

**Cougar Metals NL** is a Perth based exploration company listed on the Australian Securities Exchange (ASX: CGM).

In December 2016 the Company executed an agreement to earn a 50% interest in the Toamasina Saprolitic Graphite Project located 50km south of the port city of Toamasina, in Madagascar. The project covers approximately 4400 Ha and provides a near term opportunity to develop a low capex, opex, high quality graphite operation. The project is currently being drilled to define JORC and NI43-101 compliant resources.

In August 2016 Cougar executed an LOI to acquire an 85% interest in the Ceara Lithium Project, located in north-eastern Brazil. The Project comprises 35 tenements with an area of ~60,000Ha covering the historical lithium mining centre at Solonopole the Cristal pegmatite swarm. The project is currently being field sampled.

In addition, Cougar holds an option to acquire a 51% undivided interest in the Shoal Lake Gold East Project, located in the Shoal Lake region of Ontario, Canada; an area containing a number of past gold producers and significant gold mineralisation. Work on the Project is suspended pending the Project vendor complying with arbitration orders.

In Australia, the Company holds the laterite nickel and cobalt mineral rights to the Pyke Hill prospect located 40km east of the Murrin Murrin Nickel operations in Western Australia.

Cougar operates a mineral drilling business in Brazil providing surface diamond, reverse circulation and RAB drilling services to the Brazilian mineral resource industry.

#### **Directors**

Randal Swick – Executive Chairman  
Michael Fry – Executive Director  
David Symons – Non-Executive Director

#### **Senior Management**

Randal Swick – Managing Director  
Michael Fry – CFO & Company Secretary

#### **Capital Structure**

Shares on Issue: 829,554,238  
52 week range: \$0.001 - \$0.022  
Last Price (28/4/2017): \$0.08  
Market Capitalisation: ~\$6.6 million

#### **Substantial Shareholders**

Marcia Swick – 33.3%  
Savvy Capital Management – 16.7%

## HIGHLIGHTS OF THE THIRD QUARTER OF FY17

### **Toamasina High Quality Graphite Project - Madagascar**

- Drilling rig despatched from Brazil and delivered to Madagascar for maiden 3,000m drilling program.
- Drill rig cleared customs and is on site; road and drill-pad construction largely completed.
- Drilling program to focus on central portion of mineralised strike, where previous trenching returned grades of up to 25% Cgr.
- Local community and landowners successfully engaged to support the project.
- Consultants engaged to manage resource drilling program and PEA (scoping study) oversight.

### **Solonopole Lithium Project – Brazil**

- Review of existing Airborne geophysical data highlights 4 areas to be targeted for initial field sampling program.

### **Highlights subsequent to end of quarter**

- Capital raising of 1.15M completed.
- Second payment (AUD 200,000) to vendor of Toamasina Graphite project completed.
- Graphite mineralisation encountered in road construction giving rise to potential for new zones of graphite mineralisation at Toamasina Graphite Project.
- Drilling commences at Toamasina Graphite Project.
- Contractors engaged to conduct field exploration activities at Solonopole Lithium Project.

## **ACTIVITIES REPORT**

Cougar Metals NL (ASX Code: CGM) (“**Cougar**” or “**the Company**”) is pleased to provide its activities report for the quarter ended 31 March 2017.

### **Toamasina Graphite Project - Madagascar**

#### ***During the Quarter:***

Activities were centred upon preparation for the upcoming resource drilling program.

This included:

- preparation and despatch of a RC/Aircore rig from Brazil to Madagascar, associated customs clearance and mobilisation to site;
- community consultation;
- the construction of roads and drill-pads;
- the establishment of accommodation;
- the establishment of workshop facilities and fuel storage, and
- the selection of contractors and crews necessary to complete the works.

#### ***Subsequent to end of the Quarter:***

Graphite mineralisation was encountered in road construction giving rise to potential for new zones of graphite mineralisation at the project.

Drilling has commenced.

