipa, the focus for the June 2017 quarter will be to:

- Finalise Queensland and Commonwealth Government environmental approvals, and the issue of Mining Leases;
- Complete compensation agreements with the Traditional Land Owners;
- Secure offtake and sales contracts;

- Finalise and execute the mining and haulage, as well as the barging and transhipping contracts to allow bauxite mining operations at Urquhart Bauxite to commence.

Following meetings with various potential customers and the dispatch of representative samples in 2016 and early 2017, discussions will be advanced further with a view to securing offtake agreements for Urquhart Bauxite's direct shipping metallurgical bauxite. Offtake negotiations and sales

contracts are of the highest priority so as to underpin the development of the Urquhart Bauxite project.

As previously announced, the Company will also look to finalise a standby credit facility². Although it is expected that this facility will not be drawn upon following the recent successful Renounceable Rights Issue and underwriting of the 30 June 2017 options, the standby credit facility will give additional access to working capital to manage any unforeseen

circumstances during the critical development and start-up phase of the Urquhart Bauxite project. The Company believes that this is prudent capital and risk management for shareholders.

While Metallica is focused on the development of the Urquhart Bauxite project, the Company continues to assess potential acquisition opportunities that will add value to shareholders, as well as investigate opportunities to unlock value from non-core assets.



CAPE YORK BAUXITE & HMS JV

1,784 Ha

Mining leases and Mining lease applications

1,200 km²

Exploration tenure

Bx & HMS

Bauxite and Heavy Mineral Sands: zircon, rutile, and titanium minerals

MLM 50%

Ozore Resources Pty Ltd
50%

Pursuant to the joint venture (JV) agreement, the Cape York Bauxite and HMS Project JV is held 50% by Oresome Australia Pty Ltd, a wholly owned subsidiary of Metallica Minerals, and 50% by a private Chinese investor, Ozore Resources Pty Ltd (Ozore).

The Cape York Bauxite and HMS Project JV comprises three separate projects:
Urquhart Bauxite project,
Urquhart Point HMS project,
and the Cape York regional exploration project.

Since the formation of the JV on 8 September 2014, the JV has expended in excess of \$10M. The funds have been applied to progressing development of the Urquhart Bauxite project as well as the design and fabrication of the Urquhart Point HMS processing plant, which is currently in storage.

PRIORITIES FOR THE JUNE 2017 QUARTER

- Development of the Urquhart Bauxite project targeting production late in Q3 CY 2017. The JV will continue to progress and finalise permitting and approvals necessary to realise production from Urquhart Bauxite as referred to in this report.
- Approaches from third parties in relation to the Urquhart Point HMS project and processing plant will be progressed so as to potentially deliver value to the JV.

