

**ASX/Media Release** 

7 February 2018

# **Cougar Metals Secures Prospective Cobalt Project in Chile**

Cougar is pleased to announce that it has signed a Letter of Intent ("LOI") to acquire the Plateado Cobalt Project in Chile.

## **Highlights**

- CGM signs LOI with Antasitua Chile SPA to acquire 100% interest in the 36km<sup>2</sup> Plateado Cobalt project, Chile
- The Plateado Cobalt Project contains a historical mine which is reported to have produced high-grade cobalt
- Sampling in early 2017 of historical workings and dumps has returned grades between 0.33% Co and 1.07% Co
- Cougar has planned an exploration program including reconnaissance mapping, sampling, and extensional soil geochemistry to define the strike extent of mineralisation outside the immediate historical mine
- The acquisition represents the Company's first step towards diversifying and expanding its portfolio of assets

Cougar Metals NL (ASX: "CGM"; the "Company") is pleased to announce that is has secured a cobalt exploration project in Chile, after reaching an agreement to acquire a 100% interest in the Plateado Cobalt Project (Figure 1).

Executive Chairman, Mr Randal Swick said: "The Plateado Cobalt Project offers Cougar an attractive exploration opportunity for cobalt at a time when the commodity price remains strong and with a positive outlook. We see this as a complementary opportunity alongside our Ceara Lithium in Brazil. We are looking forward to getting on the ground soon to begin exploration."



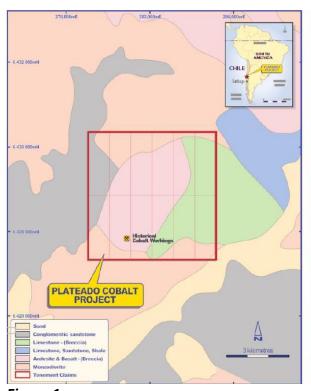




Figure 1

Under a Letter of Intent ("LOI") with Antasitua Chile SPA ("Antasitua" or "ACS"), the Company will acquire a 100% interest in the project, which contains a small scale historical cobalt mine located 130km north-west of the capital, Santiago.

#### The Key terms of the LOI:

- A new Australian parent company (Newco) shall be formed to hold the Chilean project.
  The shares of Newco will initially be held in escrow by the Manager (Mr Ricardo Rangel)
  but transferred to Cougar, upon the following conditions being met within 18 months of
  the LOI's execution date:
  - A minimum exploration expenditure of AUD \$100,000 with a minimum expenditure of AUD \$40,000 within 6 months of the LOI's execution.
  - o A cash payment of AUD \$100,000 to ACS or its nominee.
- The beneficial ownership of Newco shall remain with the manager but pass to Cougar upon an exploration spend (or a cash payment to the vendor of the shortfall) of AUD \$300,000, provided this is completed within 3 years of the execution date of the LOI.
- Cougar will engage the consulting services of the Manager and a local geologist on agreed terms.
- Cougar will also grant ACS a 15% Net Profit Interest (NPI) in the Project Portfolio, capped at AUD\$2million. Exploration costs to the point of a decision to mine are not to be considered in respect to the NPI however capital expenditure following the decision to mine will be apportioned over the life of the mine or 5 years, whichever is the minimum.



# **Project Background:**

The Plateado Project comprises 12 contiguous granted tenements, listed as Plateado 1 to 12 in the name of Antasitua Chile SPA, covering an area of 36km<sup>2</sup> in the province of Petorca, Chile.

A 1941 report sourced from the Nacional Service of Geology and Mining (Sernageomin) describes the workings located near the top of El Boldo hill as having commenced in 1899 and periodically worked in the 1930's to produce high-grade cobalt. Company management has not verified this report.

Antasitua undertook a site visit to the Plateado Project in early 2017 and located a 25m x 25m x 4.5m deep pit near the top of El Boldo hill. Rock-chip sampling of the workings returned grades of between **0.33% Co and 1.07%** Co from samples containing cobaltite and erythrite (see Table 1 and Figures 2 and 3 below).





Figure 2 Figure 3

The cobalt mineralisation identified in the workings is interpreted to lie within a 4-5m wide sedimentary unit which strikes north-south and dips at about 30 degrees west. Antasitua has indicated that the local geological setting may host primary feeder-type veins within the underlying andesite volcanic sequence, providing an additional exploration target for follow up.



Cougar will start reconnaissance exploration activities over the project including rock-chip sampling and mapping, as well as a soil geochemical survey over the prospective andesite volcanic/sedimentary succession. The company will also assess the suitability of ground geophysics to assist the delineation of structures in the prospect.