Drill samples will be collated and air freighted to Australia for analysis in 500m batches. The first assay results can be expected in early June.

It is expected that the entire program will take 6 to 8 weeks to complete.

### **Madagascar Graphite – Background**

In December 2016 the Company entered into an agreement with DNI Metals (TSXV:DNI) to acquire a 50% interest in the Toamasina Graphite Project (also known as the Vohitsara Graphite Project).

Cougar’s management were drawn to the project on account of its outstanding qualities compared to other graphite projects, providing an opportunity to be a very low cost producer of high quality graphite.

The principal advantages and merits of the project are listed below.

- Project comprises a single mining lease covering 43.75 sq km in a district with a history of high quality graphite production
- Project is fully permitted for mining.
- Project has a major highway traversing the property, and is only 50km south of the deep water port city of Toamasina.
- Work performed to date has identified near-surface mineralisation extending over 3km with trenching returning total graphitic carbon grades of up to 25%, and averaging approx 7%.
- Preliminary metallurgical test-work has returned >60% Large and Jumbo Graphite Flake Distribution (high value product).

- Graphite mineralisation at the Project comprises disseminated crystalline graphite hosted within free-dig weathered low-silica meta-sediments, providing significant savings due to the lack of drilling, blasting, crushing and grinding.
- The weathered profile is expected to extend to an average depth of around 20-30 metres, based on known weathering profiles of the district and observed geology on site.
- The mineralisation style allows for initially small scale graphite production to be economically viable as expensive crushing and grinding circuits are unnecessary.

Further details of the project are available in Appendix A of this quarterly Report

### **Brazil Lithium Exploration quarterly activities**

A lithium pegmatite targeting study conducted by Southern GeoScience Consultants has identified four (4) high priority lithium targets at Cougar's Solonopole Lithium Project. The identified areas correspond with field sampling results obtained from the DNPM (Brazilian Mines Department).

An exploration team is currently being assembled with planning underway for a mapping and sampling program scheduled to commence on 10 May 2017 over identified targets. The program is expected to be completed within 3 months of commencement.

### **Brazil Lithium – Background**

In August 2016 the company entered into an agreement with a Dubai based investment company (MMH) to acquire an 85% interest in its Ceara Lithium project covering the known lithium district of Solonopole and a lithium bearing pegmatite swarm at Cristais, Ceara, Brazil.

The principal aspects of the project areas follow:

- The Project incorporates two separate areas lying ~100km apart, being (i) an area covering the historical lithium mining centre at Solonopole, and (ii) an area encompassing the Cristal pegmatite swarm.
- 35 applications covering ~60,000Ha formally granted by the Brazilian Mines Department (DNPM).
- Southern GeoScience Consultants utilised existing existing high quality satellite, radiometric and airborne magnetic data to outline 4 target areas of interest.
- A field program lasting approximately 3 months is expected to commence on May 10, 2017 to map and sample within the 4 areas of interest.
- The 4 initial areas of interest cover an area of approximately 20,000 Ha allowing a more focussed exploration effort within the 40,000 Ha Solonopole tenement package.

Further details of the project are available in Appendix A of this report

**Drilling Business quarterly activities**

Revenue from the provision of contract drilling services for the quarter ended 31 March 2017 was R\$0.696 million (quarter ended 31 December 2016: R\$2.395 million).

Disappointingly, GeoLogica's principal client significantly reduced its exploration activities in January resulting in the demobilisation of our rig for, at least, the remainder of the year. This coupled with the conclusion of a two rig diamond drilling program has resulted in GeoLogica having only one RC rig under contract and leading to GeoLogica generating significantly lower revenues than the previous quarter.

With worsening economic conditions within Brazil, the recovery in exploration activities as seen in Australia and Africa, has not eventuated. As such the Company has decided to wind back drilling operations and liquidate its position in order for the Company to focus on developing assets within the Company's exploration portfolio.

The Company is currently exploring options in regards to the divestment of its drilling assets.

