



# QUARTERLY REPORT

to 30 June 2015

## ASX Release

29 July 2015

**Metallica Minerals Limited is an Australian bauxite, zircon-rutile, nickel-cobalt-scandium and graphite resource development and exploration Company**

**ASX:MLM**

### ISSUED CAPITAL (30/06/15)

166,891,830 Ordinary Shares  
2,000,000 Options

*See latest Appendix 5B Lodged  
15/07/15 for more detail*

### SHAREHOLDERS (30/06/14)

2,009 shareholders

**Top 20 shareholders hold 59.01%**

### LARGEST SHAREHOLDERS

Jien Mining Pty Ltd – 24.0%  
Victorian Ferries Pty Ltd – 9.8%  
Golden Breed Pty Ltd – 5.3%  
Bondline Ltd – 2.9%

### DIRECTORS

Barry Casson  
*Non Executive Chairman*

Andrew Gillies  
*Non Executive Director*

Shu Wu  
*Non Executive Director*

Shu Zhang  
*Alternate Director to Dr Wu*

### SENIOR MANAGEMENT

Simon Slesarewich  
*Chief Executive Officer*

John Haley  
*CFO & Company Secretary*

Stewart Hagan  
*GM Oresome Australia*

### CASH BALANCE

As at 30/06/15, MLM's cash balance was approximately \$1.26 million. No Debt.

## PROJECT HIGHLIGHTS

### CAPE YORK HMS & BAUXITE PROJECTS

**56.67% MLM (Ozore Resources Pty Ltd earned 43.33% and progressing to 50%)**

The Cape York Heavy Mineral Sands (HMS) and Direct Shipping Bauxite (DSB) projects have been the focus of activities for the June Quarter.

### URQUHART HMS PROJECT

- Fabrication and trial assembly by Consulmet Pty Ltd of the Urquhart HMS processing plant has now been completed in South Africa with shipping from Durban planned to occur during August
- Site clearing and civil works on the Urquhart Point Mining Lease have been completed in readiness for the arrival of the HMS processing plant
- Zircon-rutile concentrate production is now expected to commence after the wet season
- Mineral sands prices (particularly titanium minerals rutile and ilmenite) have continued to decline through 2015 and the Joint Venture is closely monitoring the impact, including periodically reviewing options while continuing to progress the development on a more cautious step-by-step or staged approach
- Successfully delivered two forty foot containers (containing water tank and tailings pipeline) to the HMS processing plant location, thus proving the logistics solution
- Over \$6M has been expended mostly on Plant and Equipment by the Joint Venture

### URQUHART BAUXITE PROJECT

- A Mining Lease Application (MLA 10044) comprising 1,378 hectares has been lodged covering the Urquhart Bauxite Project Areas A and B
- A 7.5Mt Inferred Mineral Resource averaging 51% total aluminium oxide ( $Al_2O_3$ ), 16.3% total silicon oxide ( $SiO_2$ ) of Direct Shipping Bauxite (DSB) was announced on 11 May 2015. This resource includes AAL and RSi information for Area A of 4.0Mt @ 53.3%  $Al_2O_3$ , 13%  $SiO_2$ , 40.6% AAL, 4.9% RSi
- Current demand and growth forecast for bauxite remains strong
- Native Title negotiations, environmental studies and permitting commenced

# COMPANY HIGHLIGHTS

## CORPORATE

- Mr Barry Casson was appointed as Chairman of the Board on 30 June, following the retirement of Mr David K Barwick. Barry has been a non-executive director of Metallica since 2010
- Mr Simon Slesarewich was appointed to the position of Chief Executive Officer (CEO) on 13 July 2015 following the planned succession of Mr Andrew Gillies retiring from the role of Managing Director. Andrew will remain as a Non-Executive Director of the company.
- Sales Agreement executed (*see ASX release 9 July 2015*) for the sale of the Ootann Limestone Project. A \$25,000 non-refundable deposit has been received and a further \$475,000 payment will be made once indicative approval is received for the transfer of the mining titles which is expected in August
- Sales Agreement executed (*see ASX release 28 July 2015*) for the sale of the Star River Limestone project. A \$18,500 non refundable deposit has been received and a further \$351,500 payment will be made once indicative approvals is received for the transfer of the mining titles which is expected in August
- Cape Flattery Silica Sands (EPMA 25734) has been offered for grant, the tenement contains high purity silica sand deposits on a headland adjoining the world's largest silica sand operation
- The Company has also received indicative and non-binding expressions of interest on its other limestone projects near Gladstone which are also considered non-core mineral assets
- Queensland Nickel Pty Ltd (QN) have completed nickel ore mining operations at the Lucky Break Project. Two payments of \$200,000 each are due in the September and October 2015. QN are now undertaking mine site remediation and rehabilitation work
- Exploration tenements have been granted for Metallica's 100% owned unique "Graphite in Granite" project located 60km SW of Croydon. The Company is planning to complete two 125m cored drill holes, twinning two historical percussion drill holes 500m apart which recorded significant graphite intercepts within a granite host rock. The Target of the drill holes is to confirm the presence of large and high quality graphite mineralization uniquely hosted within granitoid rocks "Graphite in Granite" – Metallica is seeking partners.



**FIGURE 1: First forty foot container containing plant and equipment components for the HMS processing plant being unloaded at Urquhart Point**

# COMPANY HIGHLIGHTS

## CORPORATE

### SAFETY

There were no lost time injuries recorded during the June quarter.

### FINANCIAL & INVESTMENT POSITION

Metallica had approximately \$1.26M in cash (no debt other than trade creditors) as at 30 June 2015.

### JOINT VENTURE EXPENDITURE

Expenditure on the Cape York HMS and Bauxite Project continues to be a Joint Venture (JV) cost as Metallica is free-carried to the extent of \$7.5M, of which \$1M in funding is remaining to be contributed.

### SIMON SLESAREWICH JOINS METALLICA AS CEO

Metallica announced the appointment of experienced Queensland based mining executive, Mr Simon Slesarewich, as the Company's new CEO (*see ASX release 1 July 2015*). The appointment coincides with the planned succession and retirement, from the Managing Director role, of founding Metallica Managing Director, Mr Andrew Gillies, who will continue to provide his expertise as a non-Executive Director.

