Quarterly Report

to 30 Sept 2014

ASX Release

31 October 2014

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

ASX:MLM

ISSUED CAPITAL (30/09/14)
166,891,830 Ordinary Shares
2,512,500 Options
16,266,660 Options Expired during the Quarter. *See Appendix 5B Lodged 21/10/2014 for more detail.*

SHAREHOLDERS (30/09/14)
2,077 shareholders

Top 20 shareholders hold 57%

LARGEST SHAREHOLDERS
Jien Mining Pty Ltd – 24%
Victorian Ferries Pty Ltd – 10.4%
Golden Breed Pty Ltd – 5.3%
Bondline Ltd – 2.9%

DIRECTORS
David K. Barwick
Non Exec Chairman
Andrew Gillies
Managing Director
Barry Casson
Non Exec Director
Shu Wu
Non Exec Director
Shu Zhang
Alternate Director to Dr Wu

SENIOR MANAGEMENT

John Haley
CFO & Company Secretary
Stewart Hagan
GM Oresome Australia

CASH BALANCE

As at 30/09/14, MLM's cash balance was approximately $2.58 million. No Debt. $580,000 Research and Development tax offset is expected by end of November 2014.

Project Highlights

URQUHART POINT & CAPE YORK HMS & BAUXITE PROJECT

100% MLM - OZORE PTY LTD EARNING 50%

The Cape York Heavy Mineral Sands (HMS) and Bauxite (Bx) project has been the focus of activities in the September Quarter.

- Joint Venture agreement signed for A$7.5M for the development of Urquhart Point HMS Project, and to progress the Cape York regional HMS and bauxite exploration. As at 30 October, $5M has been received with the additional $2.5M to be transferred when the Joint Venture Manager requests it. Ozore now holds a 33.33% interest as a result.
- FIRB approval received for the Joint Venture
- Consulmet Pty Ltd to Supply and Deliver HMS Process Plant (110 tpa) to Weipa under a fixed price turnkey Plant Supply Contract.

COMPANY HIGHLIGHTS

- Completed corporate raising of $500,000 from the issue of 6.25M shares at 8c per share through Taylor Collison, Sydney.
- Metallica sold it's remaining shareholding in MetroCoal Limited (ASX: MTE) on 29 September 2014. The shareholding was sold for $2.05 million making the Company a total profit of approximately $11 million since spinning off and listing its Surat Basin coal assets as a separate entity in 2009.
- Approaches have been made by established nickel companies for the direct shipping ore (DSO) nickel laterite from Lucky Break (and potentially SCONI) nickel deposits located 100km west of Townsville.
- Re-applied for exploration tenure covering graphite bearing granites 70km south of Croydon in North Queensland. The tenement area was held and drilled by Metallica in 2006 testing for Cu-Ni-Au bearing sulphide targets interpreted from large intense airborne and ground survey electromagnetic (EM) anomalies. No significant metal sulphide mineralisation was identified, however significant graphite within the granite hosted EM targets was observed, which explained the EM anomalies. Other than an obscure and curious geological presence it was not considered commercially important at the time and the tenements were relinquished. Metallica will seek to re-drill these areas to gain sufficient drill core samples for graphite quality and market analysis.
- Metallica has applied for a tenement at Cape Flattery approximately 220km North of Cairns) which covers known high purity silica sand deposits. The prospective areas adjoin an existing export silica sand operation (World's biggest) owned by Mitsubishi Corporation and has been exporting silica sand for at least 25 years and is the leading producer of silica sand for glass, foundry and chemical industries.

ABN: 45 076 696 092 | ☎ +61 7 3249 3000 | +61 7 3249 3001 | admin@metallicaminerals.com.au | ASX:MLM
www.metallicaminerals.com.au | 71 Lytton Road, East Brisbane QLD 4169 | GPO Box 122, Brisbane QLD 4001

2

HIGHLIGHTS
CORPORATE

Project expenditure by Metallica and administrative costs further reduced during the quarter as several staff and tenement costs have moved under the Oresome Ozore Joint Venture (JV).

Dr Shu Zhang has been appointed to the Metallica Board as Alternate Director to Dr Shu Wu. Dr Zhang is an engineer with over 40 years experience in the mining industry with a considerable amount of his time located in Australia. Dr Zhang has replaced Dr Tao Li as Jien Mining's representative.

SAFETY

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

FINANCIAL & INVESTMENT POSITION

Metallica had approximately $2.56M in cash (no debt other than trade creditors) as at 30 September 2014. This includes the sale of 64,300,000 shares in MetroCoal Limited (ASX:MTE) for $2.05M on 29 September 2014. Metallica had previously sold approximately 16M MTE shares for $9.6M in late 2011-early 2012. The remaining shareholding was sold for $2.05M making the Company a combined total profit of approximately $11M since spinning off and listing its Surat Basin coal assets as a separate entity in 2009. The investment in MTE has allowed Metallica to increase it's cash position and to further enhance the value of Metallica's project portfolio.

COST REDUCTIONS IN THE QUARTER

The Company continued to further reduce project and administrative costs during the quarter to conserve Metallica's cash position.

Expenditure on the Cape York HMS and bauxite Project is now a Joint Venture cost as Metallica is free-carried (to the extent of $7.5M) to production (expected mid 2015).

Metallica is continuing to pursue SCONI project Joint Venture funding, strategic partnerships, off-take arrangements and progressing the permitting on the Greenvale mining lease applications and environmental licenses on a low cost basis.

Cape York HMS & Bauxite JV Projects

Zircon-Rutile, HMS & Bauxite Projects

SCONI Project 100% Owned

Nickel-Cobalt & Scandium Project

3

OUTLOOK
FOR THE DECEMBER QUARTER

2014 has continued to be extremely difficult for both exploration and junior resource companies, Metallica's focus will be on development of Urquhart Point HMS Project for production by mid 2015 to gain cashflow and complete drilling programs on Urquhart Point bauxite and T16 HMS projects.

The Company will continue seeking potential strategic investors for the SCONI Ni-Co-Sc Project. Expenditure on the Company's projects will continue at low levels and on an as required basis until such time as further funding is secured and market conditions substantially improve.

There will be continued emphasis on gaining project partnerships for advancing our resource development projects.

There is potential to market our 100% Lucky Break nickel project (and potentially SCONI) for modest scale DSO nickel laterite production in the next 6 months.

On a commodity basis, we believe the start of 2015 will highlight the attractiveness for having considerable bauxite exposure, as unless there is a reverse of or major softening of the Indonesian bauxite export ban along with other unprocessed ores (such as nickel laterite) by the Indonesian Government there will be a massive shortfall in bauxite supply to China. This should be reflected in significantly rising bauxite prices as reliable bauxite supply is critical to Chinese alumina/ aluminium producers to maintain production.

The prospect of Indonesia reversing or loosening the export ban is considered unlikely. 2015 should be a very interesting year in the bauxite and nickel laterite DSO markets.

A local contractor's barge, traveling via the deep protected water shipping channel adjacent to the Urquhart Point mining lease, about to unload a drilling rig and other equipment on the beach at Urquhart Point. Similar barges can be used in the future for barging HMS concentrate and potentially bauxite for transshipment to a nearby ship.