**Shoal Lake East Gold Project (Canada)**

Work on the Shoal Lake East Gold Project remains in suspension pending compliance by KPM of the orders of the arbitration.

Please refer to [www.cgm.com.au](http://www.cgm.com.au) for further details on this project.

**Pyke Hill Project (Western Australia)**

No new work was conducted during the quarter. The Company continues to seek a sale or third parties who may have an interest in participating in the Project.

Please refer to [www.cgm.com.au](http://www.cgm.com.au) for further details on this project.

**Corporate**

On 4 April 2017, Cougar announced that it had successfully completed a placement of 164,285,714 new shares raising \$1.150 million before costs.

Costs associated with the capital raising, managed by GTT Ventures Pty Ltd totalled 6% of funds raised, yielding a net figure of \$1.081million to the Company.

The funds will principally be applied to Toamasina Graphite Project and Ceara Lithium Project.

For further information please contact the undersigned via email using [r.swick@cgm.com.au](mailto:r.swick@cgm.com.au) or alternatively contact Michael Fry (Director, CFO & Company Secretary) on +61 8 9226 5002.

Yours sincerely

**COUGAR METALS NL**



**RANDAL SWICK**

*Executive Chairman and Managing Director*

### **Forward Looking Statements**

*Statements contained in this release, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves or potential growth of Cougar Metals NL, industry growth or other trend projections are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors.*

### **Competent Persons Statements**

*The information in this report that relates to Exploration Results or Minerals Resources in relation to the Toamasina Saprolitic Graphite Project is extracted from an ASX Announcement dated 16 November 2016, (see ASX Announcement – 16 November 2016 “LOI Executed over Madagascar Graphite Project”, [www.cgm.com.au](http://www.cgm.com.au) and [www.asx.com.au](http://www.asx.com.au) ).*

*The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Exploration Results or Minerals Resource estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are represented have not been materially modified from the original market announcement.*

*The information in this report that relates to Exploration Results or Minerals Resources in relation to the Ceara Lithium Project is extracted from an ASX Announcement dated 3 August 2016, (see ASX Announcement – 3 August 2016 “LOI Executed over Brazilian Lithium Project”, [www.cgm.com.au](http://www.cgm.com.au) and [www.asx.com.au](http://www.asx.com.au) ).*

