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Crusader Finalises Lithium Agreement with Lepidico

Highlights

- Crusader Resources and Lepidico Ltd sign Shareholders Agreement to establish Third Element Metals Pty Ltd. ("Third Element Metals" or the "JV Company")
- As per the MOU announced 3 February 2016, the JV Company is to be established for the purposes of:
  - exploring for lithium and other minerals on the Manga Lithium Project and any other tenements acquired by the JV Company in Brazil and other agreed jurisdictions ("Territory");
  - mining and processing minerals extracted from tenements in the Territory using the L-Max® technology, to which the JV Company will hold exclusive rights in the Territory; and
  - sub-licensing the L-Max Technology to third parties for use in the Territory
- Reconnaissance mapping and sampling program over Manga completed- results expected in 2 weeks

Brazil-focused resource development company Crusader Resources (ASX: CAS) ("Crusader" or "the Company") is pleased to advise the Company has signed a joint-venture Shareholders Agreement and finalised the terms of associated documentation with Lepidico Ltd ("Lepidico"). The new company, to be known as Third Element Metals, is aiming to become a producer of the third element in the periodic table, namely lithium, with an immediate focus on Brazil.

Under the agreement, which follows on from signing of the Memorandum of Understanding (please refer to ASX announcement dated 3 February 2016), the shareholders have agreed to establish a 50:50 strategic joint venture ("JV Company") to explore for and develop lithium resources in the Territory.

Third Element Metals will have exclusive rights to use the L-Max® technology, a patented technology to extract lithium from mica ores within the Territory. The company intends to develop and hold a portfolio of lithium projects and or royalty interests from sub-licencing the technology in addition to deploying it to Crusader's Manga prospect.

Crusader's Executive Director Paul Stephen commented:

"The signing of the Shareholders Agreement is a critical step in formalising our strategic relationship with Lepidico.

"While Crusader's main focus will remain on its gold and iron ore assets, specifically the development of the Juruena Gold project, the Shareholders Agreement cements our partnership with Lepidico, provides the company with exclusive rights to the L-Max® technology in Brazil and allows the advancement of the Manga Lithium Project through the new company structure.

Crusader is excited to be to working with Lepidico as part of this collaboration and we look forward to their support in making Third Element Metals a success."

Lepidico's Executive Chairman Gary Johnson commented:

"We are very excited at the opportunity that presents itself with Third Element Metals. The ability for Lepidico and Crusader to reach agreement on commercial terms shortly after the finalisation of the MOU is a testament to the strong working relationship which the two companies have already established.

"Lepidico looks forward to receiving its first sample of lithium micas from the Manga Project to conduct initial testwork on developing the L-Max® process for the Manga Project."

Joint Venture Company

Third Element Metals will be based at Crusader's registered office in Perth, Western Australia, and will conduct business on normal commercial terms and conditions.

The primary assets of the JV Company will be:

(i) The Manga Lithium Project

(ii) All other lithium projects as identified, licensed and/or acquired within the Territory post 3 February 2016; and

(iii) An exclusive licence of L-Max® for any new projects in the Territory.

The JV Company will be responsible for all holding costs (including mines department, environment, taxes, rent and work fees) for the Manga and other lithium projects in the Territory.

Work on collecting samples from Manga has already begun with results from a reconnaissance mapping program at Manga due in the next 2 weeks. The historic drill chips from Manga have been found and re-logging and sampling is underway.

Lepidico and the L-Max technology

Lepidico is the sole owner and licensor of the L-Max technology, a metallurgical process that has the potential to commercially extract lithium and other by-products from unconventional sources at a competitive price.

Under the agreement, Lepidico will also grant licenses of any other technology it develops, which may be applied to the extraction of lithium to Third Element Metals. This includes technology relating to the extraction of lithium from lithium bearing phosphate minerals, such as amblygonite.

Lepidico developed its L-Max technology for the recovery of lithium from lithium bearing micas including lepidolite and zinnwaldite. The process also produces a range of valuable by-products including potassium sulfate (SOP), a fertilizer for application in the agricultural sector.

Manga Lithium (Sn In) Project – Goias State, Brazil (100% Crusader)

The Manga Li Project (previously explored for tin and indium) is located in the NE of Goias state, Central Brazil. Crusader first applied for the ground when exploring for tin, indium and gold mineralisation in the region during 2007 and later mapped, soil sampled, rock chipped and drilled 15 reverse circulation holes (for 1,001m. See Figure 1).

Crusader has recently conducted a reconnaissance field trip to the area and collected a number of new rock chips. During this trip, the historic RC drill chips (previously thought lost) were found and re-logging and sampling of these are underway.

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Drill results for the targeted tin and indium were modest, with better results including:
(Note that lithium was not directly tested in the drilling -nor the soil sampling program)

32m @ 670 ppm Sn and 8.4ppm In from 34m in MNRC011
27m @ 577ppm Sn and 8.6ppm In from 55m in MNRC010
2m@ 2,025ppm Sn and 20ppm In from 10m in MNRC012

(Please see the ASX Announcement from 17 September 2008 for a full list of drill results – available on Crusader website.)