4

CAPE YORK
HMS AND BAUXITE PROJECT JV

AREA	2,500km^2 exploration tenements (see Figure 1)
COMMODITY	Heavy Mineral Sands (zircon, rutile and ilmenite) and Bauxite
HOLDING	MLM 67% JV, with private Chinese investor, Ozore Pty Ltd 33% (earning 50%)

Four separate project components:-

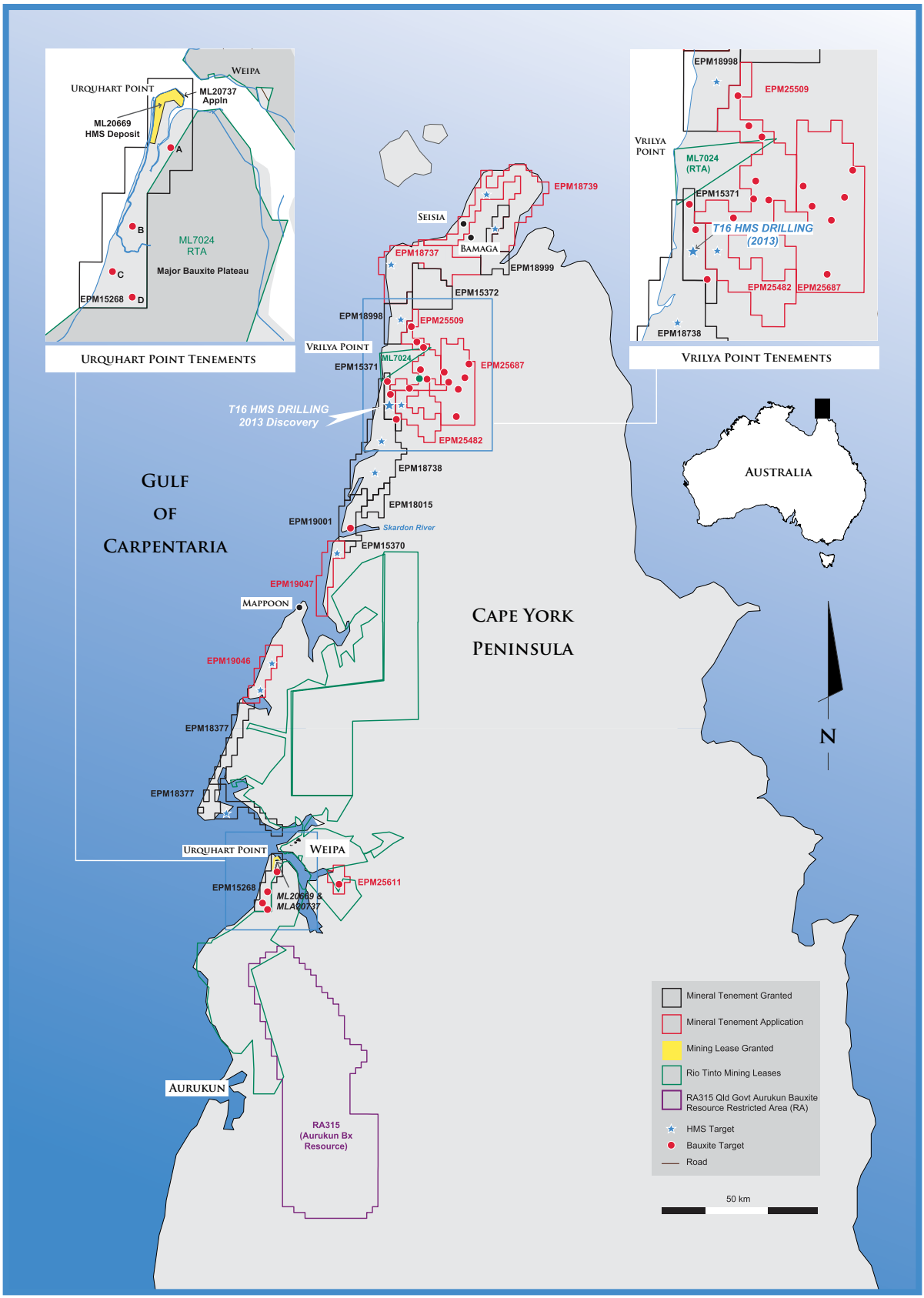
- **Urquhart Point HMS Project**
  Committed development for construction and production mid-2015
- **Urquhart Point Bauxite**
  Drilling to commence by early November. Potential for DSO bauxite
- **Major HMS & Exploration Upside**
  Drilling T16 deposit in November (potential to define HMS province)
- **Major Bauxite Exploration Upside**
  within the world class Weipa bauxite province

The Cape York Heavy Mineral Sands (HMS) and Bauxite (Bx) Project 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 earnt by a private Chinese investor, Ozore Pty Ltd, pursuant to the Cape York HMS and Bauxite Joint Venture (JV) entered into in August this year.

In accordance with the Joint Venture Agreement, Ozore is to provide A$7.5M (of which $5M has been received for a 33% interest) to develop the Urquhart Point HMS Project, and to explore for additional HMS and bauxite deposits within the JV tenements held within the Western Cape York region. The funds are sufficient to fully finance the construction and commissioning of the Urquhart Point Mineral Sands Project by mid next year.

Looking east above the Urquhart Point ML & proposed HMS mining area across the Embley River Weipa Port and Township.

FIGURE 1: CAPE YORK HMS AND BAUXITE JV PROJECT



6

URQUHART POINT JV

HMS DEVELOPMENT PROJECT & BAUXITE PROJECT

HMS DEVELOPMENT PROJECT

The Urquhart Point HMS Project is located 3km south west of Weipa (see Figure 1 & 2). The JV is planning on developing a simple dry mining (<3m depth) and wet sand mineral processing using standard gravity (spiral concentrators) HMS separation and concentration operation.

The mineral processing essentially involves the separation of the heavy minerals (>4 specific gravity (SG) density) including zircon-titanium minerals and iron oxide minerals of the sand which averages approximately 6-10% of the HMS reserve from the lighter (<3 SG) quartz and calcareous sands (i.e. normally averaging >90% HMS). No chemicals are required for HMS processing or HM concentration.

The HMS processing rate is now proposed to be approximately 110 tonnes per hour (~270,000 tonnes per year) to produce HM concentrate over a 4 year mining and processing life based on the current reserve. There has been an increase of approximately 10% for the plants design throughput by Consulmet engineers above the base case throughput of 100tphr rate used in the feasibility study, this is being undertaken at no increase in the fixed price contract to supply the plant.

The Joint Venture has executed a legally binding Supply Contract with Consulmet Pty Ltd ("Consulmet"). The plant supply contract is a fixed price turnkey contract (including fixed foreign exchange rate) to supply and deliver the plant and associated equipment to Weipa and for the commissioning the of the fully assembled HMS concentrator plant (and associated infrastructure) on site at Urquhart Point. The ordering of components and construction of the modularized plant has commenced in South Africa with planned delivery to Weipa in March/April 2015. The plant is expected to be commissioned in May/June 2015 with full scale HMS production commencing in June 2015.