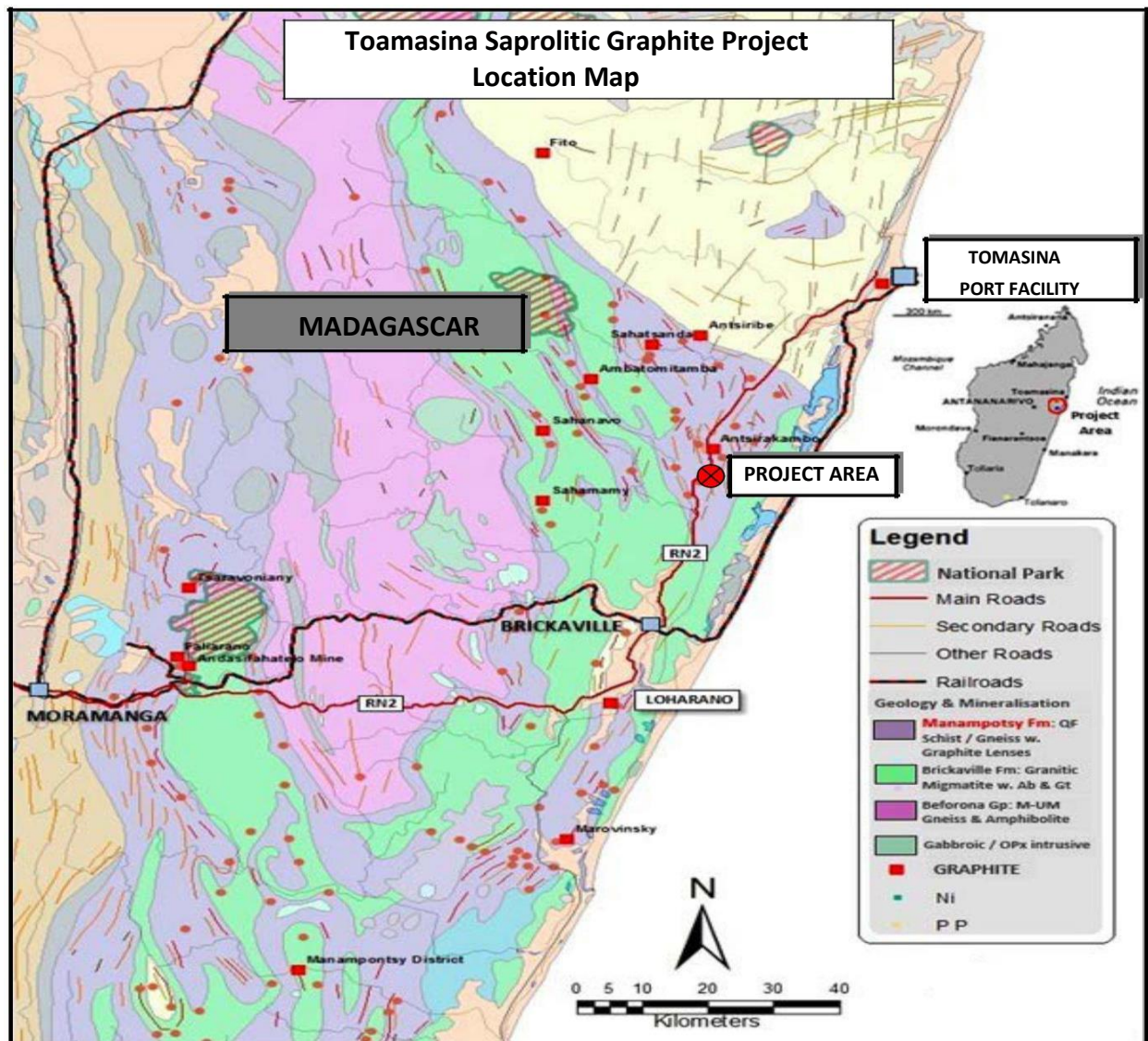
*The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Exploration Results or Minerals Resource estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are represented have not been materially modified from the original market announcement.*

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## Appendix A

### Toamasina Saproplitic Graphite Project, Madagascar

The Project is located in east central Madagascar, approximately 50 km south-southwest of the deep-water port city of Toamasina and approximately 50km North of Bass Metals' (ASX code: BSM) operating Loharano graphite mine.



Location map of Toamasina Saproplitic Graphite Project

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Access to the initial area of interest is by way of a 1.8km unsealed road leading from the main highway between the port city of Toamasina and the country's capital Antananarivo. The turn off is located 55km by paved road from the port city of Toamasina.

Madagascar has supplied high quality graphite for the international market for over 100 years. In particular, the Toamasina-Brickaville belt; in which the Toamasina project is centrally located, is well known for the high purity and larger flake-size distribution of its graphite concentrates.

The Project area has been subjected to historical artisanal mining in the period between WW2 and the end of French colonial rule (1960's). Visual estimates from site inspection and anecdotal reports from indigenous personnel put this production around 100,000T of material.

Toamasina is the largest port in the country and is considered the commercial capital of Madagascar. The city and port have been developed extensively since 2008 as a result of major infrastructure investment on the part of Sherritt; who with its partners, have developed the U\$8.0Billion Ambatovy HPAL lateritic nickel-cobalt mine 200km inland from Toamasina.

The Project is particularly well located, with its proximity to the Toamasina port and the infrastructure of a major city, and is expected to have significantly lower construction and operating costs compared with other international graphite projects.