The Figure 4 below shows the minimal soil geochemistry completed to date. Cougar intends to extend the sampling over the untested 6km strike extension.

Sample	Northing	Easting	Location	Co %
152908	6423754	280898	Dumps	0.66
152909	6423749	280899	Dumps	1.04
152911	6423739	280896	Dumps	0.72
152913	6423724	280867	Dumps	0.61
152914	6423725	280875	Dumps	0.49
152915	6423756	280868	Dumps	0.80
152916	6423765	280866	Dumps	1.07
152917	6423767	280872	Dumps	0.93
152902	6423729	280912	Pit	0.33
152904	6423721	280919	Pit	0.95

**Table 1 :** Rock chip assay results from Plateado Cobalt Project >0.3% Co

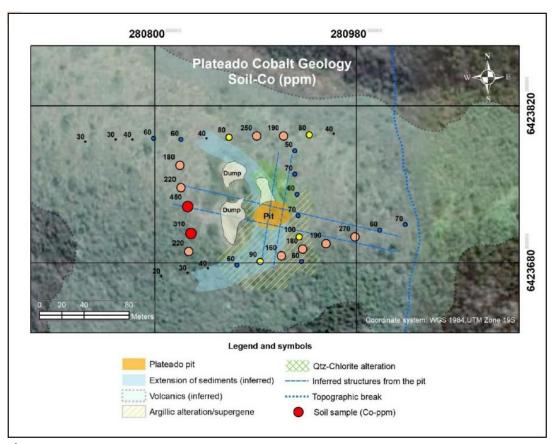


Figure 4



# **Chile - Country Overview**

Chile has a liberal, open-market economy with strong macroeconomic stability and has been one of the fastest growing economies in Latin America in the last two decades (source: World Bank). Chile's innovative culture and well-educated workforce supports a strong and progressive quality of life and positions the country as a highly attractive destination for mineral exploration and mining investment.

The quality and scale of the country's deposits attracts the world's premier mining companies including Glencore, Anglo American, BHP Billiton, Barrick Gold, Teck, Antofagasta Minerals and Rio Tinto all with investments in Chile.

Chile's attractiveness as a mining destination is due to its privileged mineral endowment; its investor-friendly regulations and overall economic and political stability; its maturity as a mining jurisdiction with developed road and port infrastructure; and qualified human resources. The relative attractiveness of Chile for international investors is reflected in the Fraser Institute's 2016 survey when it was ranked 2nd in Latin America and 39th globally for investment attractiveness. (Source EY's 2016-2017 Mining and Investment Guide)

Enquiries for further information regarding the Company's activities can be sent to info@cgm.com.au.

**COUGAR METALS NL** 

Randal Swich

**RANDAL SWICK** 

**Executive Chairman** 

## **Forward Looking Statement**

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 Person Statement**

Information in this report relates to exploration results that are based on information compiled by Mr Beau Nicholls (Member of the Australasian Institute of Geoscientists). Mr Nicholls is a fulltime employee of Sahara Mining Services and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activities undertaken 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 Nicholls consents to the inclusion in the release of the statements based on his information in the form and context in which they appear.

JORC TABLE 1
Section 1 Sampling Techniques and Data

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Criteria	Explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down-hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is</li> </ul>	<ul> <li>A total of 44 rock chip samples were collected from within the historical workings and also surrounding scree and dump samples. Samples cover all stratigraphic levels outcropping and also from historical mining activity. The samples were designed to test the presence and grade all cobalt mineralization associated with the activities.</li> <li>A total of 35 soil samples were collected from a poorly defined B horizon and designed as a fence of four lines around the immediate historical working, to determine whether there is any anomalous cobalt trends which could be identified within the soil. Holes were dug between 30 to 50 cm depth with hand pick and material collected with a plastic shovel and coarsely sieved ( plastic sieves) until 0.5 to 1 kilogram</li> </ul>



	<ul> <li>coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> <li>Example spacing was between 15 to 20m apart</li> <li>Rock chip and soil samples are considered representative from the material from which they were collected and sampling and sub sampling techniques are considered appropriate for exploration purposes. Soil data is not sufficient to allow any strike or trend of mineralisation and stepout soil geochemistry will be required</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> <li>Not applicable as no drilling results reported</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximize sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> <li>Not applicable as no drilling results reported.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation,</li> <li>Not applicable as no core and chip samples reported chip samples reported</li> </ul>



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- Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.
- The total length and percentage of the relevant intersections logged.