Urquart Point auger drilled bauxite sample

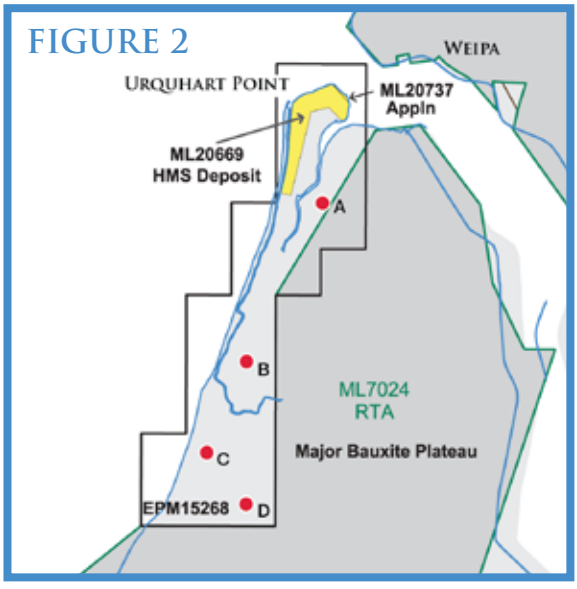
URQUHART POINT BAUXITE PROJECT

In late October the drilling program comprising over 70 holes (on a 320m x 320m spacing) will target the bauxite areas identified near the Company's Urquhart Point Mineral Sands Project. On the basis a bauxite resource of acceptable export quality is defined a mining lease will be applied for to allow simple mining and trucking to the Urquhart Point barge loading site.

The conceptual development plan is to define a deposit of Direct Shipping Ore (DSO) bauxite that can be trucked approximately 8-12km to a stockpile point within the Urquhart Point HMS mining lease near the shipping channel for barge loading on to a ship moored less than 1km distance in protected deep waters of the Embley River/Weipa port. Desktop studies are planned to be completed during the December Quarter.

Bauxite demand from present and for at least the next few years is expected to be very high, this should be reflected in rising bauxite prices to levels well above the average bauxite price in recent years. The export opportunity will be selling bauxite to Chinese alumina companies and also traders now that approximately three quarters of China's imported bauxite supply has been taken out of the market due to Indonesia's export ban. The general market consensus, including Metallica's view, is that it is considered unlikely that Indonesia will overturn or relax the export ban decision in any significant way.

FIGURE 2



7

CAPE YORK
REGIONAL HMS & BAUXITE EXPLORATION JV

CAPE YORK REGIONAL HMS EXPLORATION

Due to the Company's focus on the Urquhart Point HMS Project, limited work was undertaken on regional HMS exploration, including the T16 HMS deposit (discovered October 2013) 160km north of Urquhart Point and Weipa.

Field work will commence by mid November, primarily a grid drilling program (approximately 300 holes) focusing on further defining and expanding the extent of HM mineralisation at T16, see Figure 1.

For further information as ASX Releases dated 11 July 2014 and 22 January 2014.

The T16 project is located within EPM 15371 located immediately south of Vrilya Point and is the first regional tenement to be explored and just one of the 20 tenements held 100% by the Company. The drilled area (of which all 35 holes intersected significant HMS mineralisation) is only a small portion of the T16 target area and this in turn, is only a small portion of the regional HMS prospective zone. In essence, there is excellent potential for additional and potentially major HMS discoveries.

Based on the initial October 2013 drilling, the heavy mineral assemblage at T16, and indicative of the larger exploration area, is very attractive and the zircon and Ti Minerals are of high quality. The T16 mineral assemblage averaged 49% valuable HM (VHM) of which 33% was zircon.

The T16 region is a very small part of the extensive exploration permits and applications covering approximately 2,500km^2 of mostly contiguous ground prospective for mineral sands and bauxite on west coastal areas of Cape York Peninsular, see Figure 1.

For further information see ASX Releases dated 22 January 2014 and 11 July 2014.

***Exploration Target**

The potential quantity and grade of the HMS & bauxite deposits are conceptual in nature. There is insufficient information at this time to define a mineral resource and there is no certainty that further exploration will result in the determination of a mineral resource in these areas.

CAPE YORK REGIONAL BAUXITE EXPLORATION

The Joint Venture has completed a detailed review of its extensive Cape York tenement portfolio with the view to ascertaining its potential to host significant bauxite deposits in addition to the highly prospective Heavy Mineral Sands Exploration Targets*.

Significant areas of coastal bauxite were identified, particularly around Urquhart Point (see Urquhart Point Bauxite Project) and in the Vrilya area (see Figure 1).

The target areas south and east of Vrilya Point (~160km North of Weipa) on EPM15371 and EPM25509 respectfully, are characterised by low lying, partly dissected and undulating laterite plateaus.

Recent data compilation and desk-top studies have outlined eight prospective plateau zones within the Oresome tenements where previous exploration drilling encountered bauxite intervals grading in excess of 40% Al_2O_3 (alumina).

The Vrilya East tenement (EPMA 25687) includes a 210km^2 area of dissected aluminous laterite plateaus portions upon which previous company exploration reconnaissance was completed in the 1970s & 1980s.

Initial combined bauxite Exploration Target* across all Metallica's Regional Cape York tenements is in the range of 42Mt -128Mt (see Table on page 25) *For further information see ASX Release dated 11 July 2014.*

Metallica believes the fundamentals and outlook for bauxite is excellent, especially given the Indonesian export ban (the major bauxite supplier to China) and Indian bauxite export tax increases – see page 11 for further information on bauxite markets.

The bauxite exploration potential is of such magnitude that Metallica has adopted an all-encompassing dual HMS - bauxite project exploration focus and strategy for Western Cape York, Queensland.

8

DECEMBER QUARTER
PRIORITIES AND PLANS

REGIONAL EXPLORATION PLANS FOR THE DECEMBER QUARTER

The Joint Venture plans to continue exploration of its extensive regional tenements along the 300km sandy coastal belt (strandlines typically against coastal or inland bauxite plateaus) between Weipa and the tip of Cape York Peninsula. This work will initially be focused on grid drilling (approximately 70 holes) the Urquhart Point bauxite targets and grid drilling (in order of 300 shallow holes) at the T16 HMS deposit (discovered late 2013).

Exploration work will focus on the recently discovered zircon rich T16 HMS deposit and nearby bauxite plateau targets. Initial evaluations will also continue on at least 10 untested radiometric targets already identified within strandlines, sand dunes and inland sand formations.

These features are not known to have been previously investigated for HMS accumulations and there is considered very good potential for extensive HMS mineralisation.

Many of the Joint Venture tenements also contain bauxite. These bauxite areas will also be evaluated to establish the bauxite quality and extent, starting on well defined target Area A and Area B (see Figure 2, page 6) in the Urquhart Point tenement and immediately east and north of the T16 HMS project in the Vrilya area (see Figure 1).

KEY PRIORITIES

- Survey and prepare site layout at Urquhart Point HMS Project
- Monitor progress of the processing plant construction by Consulmet
- Grid drill Urquhart Point bauxite project and the T16 HMS deposit
- Develop conceptual exploration and development plan (subject to appropriate permitting) to identify other accessible DSO (Direct Shipping Ore) bauxite deposits that could be simply mined, screened and trucked to a barge-ship operation, such as already being planned for development on the Urquhart Point HMS project.