#### Historical Work

Mineralisation has been identified over a combined 3km strike length from visual examination of near surface samples (< 1m from surface). The mineralisation follows a distinct ridge in the area varying in elevation from 40m to 110m AMSL.

Small pits less than 2m in depth were dug to inspect for mineralisation, which is easily identified visually on account of the high % content of large flake graphite. This confirms the potential of the project to host a high margin / low-cost mining operation. Mineralisation most often occurs on topographic highs and generally within 1m of surface. The near surface and weathered style of mineralisation leads to significantly reduced costs associated with mining and processing.

A trenching, surface sampling and test pitting program was conducted on the Toamasina Project in 2015. Trenches were targeted from field observation in conjunction with man-portable ground EM and magnetics along cut lines (using GPS control).

An initial exploration program of 3,000m of air-core drilling and 1,000m of trenching is currently in progress.

An air-core rig, owned by Cougar, along with the necessary equipment to complete the drilling program was sent from Brazil to Madagascar, cleared customs, and is now on site and has commenced drilling.

Site-works incorporating facilitation of housing, and road and drill-pad construction is largely complete as at the date of this report.

Pictures taken at site in recent days follow:

**Photo 1 – Drill Rig on arrival**



**Photo 2 – Site Construction**



**Photo 3 – River crossing construction**



**River crossing construction**



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## Ceara Lithium Project, Brazil

### Background

The Ceara Lithium Project is located in Ceara State, in north-eastern Brazil.