Mr Slesarewich, a Mining Engineer and registered Senior Site Executive in Queensland, has more than 18 years' experience across Queensland's resources commodities sector, including a strong background in operational and executive roles within both mining and contracting entities.





# 4

## OUTLOOK FOR THE SEPTEMBER QUARTER

Metallica will continue the development of the Urquhart HMS processing plant with commissioning now expected by the end of 2015 with first zircon-rutile concentrate shipments now expected after the wet season. Given the continuing decline in zircon-rutile prices the Joint Venture will assess all options to ensure that the project is robust before proceeding to production.

The manufactured processing plant has been disassembled in South Africa and is being packed into 20 forty foot containers ready for shipment from Durban to Brisbane during August.

The Cape York HMS and Bauxite Joint Venture will also focus on progressing the adjoining Bauxite deposits (Area A and B). Subject to funding the JV will also progress the regional Bauxite and HMS projects.

Metallica will progress negotiations for JV partnerships on the SCONI (Ni-Co-Sc) Project is currently in discussions with an established nickel company. Metallica is also in early negotiations, with another

party, on a potential transaction involving its 100% owned Cape Flattery Silica Sands project.

The Company is also evaluating further opportunities to realise the value of its remaining Queensland Limestone assets.

Expenditure on the Company's non-core projects will continue at low levels and on an as required basis, until such time as further funding is secured and market conditions improve. There will be continued emphasis on securing partnerships so as to advance our development projects.

### MAJOR EMERGING BAUXITE OPPORTUNITY

On a commodity basis, we believe that 2015 continues to highlight the attractiveness of Metallica having considerable bauxite exposure. Unless there is a reversal of the bauxite export ban by the Indonesian Government, it is forecast there will be a considerable shortfall in seaborne bauxite supply.



**FIGURE 2:** Civil works completed in preparation for the HMS processing plant with haul road from the initial mining area



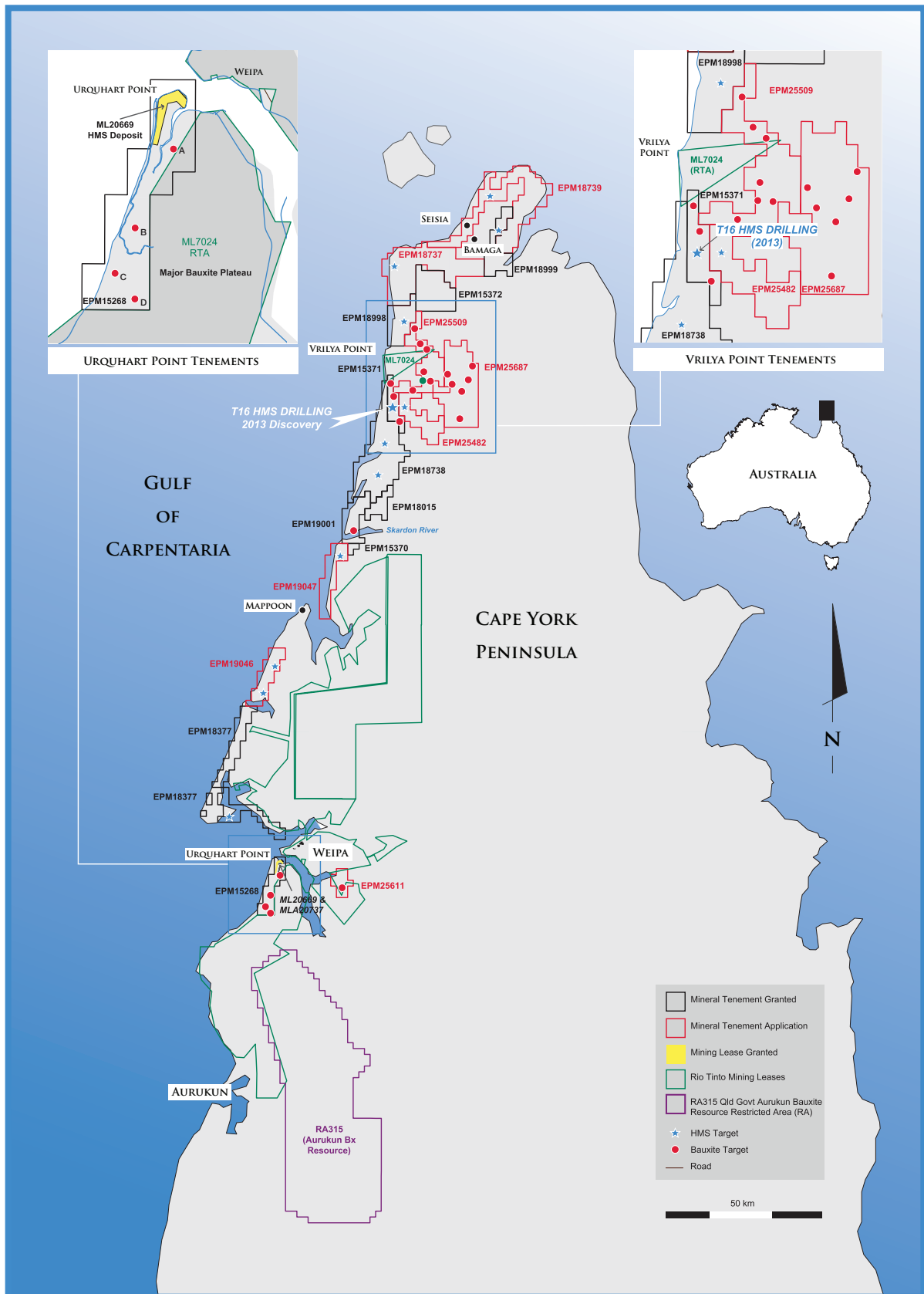


FIGURE 3: Cape York HMS and Bauxite Project's regional setting

# CAPE YORK

## HMS AND BAUXITE PROJECT JV

<b>AREA</b>	2,500km <sup>2</sup> exploration tenements (see Figure 1)
<b>COMMODITY</b>	HMS (zircon, rutile, Ti minerals) and Bauxite
<b>HOLDING</b>	MLM 56.67% (JV), with Ozore Resources Pty Ltd (a private Chinese investor), holding 43.33% (earning a total of 50%)

### THREE SEPARATE PROJECT COMPONENTS

#### URQUHART POINT HMS PROJECT

- Planning for the HMS process plant construction completion and commissioning in late 2015. The project is fully permitted.