Large Vrilya East tenement area covering extensive bauxite laterite plateaus

9

OUR COMMODITY FOCUS, MARKET & USES

WHAT IS ZIRCON & RUTILE

Mineral sands are found along ancient shorelines (strandlines). Mineral sands are mined and processed using gravity separation to produce Heavy Mineral Concentrate (HMC). HMC is further processed at a mineral separation plant to produce two main products, zircon and rutile, ilmenite (for titanium dioxide products).

INTRODUCTION TO TITANIUM

Titanium (Ti) is created through a number of different processes to create a titanium dioxide (TiO) pigment, titanium sponge or titanium metal.

Titanium dioxide is pure white, highly refractive, and can absorb ultraviolet light. For these reasons it is highly sought after as a pigment in paints, paper, plastics, rubber and other materials.

Titanium dioxide is non-toxic, non-fibrogenic and biologically inert so it can be used in cosmetics, foodstuffs and pharmaceuticals.

Titanium metal has a particularly high strength to weight ratio and is highly resistant to corrosion. For these reasons it can be used in a range of aeronautical and surgical applications, sporting equipment and jewellery.

INTRODUCTION TO ZIRCON

Zircon ($ZrSiO_4$) is a principal heavy mineral sand that has a wide range of industrial uses. Consumption is dominated by the use of milled zircon powder.

Zircon is a hard, glassy mineral used for the manufacture of ceramics and refractories and also in a range of other high-tech industrial and chemical applications.

It is used extensively for ceramic glazes, most commonly applied in kitchen tiles, dinner-ware, bathroom products and decorative ceramics. Zirconium metal has a very high melting point and has applications in nuclear fuel rods and other alloys.

Over half of the demand for zircon comes from the ceramics industry, with housing tiles a key driver of overall demand.

There is a strong correlation between global economic growth rates and zircon demand.

Zircon demand has increased along with the progressive industrialisation of emerging economies such as China and India.

Industrial ceramics made using zircon are used for heat and abrasion resistance. Some industrial ceramics are referred to as refractories - materials that retain their physical shape and chemical composition when subjected to very high temperatures.

With a melting point of around 1,800°C, refractories are used as linings to protect furnaces and kilns for smelting metals and for the manufacture of chemicals.

Resistance to corrosion makes zircon products ideal for use in the chemical industry and in desalination plants.

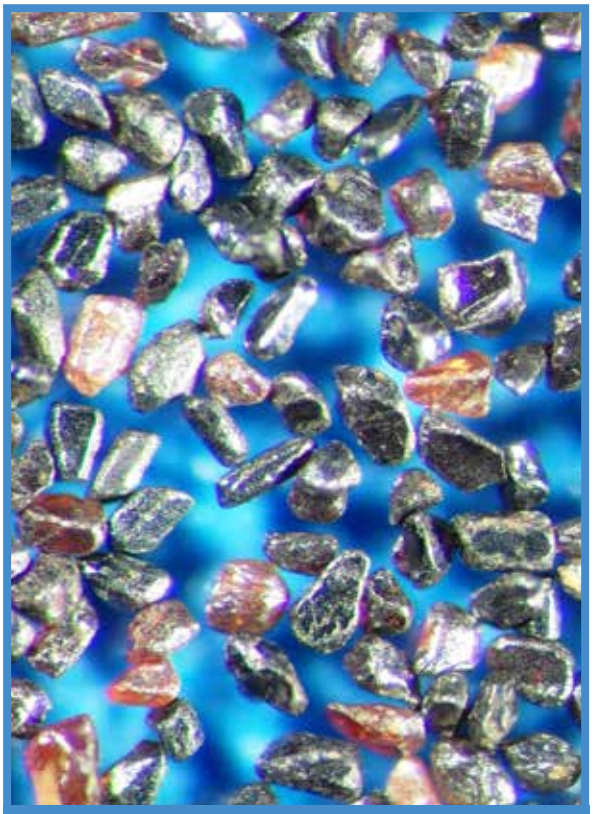
One of the early discoveries for zircon use was for the manufacture of phosphates for kidney dialysis. Zircon compounds have a low toxicity and are now increasingly preferred in the manufacture of some foodstuffs, pharmaceuticals and medicines.

WHAT IS RUTILE

Rutile (TiO_2) is a titanium mineral and is used to manufacture titanium dioxide pigment. Pure white, highly refractive and ultra-violet absorbing, titanium dioxide is used in protective coatings such as house and car paints, sunscreens, plastics, paper, and textiles.

Amongst a range of other uses, rutile and synthetic rutile can be used to make titanium metal, which is essential to the aerospace industry because of its lightness, strength and durability. Titanium metal is also used in desalination plants and corrosive chemical industries, because of its inertness and resistance to corrosion. Its non-reactive properties make titanium metal one of the few materials that can be used in the human body as hip replacements and pacemakers.

Rutile and leucoxene are further used as a flux material in welding electrodes for shipbuilding and civil engineering.



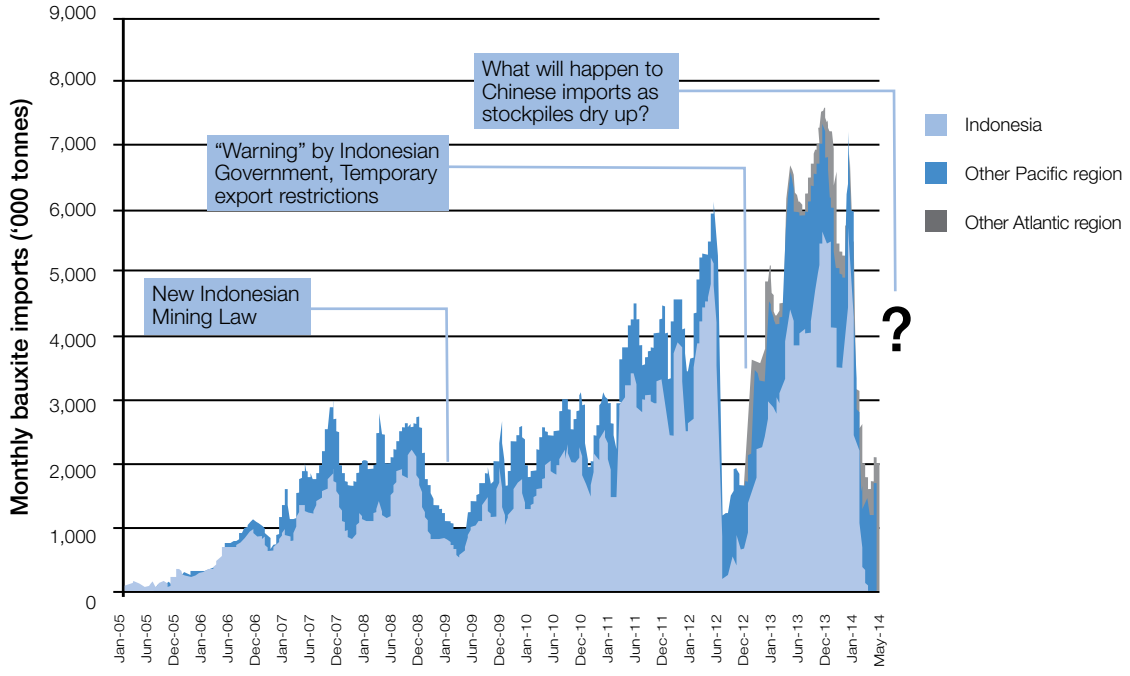
Microscope view of Urquhart Point rutile sand

Microscope view of Urquhart Point zircon sand

The Urquhart Point Project will produce a HM concentrate containing high quality zircon and rutile mineral sands

Urquhart Point Area B high grade hand auger pisolitic bauxite sample

FIGURE 3: CHINESE BAUXITE IMPORTS BY ORIGIN
(MONTHLY JANUARY 2005 - MAY 2014)



Indonesian bauxite supply to China collapsed after 12 January 2014 export bans

Source: CRU Insight 23 July 2014, CRU International Pty Ltd

OUR COMMODITY FOCUS, MARKET & USES

WHAT IS BAUXITE

Bauxite is the principle aluminium ore, and the world's main source of aluminium. Lateritic bauxites (silicate bauxites) are formed by extreme lateritic weathering and residual accumulation. The lateritic bauxites are found mostly in the countries of the tropics. They were formed by laterisation of various aluminous silicate rocks such as shale, basalt, granite, gneiss etc.