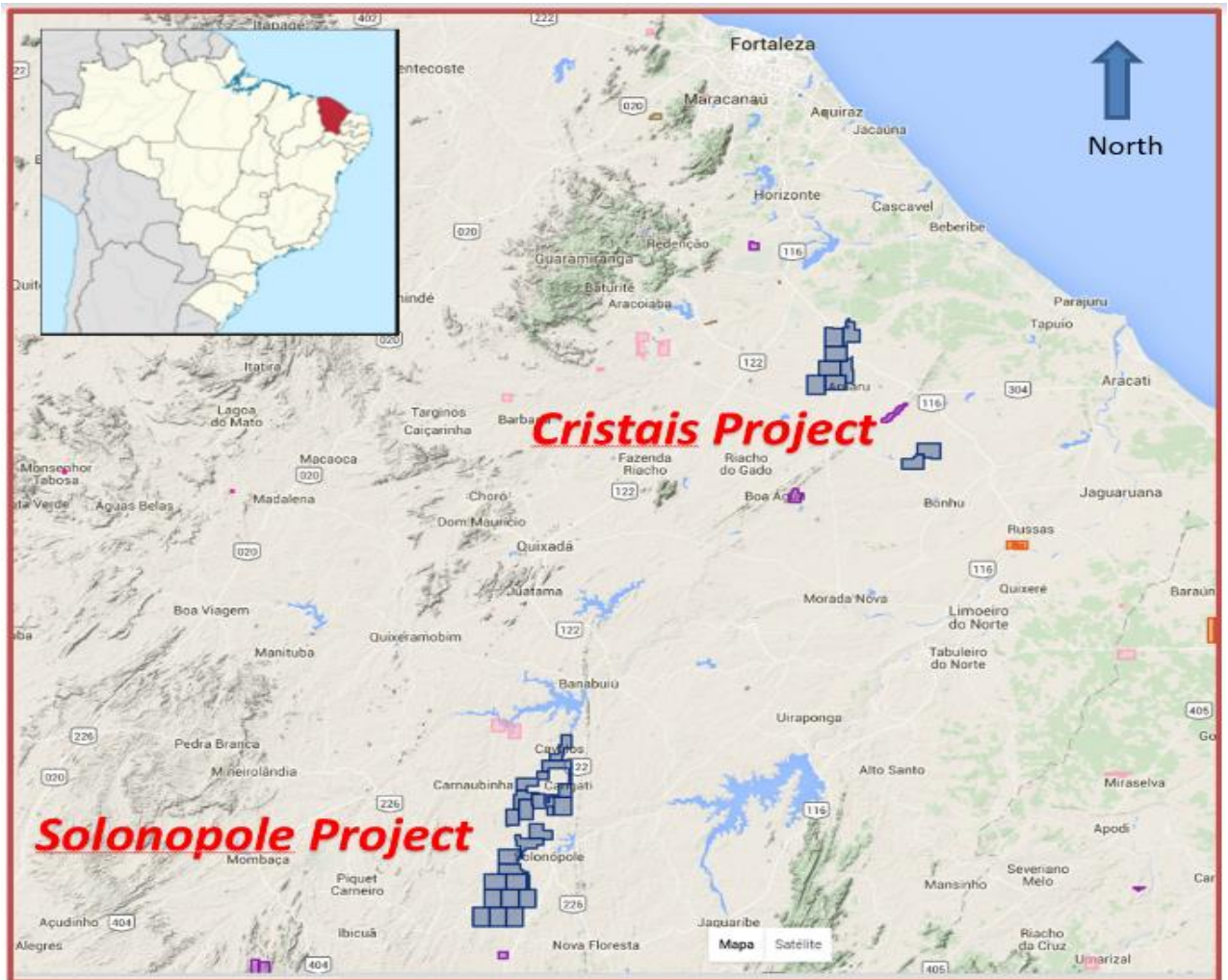


Figure 1: Location map of project areas in Ceara (north-eastern Brazil) state; application areas in blue

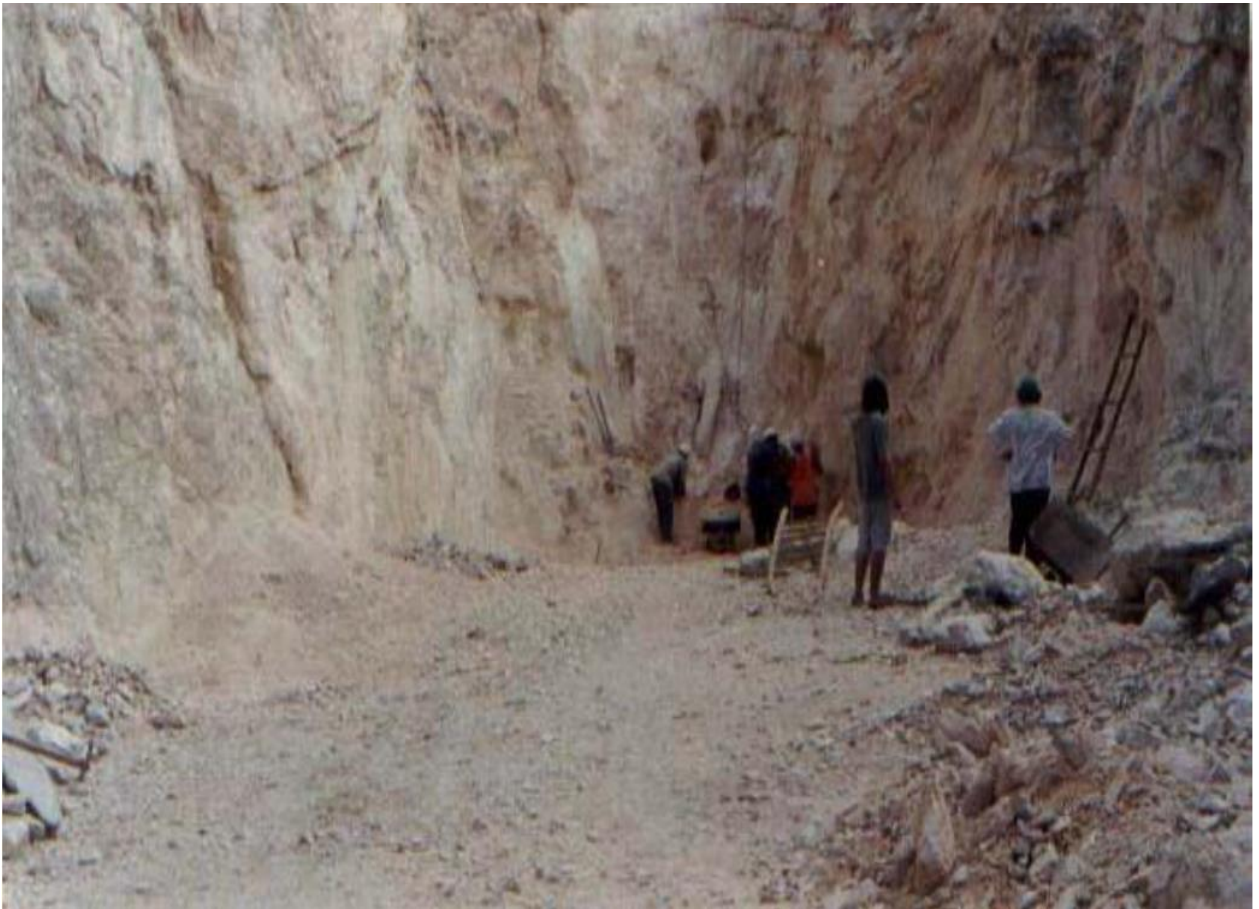
The Project is located across two separate areas, being (i) at Cristais (1.5 hours' drive from State Capital, Fortaleza) and (ii) at Solonopole (3.5 hours' drive from Fortaleza).