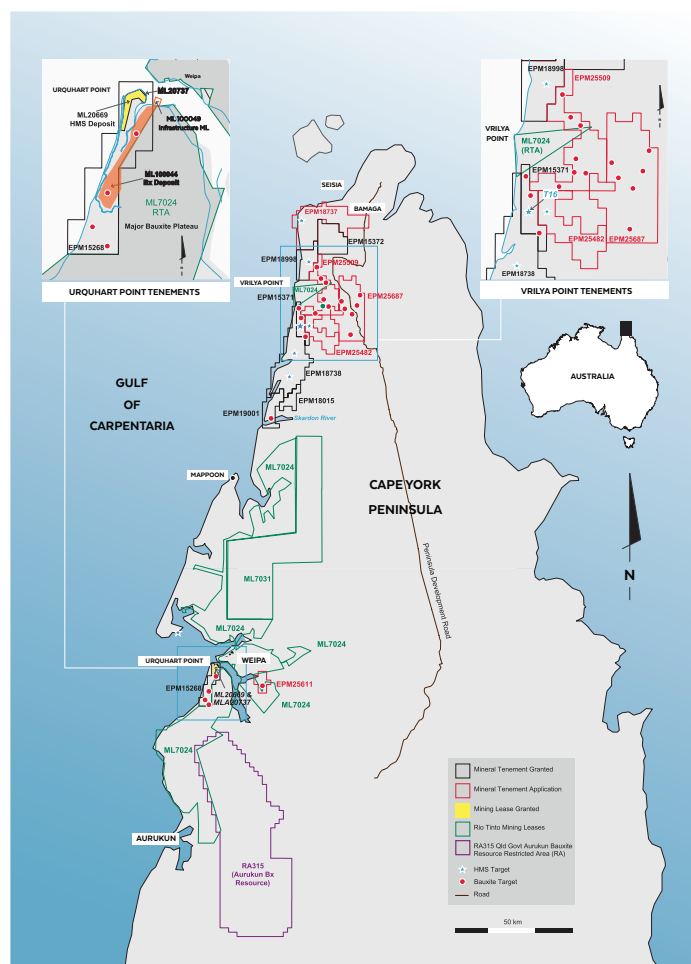


FIGURE 1: Cape York Bauxite and HMS project areas

URQUHART BAUXITE PROJECT

The Urquhart Bauxite project is located some 5km southwest of Weipa on the west coast of Queensland's Cape York Peninsula. The western Cape York is world-renowned for its extensive deposits of high-quality, export-grade pisolitic bauxite. The project consists of two bauxite plateaux, known as Area A and Area B, which are wholly contained within the lease area.

Both the Queensland⁸ and Commonwealth⁹ Governments have confirmed that the Urquhart Bauxite project will not require an Environmental Impact Statement (EIS) to be completed prior to mine start-up. This most important determination should see a Mining Lease granted in the June quarter of 2017, thereby allowing mobilisation of

contractors and production soon thereafter.

The project's JORC (2012) Resource estimate was updated in November 2016¹⁰, following the drilling program completed in August 2016.

The total Mineral Resource increased by 26% to 9.5Mt, with 6.9Mt being in the Measured and Indicated categories. An additional 8.5Mt of lower grade transitional material, over and above the 9.5Mt, has been identified for potential beneficiation through dry screening. Further investigation of the potential of this transitional material will be completed when mining is underway.

Following on from the updated JORC (2012) Resource estimate, a Pre-Feasibility Study (PFS)⁵

was completed showing that the development of the Urquhart Bauxite project had the potential to deliver strong financial returns for minimal capital expenditure utilising a contractor model that shifted risk and capital on to contractors, thereby maximising returns to shareholders.

The PFS was independently prepared by Brisbane-based international consultancy, IMC Mining Pty Ltd (IMC), which also completed the update of the JORC (2012) Resource estimate. London-based independent metals analyst, CRU International, estimated the Free On Board (FOB) USD price of bauxite received utilising the Life of Mine (LOM) schedule produced by IMC.

The results of the PFS are summarised in Table 2.

The completion of the PFS allows for a maiden JORC (2012) Reserves Statement⁵ (see Table 3) contained within Mining Lease Application (MLA) 100044.

The JV is finalising critical operating contracts for mining and haulage, as well as for barging and transshipping. It is expected that these contracts will be finalised in the June 2017 quarter, thereby allowing sufficient time for the contractors to complete planning for first production targeted for the Q3 CY 2017. The barging and associated infrastructure¹¹ remains in place, whilst the preferred mining and haulage contractor has confirmed the availability of equipment and critical personal to meet the JV's production plans.

TABLE 1: Urquhart bauxite project DSB Mineral Resource at an effective cut-off of 48% Al₂O₃