In comparison with the iron-rich laterites, the formation of bauxites depends even more on intense weathering conditions in a location with very good drainage. This enables dissolution of kaolinite and precipitation of aluminium hydroxide minerals such as gibbsite. Zones with highest aluminium content are frequently located below a ferruginous surface layer.

In 2009, Australia was the top producer of bauxite (predominantly used by domestic alumina plants) with almost one-third of the world's production, followed by China (generally of lower grade and for domestic use only), Brazil, India, Indonesia and Guinea.

CURRENT SEABORNE BAUXITE MARKET

Early in 2014, the Indonesian Government confirmed its unprocessed minerals export ban, including bauxite exports. The Government legislated to restrict bauxite exports from Indonesia and reinforced that laws encouraging down-stream processing in Indonesia would remain in place. Indonesia was at that point, China's major external provider of bauxite.

Indonesia's unprocessed minerals export ban is not temporary. China's dependency on Indonesian bauxite for approximately three quarters of its import requirements has finally come to an end (CRU July 2014) as graphically shown in Figure 3.

Alternative suppliers have to come on stream and there are great opportunities for the right projects, particularly in Australia. Existing third party bauxite capacity is not sufficient to fill the void left by Indonesia and new projects need to come on stream soon.

China is the World's largest alumina producer and consumer, but is short in bauxite, which is being consumed at an ever-increasing rate. As a result, bauxite demand and prices are increasingly based on the continuing growth of the Chinese market and China is looking for a reliable, alternative, long-term supply of high-quality bauxite. Australia logistically is well placed to supply this demand.

Aluminium is now a more competitively priced metal than ever before and its consumption is rising faster than other metals. China has insufficient domestic bauxite to feed its burgeoning aluminium industry and imports approximately 40% of its bauxite, mainly from Indonesia, Australia and India. Some bauxite is being imported from Guinea in West Africa, costing US$90/t (imported to China) – a clear indication of market stress about security of supply.

Cape York's proximity to China means Australia provides a logistical advantage over many other alternative supply sources and therefore positions Metallica to take advantage of any increase in demand for Australian bauxite. Bauxite demand is intensifying due to a perfect storm of simultaneous reduction in bauxite supply from Indonesia, India and China and increased demand for alumina to supply the rapidly rising aluminium production and consumption in these markets.

SCONI PROJECT

NICKEL - COBALT - SCANDIUM

> TRI-METAL Ni-Co-Sc PROJECT
> TECHNOLOGY TO PRODUCE HIGH PURITY SCANDIA
> GREENVALE NICKEL REGION, NORTH QUEENSLAND

AREA	6,300 Ha Mining Leases & Applications (see Figure 4)
COMMODITY	Nickel, Cobalt and Scandium
HOLDING	MLM 100%

During the September Quarter no significant project work was undertaken as project activities are effectively on hold while joint venture partners and additional funding is being sought.

The SCONI Ni-Co-Sc "Tri-metal" project is a unique project that requires strategic partners to fully implement a new and exciting critical metals market – scandium. This takes time and business confidence.

The SCONI Project has significant Ni-Co-Sc resources in the Greenvale nickel province north-west of Townsville.

SCONI's Environmental Impact Assessment (EIS) studies are well advanced for the Greenvale Mining Lease application area but currently on hold. SCONI related exploration tenements have been rationalized and minimised, focusing on existing nickel-cobalt and scandium resources at Bell Creek, Minnamoolka, Kokomo, Lucknow, and Greenvale (still in ML application) being secured within mining leases for future development.

The Company seeks to secure and enhance shareholder value through continued efforts to complete necessary permitting for the Greenvale mining lease and to develop important relationships with interested parties for Ni-Co and Sc offtake and project participation.

Fundamentals and outlook in the nickel market have been enhanced, resulting from the recent Indonesian nickel laterite export ban, a major supplier to China's nickel industry (particularly nickel pig iron). SCONI will be marketed as a nickel-cobalt & scandium tri-metal project to established nickel companies who seek major benefits in having a long life project in an excellent location in a relatively low risk country.

The Company is seeking partners for either a SCONI Ni-Co-Sc and/or a SCONI Scandium project 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.*

SCANDIUM MARKETING

Metallica has continued but with reduced scandium marketing as the size and growth of the potential global scandium market and opportunity cannot be underestimated. The two key focus sectors of our scandium marketing have been Solid Oxide Fuel Cells (SOFCs) and Aluminium Alloy industries.

Activity on SCONI is focused on entering into additional binding off-take agreements and/or strategic alliances with world leaders in SOFC and aluminium alloy developers and end users. Until further off-take agreements and project funding (via partnerships or joint venture) are entered into, minimum project activity is occurring.

>99.9% purity scandia (scandium oxide) produced from pilot plant testwork 2012 on SCONI ore