In total, the Project comprises thirty-five (35) granted licences covering an area of ~60,000Ha. Both Cristais and Solonopole have excellent infrastructure being located along major sealed highways and in close proximity to a high voltage national electricity grid.

### Solonopole Project

The Solonopole area is known area of lithium mineralisation with lithium having been mined in the area intermittently over the past 40 years.

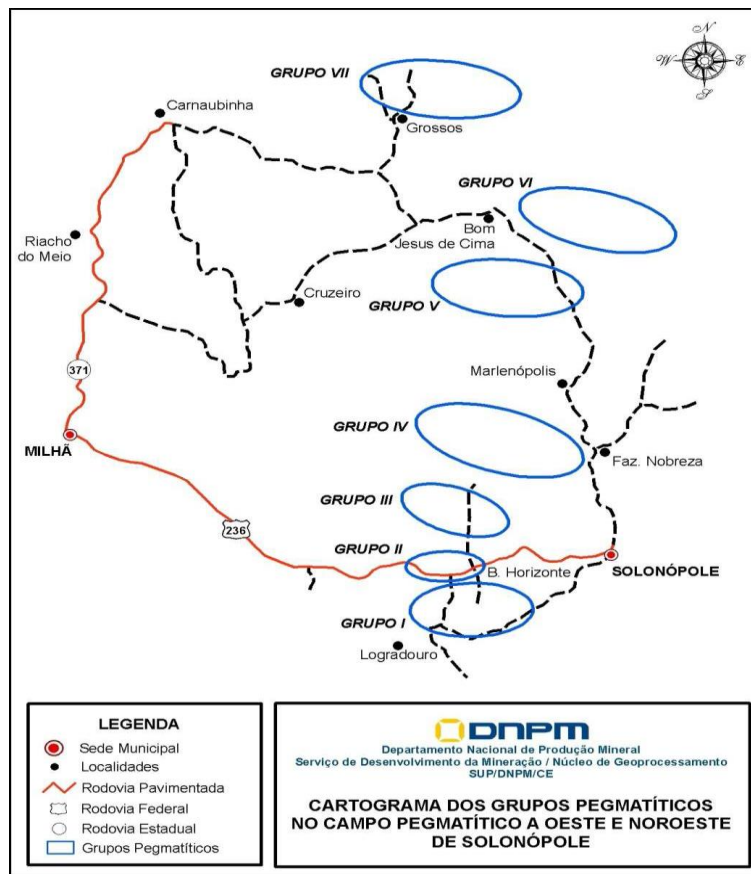
Historical production tonnages of lithium have not been recorded as mining operations have been informal and of small scale, with no pits going below 5 metres in depth.