#### URQUHART BAUXITE PROJECT

- Mining Lease application (MLA ) 10044 comprising 1,378Ha has been lodged covering the Urquhart Bauxite Project
- 7.5Mt Inferred Mineral Resource averaging 51% total aluminium oxide (Al<sub>2</sub>O<sub>3</sub>), 16.3% total silicon oxide (SiO<sub>2</sub>) of Direct Shipping Bauxite (DSB) (see ASX Release 11 May 2015)
- Direct Shipping Bauxite (DSB) confirmed for Area A with high available alumina and moderate reactive silica (see ASX release 17 April and 26 February 2015).
- Area B drilling confirmed additional bauxite in 40 of 62 holes (see ASX release dated 26 February 2015)
- Current demand and growth forecast for bauxite remains strong
- Environmental studies and permitting commenced

#### CAPE YORK REGIONAL HMS & BAUXITE PROJECT MAJOR EXPLORATION UPSIDE

Oresome (100% MLM subsidiary) holds extensive tenements in Western Cape York within the world class Weipa bauxite province. These tenements predominately cover two exploration target types; HMS and laterite bauxite.

The Cape York HMS and Bauxite Project JV is located on the west coast of Queensland's Cape York, and will be held 50% by Metallica Minerals' wholly owned subsidiary, Oresome Australia Pty Ltd, with a 50% interest being earned by a private Chinese investor, Ozore Resources Pty Ltd (Ozore), pursuant to the Cape York HMS and Bauxite agreement entered into in August 2014.

In accordance with the Agreement, Ozore is to provide A\$7.5M (of which \$6.5M has been received for a 43.33% interest) to develop the Urquhart HMS Project and to explore for additional HMS and bauxite deposits within the JV tenements held within the Cape York region.

Since the formation of the JV on 8 September 2014, the JV has expended over \$6M on progressing the Urquhart HMS Project and regional exploration programs, with the majority of funds applied to the manufacturing of the HMS processing plant which has recently been completed in South Africa. Metallica has a free-carry interest in the project until Ozore's total funding commitment is satisfied.

# URQUHART

## HMS PROJECT

The Urquhart Point HMS Project is located on Urquhart Point 3km south west of Weipa (see *Figure 3*). The JV is developing a simple dry mining (<3m depth) and wet sand mineral processing operation using standard gravity (spiral concentrators) HMS separation to produce a zircon-rutile heavy mineral concentrate (HMC).

The mineral processing involves the separation of the heavy minerals (>4 specific gravity (SG) density) including zircon-titanium minerals and iron oxide minerals in the sand from the lighter (<3 SG) quartz and calcareous sands. No chemicals are required for HMS processing or HM concentration.

The HMS processing rate will be approximately 110 tonnes per hour (~270,000 tonnes per year) to produce HMC over a 4 year mining and processing life based on the current reserve.

The JV has executed a legally binding Plant Supply Contract with Consulmet Pty Ltd (Consulmet). The plant supply contract is a fixed price contract (including fixed foreign exchange rate) to supply and deliver the plant and associated equipment to Weipa and for the commissioning of the fully assembled HMS concentrator plant and associated infrastructure (see *Figures 4 and 5*).

The ordering and manufacturing of components and construction of the modularized plant has been completed in South Africa. It is planned that the containerised plant will be shipped to the Port of Brisbane during August 2015. The plant was due to be commissioned in June 2015, however the JV decided to add a fine sand screening unit (Derek screen) to remove >250 micron size trash fraction of the HMS, as well as additional clean-up spirals so as to increase the value of the final product. This extra equipment, fitted as a final processing stage is referred to as the Concentrator Upgrade Plant (CUP) or the “back end” of the main processing plant and will further separate coarse and light sand material, thereby

enhancing the quality of the zircon-rutile product. The plant is now expected to be commissioned in late 2015 with full scale HMS production commencing soon after (subject to commodity prices).

The pre-civil site preparation works have been completed (see *Figure 2*) in readiness for assembly of the modularized plant. Offtake discussions and product marketing are at an advanced stage.

## OPERATIONAL REVIEW

Due to the currently lower than anticipated Australian dollar prices of mineral sands (particularly Ti Minerals i.e. Rutile and Ilmenite) following the completion of the Urquhart Point HMS Feasibility Study in July 2014 the JV will internally revise the Project Financial model ahead of operations. The mining schedule has also been revised to maximize feed grades and resulting cashflow and preparing a pre-production stockpile of high grade material.

As a result of these improvements the initial seven quarters of production will see an average Heavy Mineral (HM) feed grade of approximately 14%, comprising a zircon plus rutile assemblage (% of HM) of over 30%.

Recent zircon market analysis, from well known research participants, have reported that current global mineral sands operations have an average HM feed grade of just over 4%, with combined rutile and zircon assemblages comprising 13%. However, of the new deposits under active investigation it is estimated that the zircon/rutile assemblages is closer to 9%.

Metallica's long term outlook on zircon and rutile prices has not changed since the Ore Reserves were declared in mid 2014. The revised internal financial model has calculated that the project will generate approximately \$6M after tax cash flow in the first seven quarters of production. Metallica will receive 50 per cent of this cash flow.