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

* AAI – Available Alumina @150°C

** RSi – Reactive Silica @ 150°C

8. ASX Release 25 October 2016 "DEHP confirms Urquhart Bauxite will not require an EIS", available at asx.xom.au

9. ASX Release 24 June 2016 "Commonwealth Government confirms no EIS", available at asx.xom.au

10. ASX Release 14 November 2016 "Significant Increase to Mineral Resource at Urquhart Bauxite", available at asx.com.au

11. ASX Release 24 October 2016 "Logistics provider ships maiden bauxite cargo", available at asx.com.au

URQUHART BAUXITE PROJECT

TABLE 2: Summary of 2016 PFS Results – Urquhart Bauxite project

Item	Unit	Scenario 1 (Base Case)	Scenario 2	Scenario 3
		<i>Mining Proved & Probable Reserves in Area A</i>	<i>Additional mining of Inferred resource in both Area A and Area B</i>	<i>At end of mine life, screening transitional stockpiled material</i>
Total Saleable Product	Dry kt	6,532	8,672	10,296
Total Al₂O₃	%	52.7	51.6	51.2
Total SiO₂	%	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
NPV₁₀ Pre Tax	A\$m	78.4	78.9	86.9
NPV₁₀ 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

*** Includes all operating costs, royalties and other payments

TABLE 3: Urquhart Bauxite project reserves

	Area	Direct shipping Bauxite (low Temp) Dry Kt	Al ₂ O ₃ %	SiO ₂ %	THA %	Low Temp RSi %
Proved	A	2,964	53.7	12.3	42.3	5.4
Probable	A	3,568	51.9	14.2	39.1	5.9
Ore Reserve	A	6,532	52.7	13.3	40.6	5.7