*Figure 2: small scale mining operation in Solonopole, typical of the region (from 1980's).*

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In 2012, the DNPM undertook a geological assessment of the Solonopole pegmatites. The DNPM identified seven (7) distinct areas of pegmatite as depicted in the following diagram:



The minerals identified in each of the areas were determined as follows:

|         |  |
|---------|--|
| Area 1: | amblygonite and secondarily tantalite-columbite and beryl  |
| Area 2: | quartz k-feldspar, cleveandite, spodumene, lepidolite, amblygonite, cassiterite, muscovite, tantalite, beryl and tourmaline; |
| Area 3: | amblygonite crystals up to 40 cm x 15 cm   |
| Area 4: | amblygonite, tantalite-columbite and beryl   |
| Area 5: | amblygonite, beryl and spodumene   |
| Area 6: | beryl main production, in association with microcline, afrisite, apatite and other phosphates;                               |
| Area 7: | beryllium, mica and amblygonite  |

The DNPM's geological team took ~60 grab samples from each of the locations and had the samples assayed at ACME Laboratories in Brazil.

The assays returned 11 positive results with lithium grades ranging between 0.5% and 9.41% Li<sub>2</sub>O, as presented in Table 1 following. The principle lithium minerals identified were spodumene, amblygonite and lepidolite.

| Table 1   |             |                   |
|---|-------------|-------------------|
| DNPM Grab Sampling Results 2012   |             |                   |
| Sample Number   | Mineral     | Li <sub>2</sub> O |
| DNPN-53   | Amblygonite | 9.41              |
| DNPN-26   | Amblygonite | 8.89              |
| DNPN-01   | Amblygonite | 8.68              |
| DNPN-41B  | Lepidolite  | 4.84              |
| DNPN-45   | Lepidolite  | 3.16              |
| DNPN-41A  | Lepidolite  | 3.12              |
| DNPN-52   | Lepidolite  | 2.48              |
| DNPN-37B  | Lepidolite  | 2.35              |
| DNPN-55   | Lepidolite  | 1.96              |
| DNPN-40   | Amblygonite | 1.03              |
| DNPN-37A  | Spodumene   | 0.43              |
| ** Samples assayed at ACME laboratory – details of analysis not provided. |             |                   |
| ***XRD undertaken to define mineralogy                                    |             |                   |

The Images below show pegmatites identified during the site visit undertaken by MMH's geological consultants in March 2016.

Figure 3



Figure 4



Figure 5



Figure 6



Sampling Techniques, Data, Exploration Results (ASX Listing Rule 5.7)

Information material to understanding the exploration results pertaining to the Ceara Lithium Project was included in Appendix 1 of ASX announcement dated 3 August 2016.

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## SUMMARY OF TENEMENTS AND CHANGES

In accordance with ASX Listing Rule 5.3, Cougar advises of the following:

| Project                       | Tenement Reference | Interest held by Cougar at 31 December 2016 | Changes during the quarter (acquisitions /disposals) | Interest held by Cougar at 30 September 2016 |
|-------------------------------|--------------------|---|--|--|
| Pyke Hill Nickel (Australia)* | M39/159            | Ni/Co rights - 100%                         | -  | Ni/Co rights - 100%                          |
| Shoal Lake Gold (Canada)      | MH9                | 100%  | -  | 100%   |
| Shoal Lake Gold (Canada)      | MH10               | 100%  | -  | 100%   |
| Shoal Lake Gold (Canada)      | MH40               | 100%  | -  | 100%   |
| Shoal Lake Gold (Canada)      | D259               | 100%  | -  | 100%   |

\* Cougar holds 100% of the Nickel and Cobalt Laterite rights in relation to the tenement, with tenement ownership to be transferred to Cougar upon the commencement of mining activities.

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