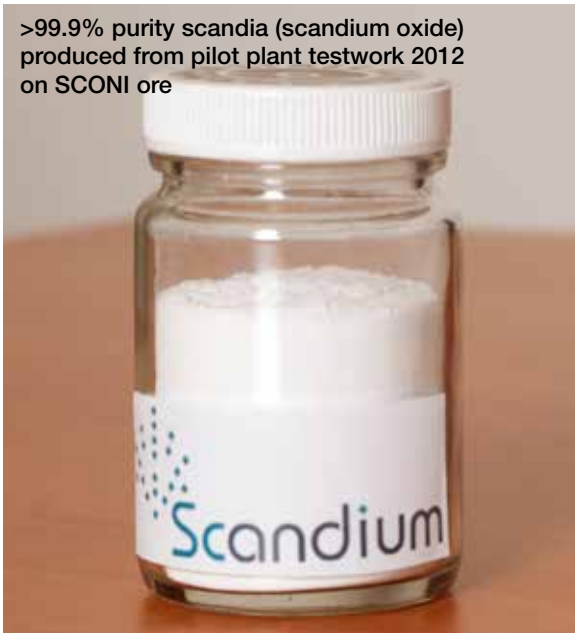
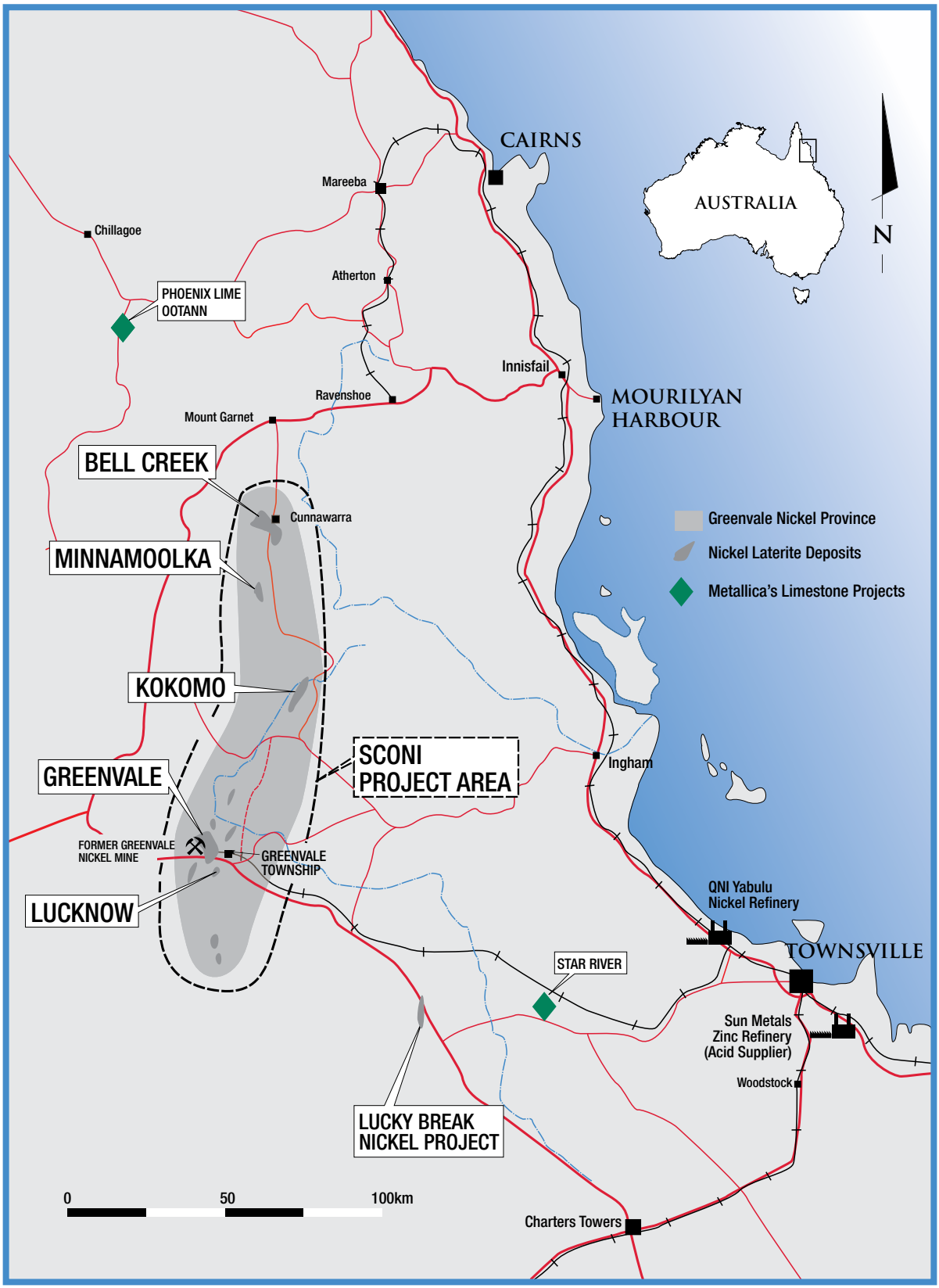


FIGURE 4: SCONI PROJECT REGIONAL SETTING



ABOUT SCANDIUM

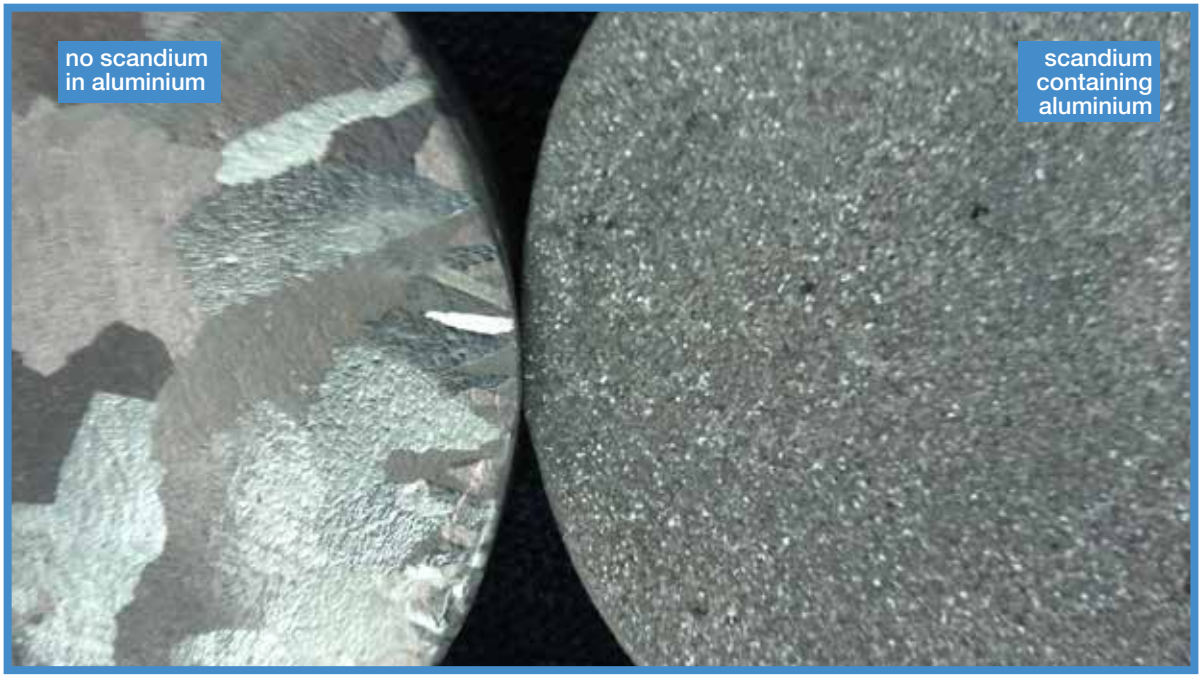
Scandium (Sc - Element 21 of the periodic table) is one of the 17 rare earth elements (REEs) and one of the most useful and valuable. High-grade, large tonnage, easily mineable scandium deposits with favourable metallurgy and location are scarce, making it a commodity that is difficult to obtain in commercial quantities.

Among other benefits, scandium has unique properties that can enhance the world's technological future. Scandium is one of the most potent strengthening elements that can be alloyed with aluminium to create stronger master alloys with applications in;

- Aerospace (and possibly in automobiles and transport generally) – seeking better range and fuel efficiency without compromising performance; High performance sporting equipment; and Additive Layer Manufacturing (ALM or 3D printing) of complex metal shapes.
- Scandium-strengthened aluminium alloys produce lighter-weight, higher-strength components and structures with superior weldability, better thermal and corrosion resistance and greater durability.
- Scandium is used in the production of SOFCs by companies such as Bloom Energy. As the western world transitions towards green energy, SOFCs will become more widely used, providing clean and efficient energy that is driven by the massive worldwide expansion of natural gas usage and distribution infrastructure.
- Scandium is used in SOFCs to enhance the efficiency of the zirconia electrolyte for generating electricity and recoverable heat through an electro-chemical process that converts fuel (typically natural gas, methane) and air (oxygen 20%) into electricity and heat without combustion, noise or moving parts. Scandium stabilised zirconia electrolyte provides very high ionic conductivity and efficiency which is not readily achievable with other elements.