URQUHART BAUXITE PROJECT

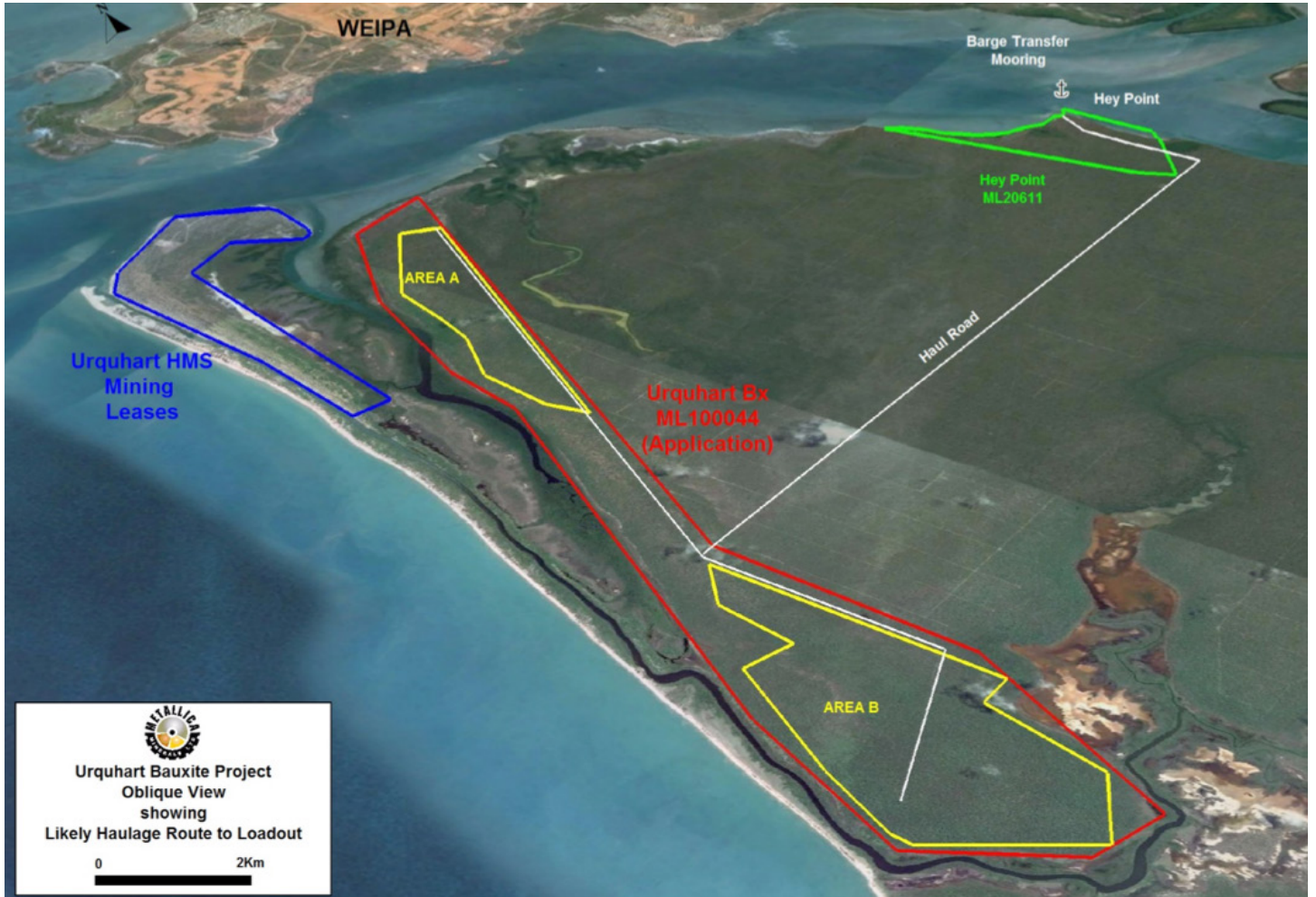


FIGURE 2: Aerial view showing likely haulage route and proximity of Hey Point load-out facility (green) to the Urquhart Bauxite project lease (red) and mining areas (yellow)

URQUHART POINT HMS PROJECT

The modularised heavy mineral sands (HMS) processing plant arrived in Australia in December 2015 and is currently stored near Brisbane. Given the continuing low heavy mineral sand prices, the JV has deferred on-site construction of the heavy mineral sand processing

plant to focus on the higher value Urquhart Bauxite project. Following several further approaches from third parties, the JV is progressing several options that may deliver value to the JV.

The Urquhart Point HMS Project is located on Urquhart Point,

3km south-west of Weipa (see Figure 3). The JV has developed a simple dry mining (less than 3 metre depth) and wet sand mineral processing operation using standard gravity (spiral concentrators) HMS separation to produce a zircon-rutile heavy mineral concentrate (HMC).

The development plan can be implemented very quickly to deliver production if there is an improvement in commodity prices.

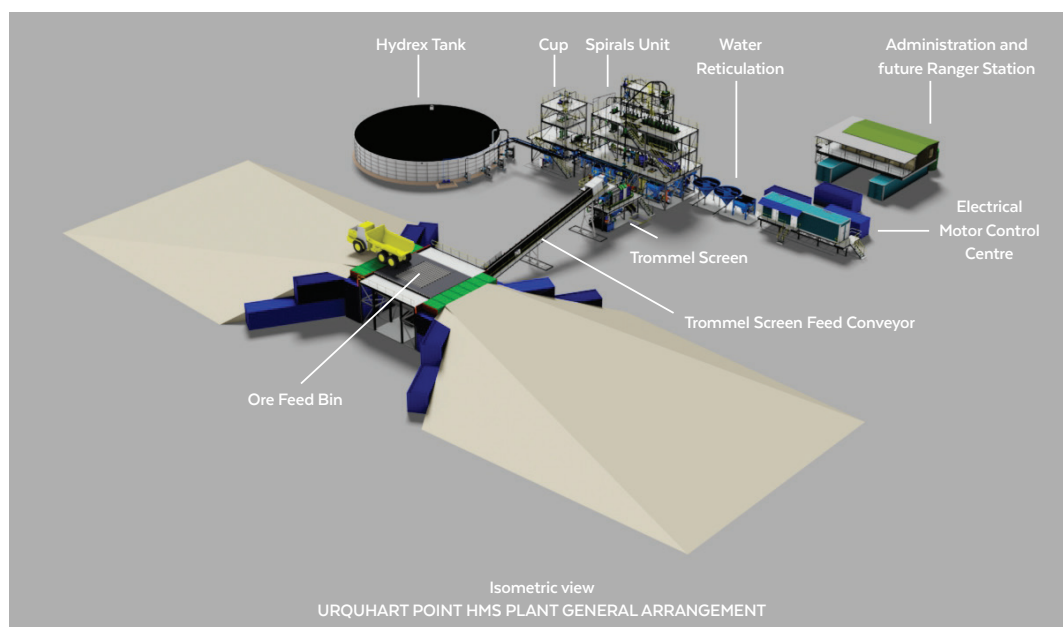
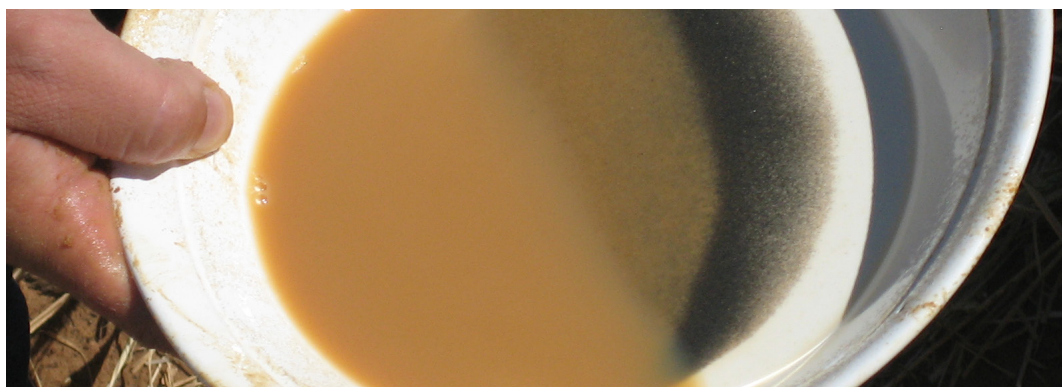