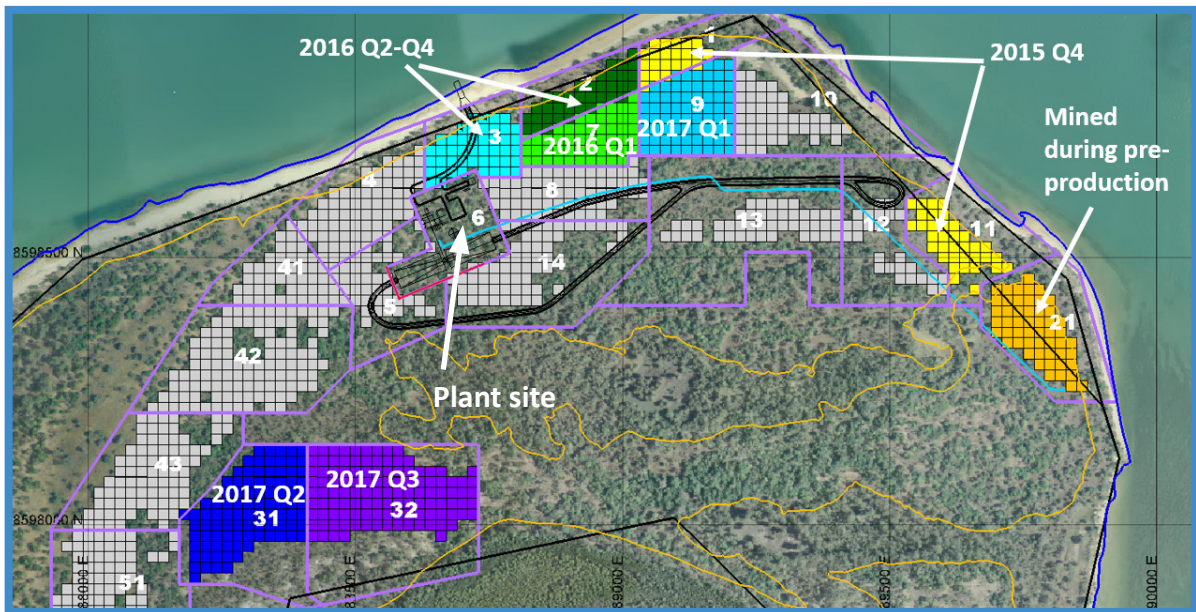


FIGURE 4: Urquhart HMS site & initial mining plan

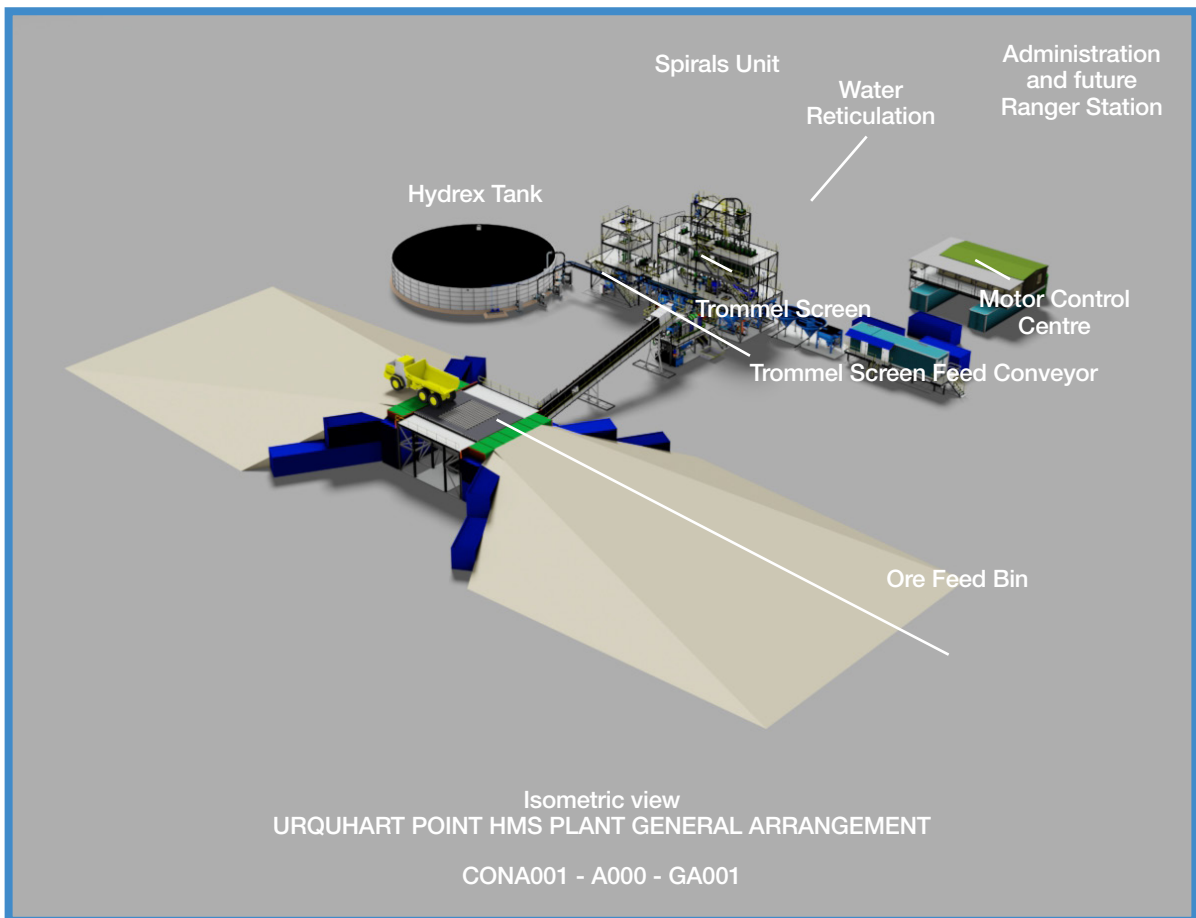


FIGURE 5: 3D CAD image Urquhart HMS plant design

# URQUHART DSB BAUXITE PROJECT

The Urquhart Bauxite Project is situated adjacent to the HMS project and is some 5km southwest of Weipa on Queensland's Cape York Peninsula. Western Cape York is world-renowned for its extensive deposits of high-quality, export grade pisolitic bauxite.

The Joint Venture recently lodged a Mining Lease Application (MLA) 100044 comprising 1,378Ha covering the Urquhart Bauxite Resource (Area A and Area B) (see ASX release 25 June 2015) and an infrastructure mining lease application MLA 100049 over the proposed north jetty barge option area.

The recent drilling results coupled with the completed geological modelling confirm that the majority of the Urquhart bauxite resource is suitable for Direct Shipping Bauxite (DSB). It is planned that DSB will be barged from one of three options; from the Urquhart Point HMS mining lease (owned 100% by the JV), the eastern side of the MLA (North Jetty), or Hey Point (held by a private company) and transhipped in the sheltered Weipa Port area, (see Figure 6 and ASX Release 25 June 2015).

The potential production of DSB allows for the expedited permitting and development of a relatively simple mining-truck-barge operation with low capital and operating costs.