The previous rock-chip program conducted by Crusader was assayed for multi-elements and includes some significant Li_20 results. Li_2O grades of up to 1.3% were returned, within a zinnwaldite-rich greisen zone, proximal to the anomalous tin and indium bearing greisen. The rock chip-sampling program was undertaken targeting tin and indium and returned results up to 5% tin and 750ppm indium, noting that the tin and indium mineralisation was hosted in a different greisenised zone from the proximal zinnwaldite-rich and Li-rich muscovite greisen zones.

Crusader has recently submitted a new batch of rock-chip samples from Manga after a reconnaissance field program was completed. Results are expected within a couple of weeks and along with the RC drill chips from the 2007 campaign, (which were located during the reconnaissance and are now being re-logged), will help fast-track the exploration program at Manga.

Geological technical data reviews[1] were undertaken and these described samples of zinnwaldite greisen and a li-rich muscovite greisen from Manga with results of up to 1.8% Li_2O (Manga is also referred to as 'Mangabeiras or Mangabeiras Massif' see Botelho & Moura 1998 and Moura 1993- references below). These academic papers also refer to specific analysis of the zinnwaldite and the li-rich muscovite minerals (referred to as Li-phengite), with multiple analyses done on different mineral grains (from different rock samples). Results returned between 2.04% and 3.56% Li_2O for the zinnwaldite and 1.55% and 2.32% Li_2O for the Li-muscovite.

The literature also compares the geological setting and mineralisation style at Manga to the world-class Cinovec Sn, W, Li project in the Czech Republic, a project that has been mined for hundreds of years and is now being appraised for its lithium potential by fellow Australian listed explorer, European Metals (ASX:EMH).

Crusader has mapped various greisens in the area over an extensive region and drilling intersected different greisen facies. The soil sampling that was completed in 2007 was analysed with a hand-held XRF, which did not have the capacity to analyse the lithium content directly. Crusader has however, leveraging the technical experience of Lepidico, been able to use the historic XRF data to better understand the chemistry of the lithium mineralisation (based on Cinovec mineralisation style) and has been able to highlight exploration targets using certain other pathfinder elements, which are often associated with lithium mineralisation.

[1] Botelho N. F. & Moura M. A, Granite-ore deposit relationships in Central Brazil. Journal of South American Earth Sciences, Vol. 11, No 5, pp. 427-438, 1998
Moura M. A, A Zona greisenizada procipal do Macico estanifero Manga Beira (GO); Geologia, petrologia e ocorrencia de Indio (In). Dissertacao de Mestrado, Universidade de Brasilia, 1993

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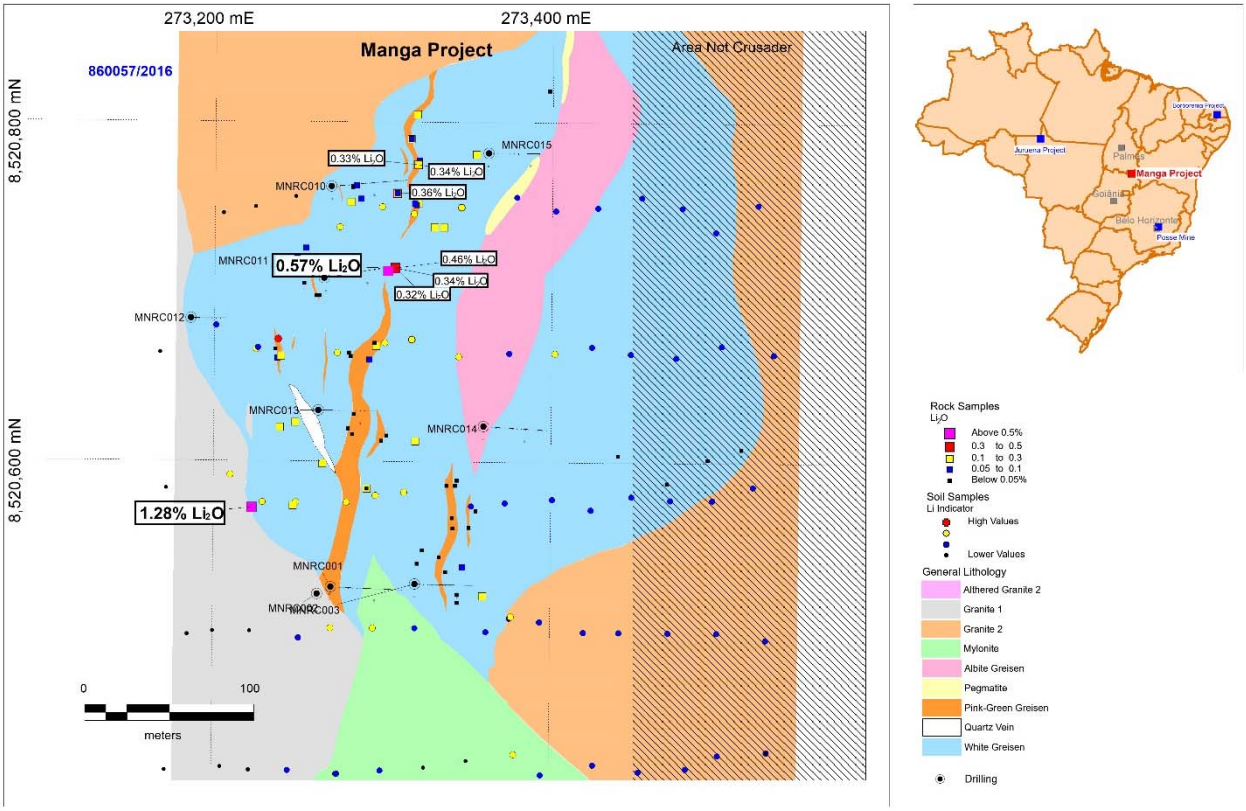