The use of scandium has been limited by its scarcity of occurring in commercial concentrations and lack of reliable supply. The current total world supply of scandium is estimated to be around 10-15 tonnes of scandium oxide per annum, all of which is sourced as a minor by-product from other metals and industrial processes. High purity scandium oxide currently sells at prices in excess of US$2,000/kg depending on product quantity and purity. However, as evidenced by the Company's Heads of Agreement with Bloom Energy (late 2012) and interest from Al Alloy manufacturers and end users, the potential market for scandium is poised for a step change in demand.

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.



Scandium is a potent aluminium grain refiner, allowing for smaller equigranular crystallisation which enhances strength and weldability

TWO NEW PROJECTS IN METALLICA'S PORTFOLIO

> WARRIOR GRAPHITE EXPLORATION PROJECT SOUTH OF CROYDON
> THE CAPE FLATTERY SILICA SANDS PROJECT NORTH OF CAIRNS

WARRIOR GRAPHITE PROJECT

On 1 October Metallica re-applied for exploration tenure with EPMA 25779 and 25806 covering graphite bearing granites 70km south of Croydon in North Queensland (see Figure 5). The tenement area was held and drilled by Metallica in 2006 testing for Cu-Ni-Au bearing sulphide targets interpreted from large intense airborne and ground survey electromagnetic (EM) anomalies.

From the drilling, no significant metal sulphide mineralisation identified, however significant graphite within the granite source of the EM targets was observed (which clearly explained the EM anomalies) which, other than the graphite being an obscure and curious geological presence it was not considered commercially important at the time and the tenements were relinquished. Metallica will expeditiously seek to re-drill these areas to gain sufficient drill core samples for graphite quality and market analysis.

The Croydon Gold Fields are considered to be within the same geological unit and are located 70km to the north where the Mid Proterozoic outcrop. The Esmeralda Granite is unique in that it contains unusually high amounts of graphite. Historically these have been referred to as 'belts of graphitic granite'.

As Mesozoic and Cenozoic cover masks a large part of the Esmeralda Granite, little information exists to its overall shape.

Work needs to be completed to determine the mineralogy and metallurgy of the graphite and Metallica is proposing to twin previous drill holes with core drilling to provide fresh rock samples for graphite quality and market analysis.

In 1988, the JV between Golden Plateau NL and Strategic Minerals Corp NL reported exploration within EPM 4853 "Prospect Bore Project". Three holes, PB16, PB17 & PB18 targeting magnetic highs within an east west structure intersected graphitic granite breccia with graphite percentages up to 30%.

This east west structure was also tested by MLM previously within EPM 14406 "Prospect". Whilst targeting a large and strong EM conductor, MLM intersected graphitic granite and re-interpretation of this structure suggests it has a strike length between 3km and 4km.

Graphite Breccia appears to be an excellent EM conductor which could make exploration targeting more efficient with additional ground EM useful in locating additional drilling targets.

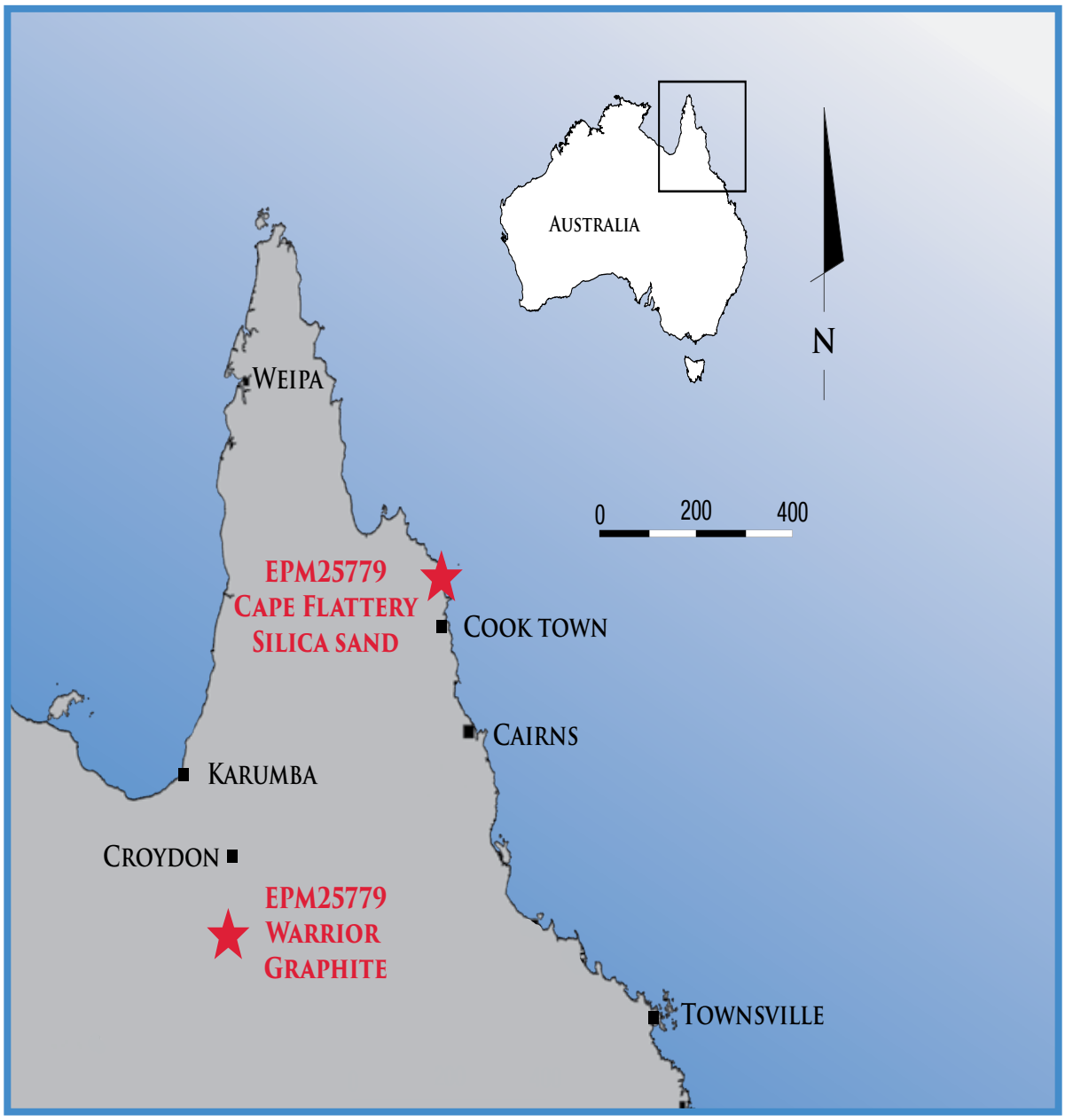
In addition to the graphite targets within EMPA 25779, serendipitous opportunities are likely to exist due to the paucity of geological information currently available, there is scope for additional potential mineralisation styles to be investigated such as;

- PGE's and nickel sulphides (as originally explored for by Metallica) associated with the identified layered gabbros
- REE's associated with carbonatites that could exist based on well-known fluorine anomaly in the region
- Diamond exploration potential associated with magnetics targets with similar attributes to Kimberlites
- Gold in intrusion related mineralisation associated with the known granite hosted gold mineralisation as there is around Croydon

CAPE FLATTERY SILICA SAND PROJECT

In the September Quarter, Metallica has applied for tenement EPM 25734 at Cape Flattery (approximately 220km north of Cairns - see Figure 5) which covers known high purity silica sand deposits. The prospective areas adjoin an existing export silica sand operation (World's biggest) owned by Mitsubishi Corporation and has been exporting silica sand since for at 25 years and is the leading producer of silica sand for glass, foundry and chemical industries.