The Weipa type bauxite is of high quality export grade with high alumina content (>50%  $\text{Al}_2\text{O}_3$ ) that is sought after in the seaborne market.

In May 2015, the Joint Venture announced a maiden

JORC 2012 compliant bauxite Resource estimate for the Urquhart Bauxite Project. The Project consists of two (2) bauxite plateaus, known as Area A and Area B, both of which are wholly contained within EPM15268.

The 2015 Resource estimate for the Urquhart Bauxite Project (for both Areas A and B) at the 45%  $\text{Al}_2\text{O}_3$  cut-off for DSB is: **Inferred 7.5 Mt @ 51.0%  $\text{Al}_2\text{O}_3$ , 16.3%  $\text{SiO}_2$** .

Additional details by area are provided in Table 1 and a visual summary of the resource model presented in Figure 7.

Available alumina (AAI) and reactive silica (RSi) were selectively sampled for intervals below a 15%  $\text{SiO}_2$  or above 48%  $\text{Al}_2\text{O}_3$  threshold at Area A. This represents the lower half of the bauxite horizon defined in Area A.

Subsequently, it was modelled as a separate domain where the assays for AAI and RSi analyses are complete. In comparison, Area B has generally higher  $\text{SiO}_2$  and a much smaller and less continuous lower bauxite domain as defined on a 15%  $\text{SiO}_2$  or above 48%  $\text{Al}_2\text{O}_3$  threshold. It has similar chemistry but currently no available AAI and RSi assay results to conclusively determine the overall quality of Area B.

Estimates for the lower bauxite horizon as a higher grade subset of the 45%  $\text{Al}_2\text{O}_3$  resource in Table 1 are provided in Table 2 and at an effective cut-off grade of 15%  $\text{SiO}_2$ . This includes available AAI and RSi information for Area A of: **Area A Inferred 4.0 Mt @ 53.3%  $\text{Al}_2\text{O}_3$ , 13.0%  $\text{SiO}_2$ , 40.6% AAI, 4.9% RSi**

**TABLE 1: Urquhart DSB Resource statement details at 45%  $\text{Al}_2\text{O}_3$  cut-off**

Area	DSB (in-situ)			Screened 1.2 mm			
	Kt	$\text{Al}_2\text{O}_3$ %	$\text{SiO}_2$ %	Kt^	Yield %	$\text{Al}_2\text{O}_3$ %	$\text{SiO}_2$ %
A	5121	52.0	15.0	3769	73.6	56.8	7.0
B	2366	48.8	19.0	1505	63.6	54.4	9.3
<b>Total</b>	<b>7487</b>	<b>51.0</b>	<b>16.3</b>	<b>5274</b>	<b>70.5</b>	<b>56.1</b>	<b>7.6</b>

**TABLE 2: Urquhart DSB Resource statement for the lower Bauxite profile**

Area	DSB (in-situ)					Screened 1.2 mm			
	Kt	$\text{Al}_2\text{O}_3$ %	$\text{SiO}_2$ %	AAI%	RSi%	Kt^	Yield %	$\text{Al}_2\text{O}_3$ %	$\text{SiO}_2$ %
A	3987	53.3	13.0	40.6	4.9	3037	76.2	57.1	6.7
B	777	52.7	13.2			486	62.6	56.1	7.0
<b>Total</b>	<b>4764</b>	<b>53.2</b>	<b>13.0</b>			<b>3523</b>	<b>74.0</b>	<b>56.9</b>	<b>6.7</b>

Tonnages are a subset of those reported in Table 1

^ Recovered tonnage (tonnes x yield) for the same DSB cut-off grade and DSB in-situ dry tonnage