Figure 1: Geological map of the Manga zone with rock chips, soil results and drilling.

Figure 2: Crusader geologist sampling the greisen zone at Manga.

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About Crusader
Crusader Resources Limited (ASX:CAS) is a minerals exploration and mining company listed on the Australian Securities Exchange. Its major focus is Brazil; a country Crusader believes is vastly underexplored and which offers high potential for the discovery of world class mineral deposits. Crusader has three key assets:

Posse Iron Ore
The Posse Iron Ore Mine is located 30km from Belo Horizonte, a city acknowledged as the mining capital of Brazil and the capital of Minas Gerais state. The project had an indicated and inferred Mineral Resource estimate of 36Mt @ 43.5% Fe when mining began in March 2013. Posse is currently selling DSO into the domestic market. With an experienced mining workforce amongst a population of over 2.5 million people, the infrastructure and access to the domestic steel market around the Posse Project is excellent.

Borborema Gold
The Borborema Gold Project is in the Seridó area of the Borborema province in north-eastern Brazil. It is 100% owned by Crusader and consists of three mining leases covering a total area of 29 km² including freehold title over the main prospect area.
The Borborema Gold Project benefits from a favourable taxation regime, existing on-site facilities and excellent infrastructure such as buildings, grid power, water, sealed roads and is close to major cities and regional centres. The project's Ore Reserve includes Proven and Probable Ore Reserves of 1.61Moz of mineable gold from 42.4Mt @ 1.18g/t (0.4 & 0.5g/t cut-offs for oxide & fresh).
The measured, indicated and inferred Mineral Resource Estimate of 2.43Moz @ 1.10 g/t gold, remains open in all directions.

Juruena Gold
The Juruena Gold Project is located in the highly prospective Juruena-Alta Floresta Gold Belt, which stretches east-west for >400km and has historically produced more than 7Moz of gold from 40 known gold deposits.
The Juruena Project has been worked extensively by artisanal miners (garimpeiros) since the 1980s, producing ~500koz in that time. Historically there is a database of more than 30,000 meters of drilling and extensive geological data.

Competent Person Statement
The information in this report that relates to the Manga Li project exploration results, Juruena Gold Project exploration results, Posse Iron Ore Project exploration results and Borborema Gold Project exploration results released after 1 December 2013, is based on information compiled or reviewed by Mr. Robert Smakman who is a full time employee of the company and is a Fellow of the Australasian Institute of Mining and Metallurgy. The information in this report that relates to Mineral Resources at the Juruena Gold Project is based on information compiled or reviewed by Mr. Lauritz Barnes and Mr. Aidan Platel who are independent consultants to the company and Members of the Australasian Institute of Mining and Metallurgy. Each of Mr. Smakman,
Mr. Barnes and Mr. Platel have sufficient experience that is relevant to the type of mineralisation and type of deposits under consideration 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. Mr. Smakman, Mr. Barnes and Mr. Platel consent to the inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to:

a) Borborema Gold Project and Posse Iron Ore Project Exploration Results released prior to 1 December 2013 is based on information compiled or reviewed by Mr. Robert Smakman who is a full time employee of the company;
b) Borborema Gold Mineral Resources is based on information compiled by Mr. Lauritz Barnes and Mr. Brett Gossage, independent consultants to the company;
c) Borborema Gold Ore Reserves is based on information compiled by Mr. Linton Kirk, independent consultant to the company;
d) Posse Fe Mineral Resources is based on and accurately reflects, information compiled by Mr. Bernardo Viana who was a full time employee of Coffey Mining Pty Ltd,

and who are all Members of the Australasian Institute of Mining and Metallurgy (Rob Smakman and Linton Kirk being Fellows), and who all have sufficient experience that is relevant to the type of mineralisation and type of deposit under consideration, and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Each of Mr. Smakman, Mr. Barnes, Mr. Kirk, Mr. Viana, and Mr. Gossage consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.
The information was prepared and disclosed under the JORC Code 2004. It has not been updated since to comply with JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

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