FIGURE 5: WARRIOR (GRAPHITE) & CAPE FLATTERY (SILICA SAND) PROJECTS



DISCLAIMERS
& COMPETENT PERSONS STATEMENTS

COMPETENT PERSONS STATEMENTS

Technical information and exploration results contained in this report have been compiled by Metallica Minerals Ltd's full time employee Andrew Gillies B.Sc MAusIMM in the position of Managing Director.

Mr Gillies has sufficient experience that is relevant to the style of mineralisation being reported on to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Minerals Resources and Ore Reserves. Mr Gillies consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

CAUTION REGARDING FORWARD LOOKING STATEMENTS

Certain statements made in this report 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.

CAPE YORK JV - REGIONAL BAUXITE EXPLORATION TARGETS

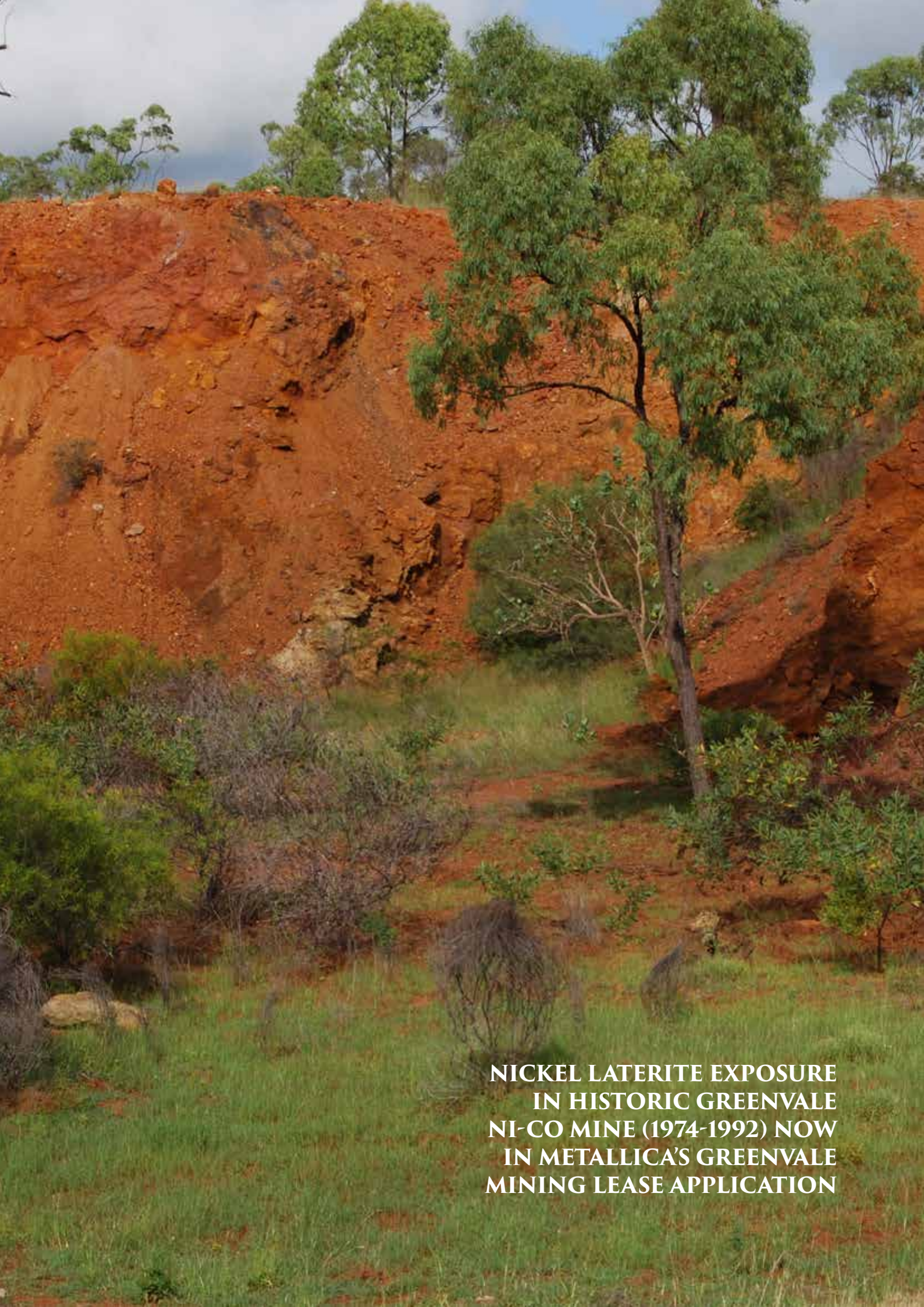
Project	Permit	Discrete Targets	Insitu mineralisation tonnage range Mt[2]	Total Al_2O_3 %[3]	Total SiO_2 %[3]
Urquhart Point	EPM15268	2	5 to 10	43-55	5-18
Vrilya	EPM15371	3	2 to 6	40-47	insufficient data[1]
Vrilya	EPMA25509	7	12 to 36	40-48	10-191
Vrilya East	EPMA25687	3	28 to 86	40-43	insufficient data[1]
	TOTAL	**15**	**47 to 138**		

[1] previous exploration reports SiO_2 data incomplete
[2] range based on measured areas of target plateaus, minimum thickness of >0.5m bauxite, estimated average thickness of 1.5m from previous exploration data and bulk density value of 1.5
[3] based on screened sample assay results

***EXPLORATION TARGET**
The potential quantity and grade of the bauxite deposits are conceptual in nature. There is insufficient information at this time to define a mineral resource and there is no certainty that further exploration will result in the determination of a mineral resource in these areas.

COMPETENT PERSONS STATEMENT - BAUXITE EXPLORATION PROJECT
The Technical information contained in this report has been compiled and/or supervised by Mr Andrew Gillies B.Sci (Geology) M.AusIMM (Managing 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, Exploration Targets and Resources estimates 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.

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 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.



NICKEL LATERITE EXPOSURE IN HISTORIC GREENVALE NI-CO MINE (1974-1992) NOW IN METALLICA'S GREENVALE MINING LEASE APPLICATION

SUBSIDIARY COMPANIES

NORNICO Pty Ltd ACN 065 384 045
Oresome Australia Pty Ltd ACN 071 762 484
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

METALLICA MINERALS LTD

METALLICAMINERALS.COM.AU