# Sub-sampling techniques and sample preparation

- If core, whether cut or sawn and whether quarter, half or all core taken.
- If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.
- For all sample types, the nature, quality and appropriateness of the sample preparation technique.
- Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.
- Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.
- Whether sample sizes are appropriate to the grain size of the material being sampled.

- Rock chip and soil samples were collected in situ with sample weights of 0.5 to 1 KG.
- All samples for laboratory analysis were submitted to ALS Minerals Laboratory located in Santiago and then analysed by ALS at Lima by ME-ICP61a High Grade Four Acid ICP-AES
- Samples were oven dried to 100 deg c. and the entire sample coarse crushed to about 70% passing <2mm.</li>
   Following splitting of sample, the remaining sample was pulverised to 85% passing 75 μm.
- No field duplicates or external standards were inserted with the field samples.
- The pulp samples from two rock chips were later analysed with a pXRF hand held device to determine the pXRF units accuracy/ Results closely matched the ALS laboratory results for Co and As
- Samples are considered representative of the material collected
- Sample sizes are considered appropriate all of the material collected



Quality	of
assay	data
and	
laborato	ry
tests	

- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
- For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.
- Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.

- The analytical techniques used where appropriate and the technique considered total
- A pXRF handheld device was used as a check for confirmation of anomalous results in rock chips
- No external standards, blanks or duplicates where submitted.
- ALS laboratory produce QAQC reports for each analytical submission which includes the inclusion of standards blanks and duplicates, and report on the precision of their analysis.

# Verification of sampling and assaying

- The verification of significant intersections by either independent or alternative company personnel.
- The use of twinned holes.
- Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
- Discuss any adjustment to assay data.

- pXRF was utilised to check ALS
- Not applicable
- All field data was manually collated and entered into spreadsheets and validated
- All electronic data is backed up
- No adjustments required

# Location of data points

- Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.
- Specification of the grid system used.
- Quality and adequacy of topographic control.

- Use of hand-held GPS units.
   Accuracy of +/- 10m.
- The grid system used was WGS 1984 UTM Zone 19S
- No topographic control has been used for the sampling.



Orientation of data in relation to geological structure	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Rock chip results were based on visual observations and not designed to any grid specifications and designed as a fence of four lines around the immediate historical workings Sample spacing were between approximately 15 to 20 m but is not sufficient to define clear mineralisation trends</li> <li>Rock chip and soil sampling undertaken on a close spaced sample spacing design to identify potential underlying mineralization structure. Mapping in pits can then be applied to orientate interpretation of soil geochemistry.</li> </ul>
Sample security	The measures taken to ensure sample security.	Samples were kept in sealed bags and sent to ALS laboratory by independent geological contractor.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audit or reviews were undertaken



# **Section 2 Reporting of Exploration Results**

(Criteria listed in the preceding section also apply to this section.)

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Plateado Project comprises 12 contiguous granted tenements, listed as Plateado 1 to 12, in the name of Antasitua Chile SPA, covering an area of 36km² in the province of Petorca, Chile.</li> <li>The company has entered into a LOI to acquire 100% of the project portfolio on terms outlined in the preceding ASX release</li> <li>Tenements are in good standing and no know impediments exist</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The project contains an area of historical cobalt workings. A 1941 report sourced from the Chilean department of mines describes the workings located near the top of the El Boldo Hill as having started in 1899 and periodically worked in the 1930s to produce high grade cobalt .The workings are indicative of artisanal scale mining, however there are no indications that the area has been systematically explored with modern exploration techniques  Some exploration work, including rock and soil sampling was carried out by consultants on behalf of Uranium Equities Ltd in 2017



Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> <li>The local geological setting comprises as sequence of andesite volcanics overlying brecciated limestones both of which are intruded by monzodiorite along the northern and southern boundaries.</li> <li>The cobalt mineralisation identified in the workings is interpreted to lie within a 4-5m wide sedimentary unit which strikes north-south and dips at about 30 degrees west. Antasitua has also indicated that the local geological setting may contain primary feeder-type veins within the underlying andesite volcanic sequence.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person</li> </ul>



	should clearly explain why this is the case.	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Grade cut-off of >0.3% Co has been used for reporting results. Other data aggregation methods are not applicable to rock chip sampling results reported
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	Not applicable as no drill hole results reported
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures and Tables



Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> <li>All significant results have been reported &gt;0.3% for Co (for Rock Chips)</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> <li>Too early stage to discuss extensions to mineralisation. Require results and additional exploration work</li> </ul>