FIGURE 3: 3D CAD image Urquhart HMS plant design

CAPE YORK REGIONAL EXPLORATION

The Joint Venture did not undertake any field work on its regional HMS and bauxite exploration targets during the March quarter. With a clear focus on the Urquhart Bauxite project, regional exploration is currently on hold.



ESMERALDA GRAPHITE PROJECT

581 km²

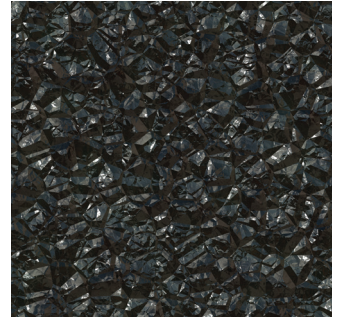
Exploration tenure

Graphite

Large scale “graphite in granite”- targeting high purity graphite

MLM 100%

Through subsidiary Touchstone Resources Pty Ltd



In October 2015¹² a graphite specific drilling program on the project commenced. The assay results confirmed thick graphite (graphitic carbon – Cg) mineralised intervals in the first two exploration holes.

The core was assayed for graphite content and total carbon. In summary, both drill holes (in a vertical two-hole drilling program) intersected significant broad graphite

mineralisation (using a 3% Cg cut-off) with continuous intercepts of¹³:

WD001
95m @ 6.5% Cg from 71m

WD002
29.1m @ 7.8% Cg from 71.9m

Standard procedures that involved crushing and preparation of representative drill core samples for bench scale floatation testwork

showed that a concentrate grade of 91.5% TC (90.6% Cg) was able to be produced at a 91% recovery. Further purification testwork using an additional single stage caustic bake and wash process, produced an even higher concentrate grade of 97.8% TC¹⁴.

The Company completed an electromagnetic geophysics program in October 2016 to identify near-surface graphite mineralisation for follow up

drill testing. Analysis of the EM geophysics program failed to identify any near-surface graphite mineralisation targets in the survey area, which covers 3.5% of the total project area.

The Company plans to review the project area so as to identify other areas that may contain near-surface graphite mineralisation. This strategy may include a modest exploration field program during 2017.

12. ASX Release 23 October 2015 “Drill rig mobilised to the Esmeralda Graphite Project”, available asx.com.au.

13. ASX Release “Assays strongly support potential for large graphite deposit”, available asx.com.au

14. ASX Release 24 May 2016 “High Purity and Recovery from testwork on the Esmeralda Graphite Project in North Qld”, available asx.com.au.