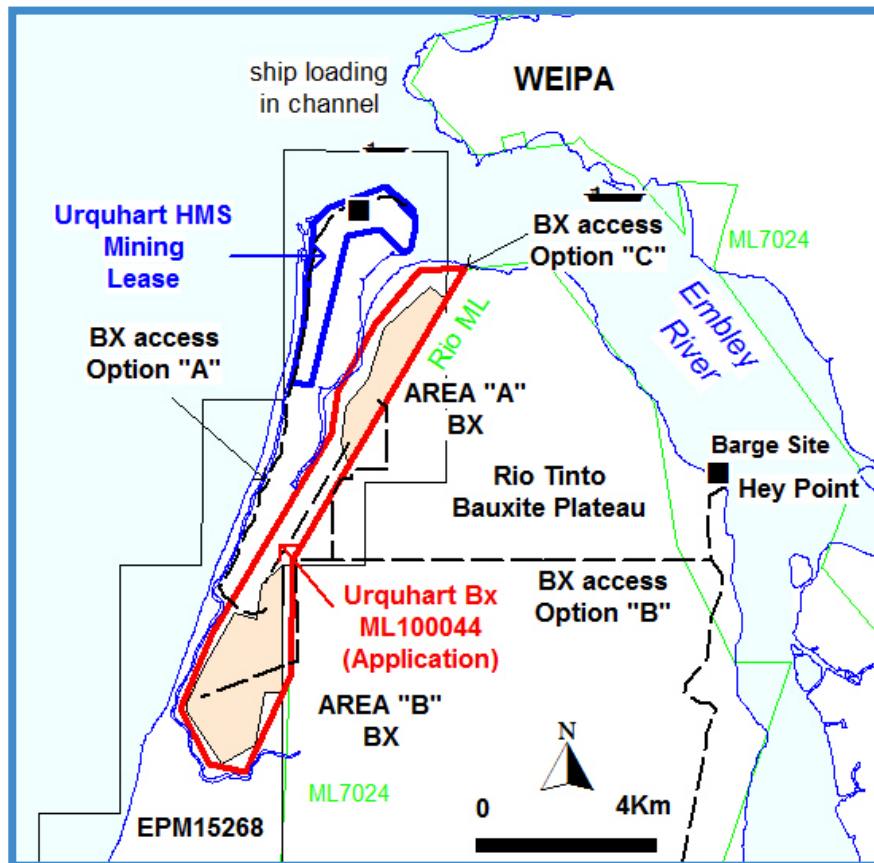


FIGURE 6: Tenement locations and proposed access options

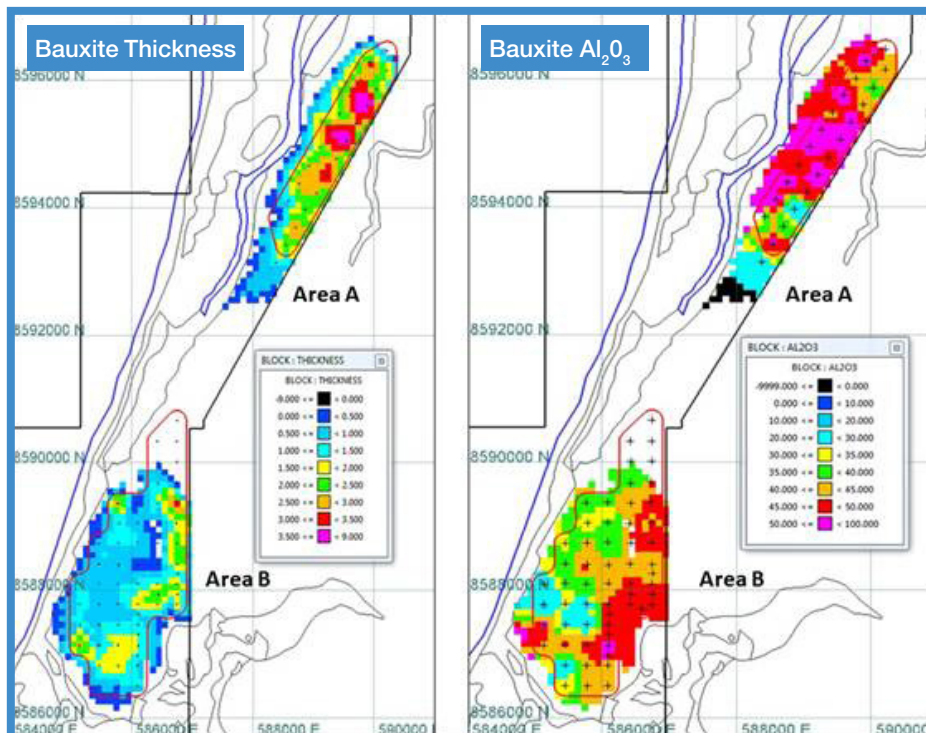


FIGURE 7: Inferred Mineral resource with the red classification boundary and black tenement boundary



## CAPE YORK REGIONAL HMS EXPLORATION

The Joint Venture has not completed any field work on its regional HMS exploration targets during the June quarter. A desktop review of the regional exploration area will be completed in the September quarter to define priority drill targets for future exploration programs.

### KEY HMS & BAUXITE PRIORITIES FOR THE SEPTEMBER QUARTER

- Complete early works items including the establishment and commissioning of water bores on Urquhart HMS Project in preparation for production
- Install the tailings pipeline on site at Urquhart HMS Project that was delivered in the during the recently completed successful logistics trial
- Undertake dry season environmental survey and monitoring at Urquhart bauxite project
- Continue bauxite project evaluation and initial market studies
- Prioritise the next regional HMS and bauxite exploration target(s) for drilling
- Complete the logistics for the 20 containers from Durban to the Port of Brisbane and transport to site



Site works during April at Urquhart Point HMS plant site

# ESMERALDA

## GRAPHITE PROJECT

<b>AREA</b>	South of Croydon, North Queensland
<b>COMMODITY</b>	Graphite (large scale “graphite in granite”)
<b>HOLDING</b>	MLM 100% (through subsidiary Touchstone Resources Pty Ltd)

The Esmeralda has four tenements, located south of Croydon in North Queensland, three have been granted by the Department of Natural Resources and Mines (*see ASX release dated 15 July 2015*). Metallica has identified significant graphite occurrences within its Exploration Permit for Minerals (EMPs) 25779, 25806, 25807 and 25990 (combined area covering over 750km<sup>2</sup>) over the Esmeralda Granites in the Croydon region (*see Figure 8*).

Metallica observed graphite mineralisation in previous drilling across the project area. The Company is now progressing land access and other things in readiness for a modest core drilling program to be completed in the coming months.

These occurrences were primarily identified in 2006 during a Metallica drilling program targeting well defined airborne and ground defined intense electromagnetic (EM) anomalies. At the time the target of the drilling was base metal and/or gold bearing massive sulphide mineralisation, instead of sulphides Metallica discovered significant graphite mineralisation.

Despite being a considerable geological curiosity, graphite is rarely associated as a constituent mineral in igneous rocks. At the time the discovery was not considered of sufficient commercial interest to progress further exploration.

In addition, a literature review of publicly available information on graphite occurrences in the Esmeralda granites and Croydon volcanics indicates large suites of igneous rocks that are inherently and uniquely graphite bearing. Metallica will be drilling an area where it is interpreted that magmatic differentiation or structural controls have concentrated graphite into significantly higher percentages.

Previous percussion drilling, including Metallica in 2006, exploring for metals and other mineral mineralisation, recorded significant zones (>20m down

hole intercepts) of observed graphite mineralisation (>10% graphite visually) in the drill logs.

As the graphite is not metamorphic in origin, nor occurs in metamorphic host rock, as over 95% of the world's known graphite deposits, the Esmeralda Graphite Project is relatively unique as igneous sourced or hydrothermal graphite deposits are rare.

Known deposits of this type are typically of high purity graphite in either flake or crystalline form (such examples include Sri Lanka deposits and the Albany Graphite Granite deposit in Canada). The carbon source is non-organic and the carbon is thought to be from deep CO<sub>2</sub> or CH<sub>4</sub> gaseous injection into the magma chamber and later crystallising out as pure or near pure carbon (graphite) crystals.

Metallica has developed a “Hydrothermal” mineralisation model for the Esmeralda granite based on work completed by the Bureau of Mineral Resources (BMR) in 1988 and recent discovery of the Albany graphite deposit in 2013. Metallica has identified 14 historic percussion exploration drill holes across the region intersecting significant graphitic granite.