SCONI SCANDIUM, COBALT & NICKEL PROJECT

2,049 Ha

Mining leases

478 Ha

Mineral development licenses

155.6 km²

Exploration tenure

MLM 100%

Through subsidiaries
NORNICO Pty Ltd and
Greenvale Operations Pty
Ltd

The SCONI scandium-cobalt-nickel tri-metal project is located less than three hours' drive northwest of Townsville, Queensland.

On the 10th of October 2016, Metallica announced that the Company had entered into a Farm-in and JV Agreement with Australian Mines Ltd (Australian Mines) (ASX:AUZ) over Metallica's 100%-owned SCONI project.

Australian Mines has commenced a Definitive Feasibility Study (DFS), which is anticipated to be completed within 2 years. That company has also advised that environmental licenses have been granted by the Queensland Government, thereby permitting mining operations at SCONI⁷.

The JV with Australian Mines over the SCONI project delivers on Metallica's commitment to create value from non-core assets, preserves Metallica's significant past investment, whilst maintaining an exposure to the continued upside from the development of the SCONI project, which is being rapidly progressed by Australian Mines.

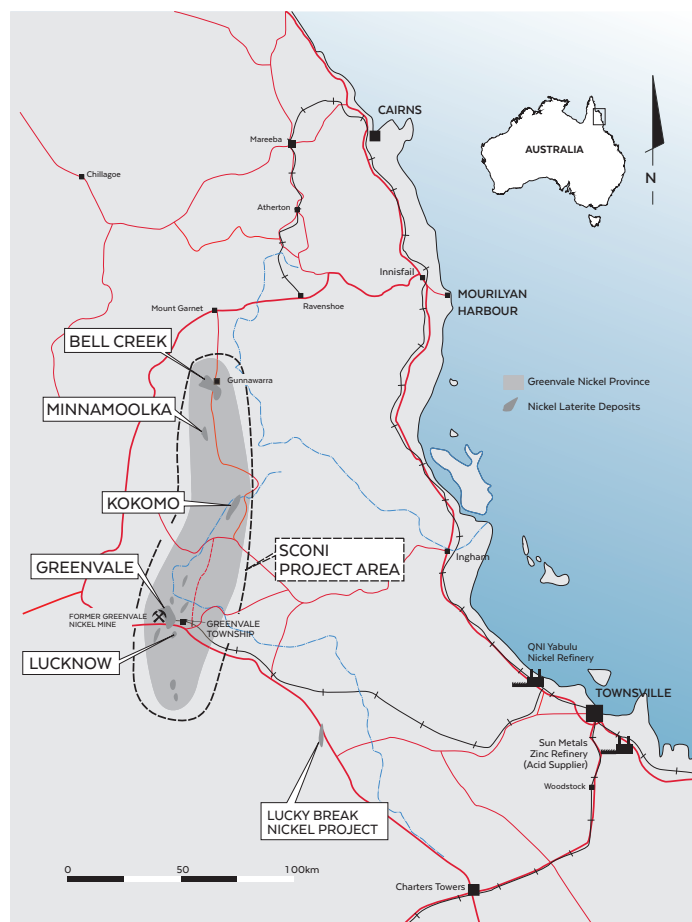


FIGURE 4: SCONI project area

CAPE FLATTERY SILICA SANDS

54km²

Exploration tenure

Silica Sands

For bulk export shipping

MLM 100%

Through subsidiary
Oresome Australia Pty Ltd



The Cape Flattery silica sands project is located approximately 200km north of Cairns in north Queensland (see Figure 5). The EPM covers part of a large Quaternary sand dune field, which is believed to contain high-grade silica sand, a section of which is currently being mined by Cape Flattery Silica Mines Pty Ltd (CFSM), a wholly-owned subsidiary of Mitsubishi Corporation.

The adjacent CFSM operation has operated since 1967 and is the world's largest silica sand mining operation. The dune field is known to contain high grade silica sands. Metallica will evaluate its potential for development as a silica sand mining and bulk shipping operation.



FIGURE 5: Cape Flattery project area

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