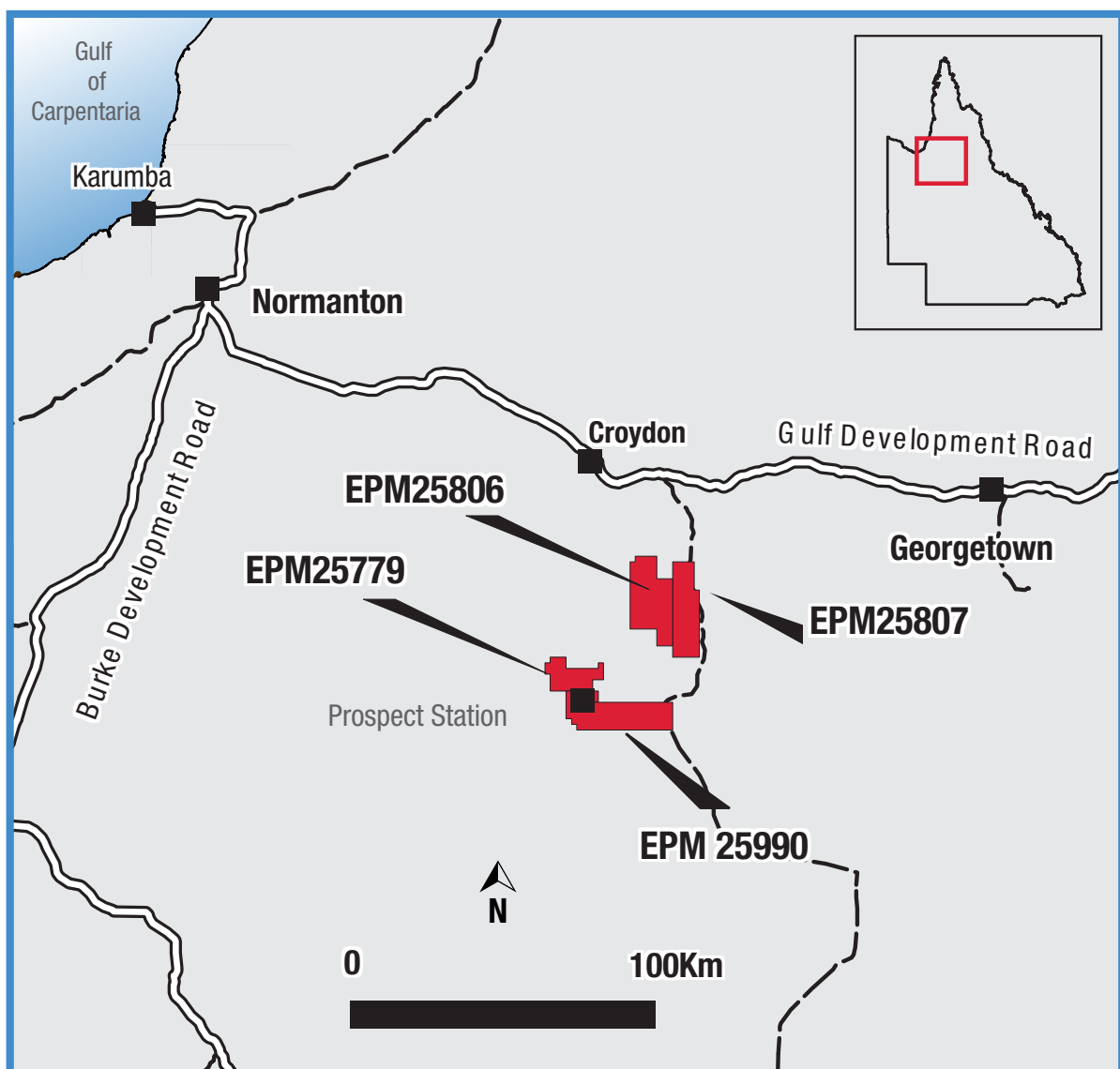
The proposed new core drilling program will comprise two holes (each to be drilled at least 125m in depth) twinning two historic exploration percussion holes; RC002A (2006) and PB18 (1988), approximately 500m apart, which recorded significant graphite granite breccia. These are within the priority Warrior Graphite Exploration target within EPM 25779 approximately 70km SSW of Croydon (*see Figure 8*).

The graphite core intervals will then be assessed to determine the graphite form, purity, mineralogy and preliminary metallurgy characteristics and marketability. The cost of the two drill holes (planned to be a total of ~270m), supervision and analysis is expected to be approximately \$150,000.

Previous Electromagnetic (EM) surveys, including a survey by Metallica in 2006, readily identified conductive graphite, and additional EM surveys will better define targets for future exploration. Metallica's proposed drill holes are within a very well defined intense EM anomaly as could be expected by the significant graphite observed from the drilling.

## KEY PRIORITIES FOR THE SEPTEMBER QUARTER

- Progress land access and other agreements to allow on the ground activities
- Prepare core drilling program for completion in the coming months



**FIGURE 8: Warrior Project locations**



# SCONI

## NICKEL - COBALT - SCANDIUM PROJECT

<b>AREA</b>	6,300 Ha Mining Leases & Applications
<b>COMMODITY</b>	Nickel, Cobalt and Scandium
<b>HOLDING</b>	MLM 100%

During the June Quarter no significant project work was undertaken as project activities are on hold while joint venture partners are being sought.

The SCONI Ni-Co-Sc “Tri-metal” project (see Figure 9) is a unique project that requires strategic partners. This takes time and business confidence.

While to date several Pre-feasibility studies have been undertaken on the SCONI (previously named NORNICO) project there is considerable scope to enhance the Projects’ processing flowsheet and resulting economics through the addition of the following:

- Beneficiation studies to enhance nickel + / - cobalt and scandium grades
- Application of combining both Pressure Acid Leaching (PAL) and Atmospheric Acid Leaching (AAL) (previously only investigated singularly)
- Reviewing process flowsheet and testing latest laterite processing technologies
- Sourcing major plant and equipment from China and other lower cost manufacturing countries

The Company is in discussions with potential partners for the purpose of progressing SCONI Ni-Co and/or Scandium projects development.

For further information on SCONI and its Ni-Co-Sc resources see Metallica Minerals Annual Report ASX release 6 October 2014 pages 24-30.

### KEY PRIORITIES FOR THE SEPTEMBER QUARTER

- Continue negotiations for a Joint Venture partner on the SCONI Ni-Co-Sc Project
- Enter the national phase (including Australia, USA and other countries) of Metallica’s owned scandium processing and purification technology patent applications

- Launch the commercialisation of Metallica’s scandium intellectual property (IP) for the extraction of scandium and subsequent refining into high purity scandium oxide (99.99%  $\text{Sc}_2\text{O}_3$ ) using Metallica’s patented technology and approaching emerging and current scandium producers

To learn more about the SCONI project and scandium, see the 4 page summary – ‘A New Spice Metal to Enhance Industry & Life’ on the Metallica website.

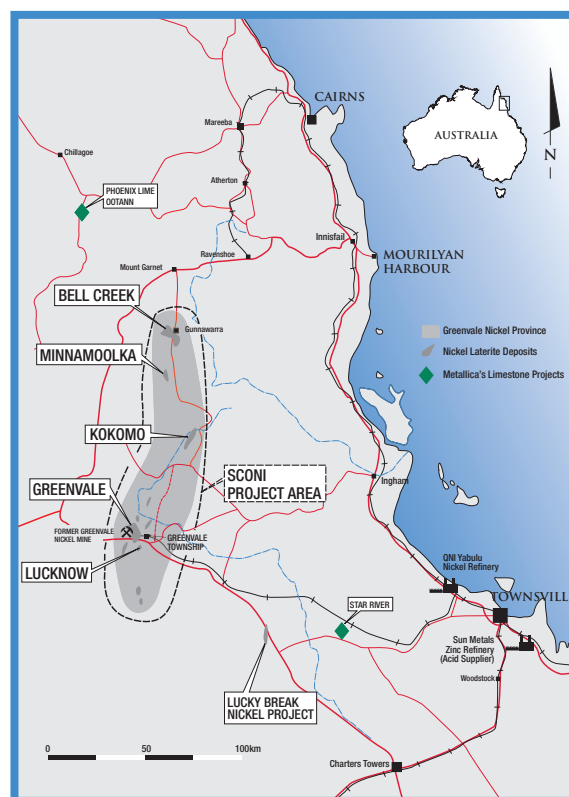


FIGURE 9: SCONI Project area

# LUCKY BREAK NICKEL PROJECT

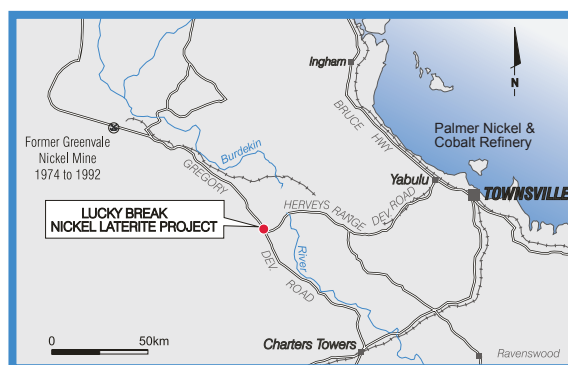
<b>COMMODITY</b>	Nickel and Cobalt Laterite
<b>HOLDING</b>	MLM 100% (subject to Royalty Agreement - see below)

On 12 January 2015, the Company entered into a Royalty Agreement with Queensland Nickel Pty Ltd (QN) to allow the mining and extraction of nickel laterite ore from the Company's Dingo Dam Mining Lease which makes up a part of the Lucky Break nickel project located 140km by road west of Townsville (see Figure 10).

QN has advised that it has completed mining operations at the Royalty Area having extracted over 100,000 tonnes of high grade nickel laterite ore and is now undertaking mine site remediation and rehabilitation work.

Under the Agreement, the removal of the 100,000 tonnes of ore triggers the following further payments (in addition to the \$250,000 already received on 12 January 2015):

- \$200,000 payment due in September 2015
- \$200,000 payment due in October 2015



**FIGURE 10: Lucky Break Project Area**



**QN mining nickel laterite ore on the Dingo Dam Nickel Project**

# CAPE FLATTERY

## SILICA SANDS PROJECTS

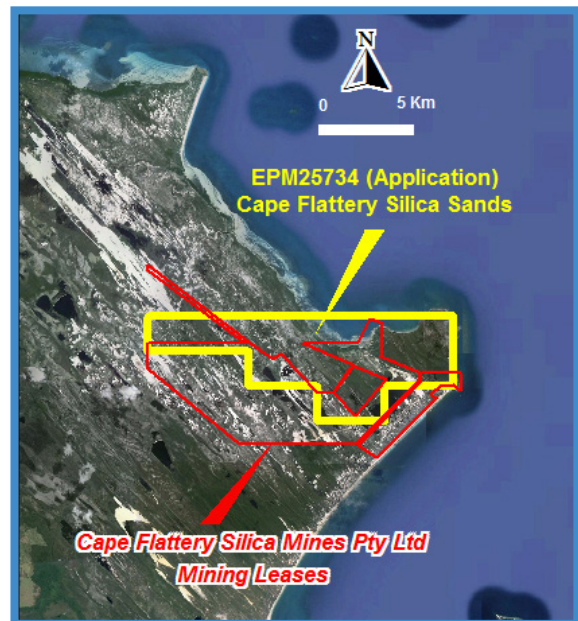
AREA	North of Cairns, North Queensland
COMMODITY	Silica Sand (for bulk export shipping)
HOLDING	MLM 100% (through subsidiary Oresome Australia Pty Ltd)



**FIGURE 11: Cape Flattery Project location**

The Cape Flattery EPM application is located approximately 200km north of Cairns in North Queensland (see Figure 11), and covers part of a large quaternary sand dune field, a section of which is currently being mined by Cape Flattery Silica Mines Pty Ltd (CFSM), a wholly owned subsidiary of Mitsubishi Corporation (see Figure 12).

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



**FIGURE 12: Cape Flattery EPMA & CFSM mining lease location**



# DISCLAIMER & COMPETENT PERSONS STATEMENTS

## QUARTERLY REPORT COMPETENT PERSONS STATEMENTS

The Technical information contained in this report has been compiled and/or supervised by Mr Andrew Gillies B.Sci (Geology) M.AusIMM (Director of Metallica Minerals Ltd) who is a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (M.AusIMM). Mr Gillies has relevant experience in the mineralisation, exploration results and Resources being reported on 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 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 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.



In late March QN commenced mining operations on Metallica's Dingo Dam nickel mining lease with first nickel ore trucked to the Palmer nickel cobalt refinery in April



#### 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



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