

Cascabel Metallurgical Test Work Yields High Grade Copper and Gold Content Rates at Alpala

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OTTAWA, Oct. 28, 2019 - [Cornerstone Capital Resources Inc.](#) (“Cornerstone” or “the Company”) (TSXV:CGP) (Frankfurt:GWN) (Berlin:GWN) (OTC:CTNXF) pleased to announce the following update on recent results from the ongoing comprehensive comminution and metallurgical test work program for the Alpala project at its Cascabel copper-gold porphyry joint venture in northern Ecuador. These include updates to the recovery parameters for copper, gold and silver and a comprehensive analysis of concentrate specifications from Locked Cycle test work completed and published in the comprehensive ALS Metallurgical Testing Cascabel Copper-Gold Project – Phase 1 Report (the “ALS Report”).

Cornerstone has a 22.8% direct and indirect interest in Cascabel comprised of (i) a direct 15% interest in the project financed through to completion of a feasibility study and repayable out of Cornerstone’s share of project cash flow, plus (ii) an indirect interest comprised of 9.2% of the shares of joint venture partner and project operator SolGold Plc.

SolGold is now actively engaged with concentrate market participants and expects to confirm alignment on the high quality and marketability of the Alpala concentrate in the prefeasibility study (“PFS”).

HIGHLIGHTS:

- High recoveries and increased concentrate grades (since Preliminary Economic Assessment, PEA¹)

PARAMETER	LC-LG COMPOSITE		IC-HG COMPOSITE		HC-HG COMPOSITE	
	PEA	ALS Report	PEA	ALS Report	PEA	ALS Report
Cu Concentrate	27.6	28.4	30.5	30.7		
Au Concentrate	46.2	46.2	41.0	41.0		

PEA Study results
ALS Report

PARAMETER	UNITS	LC-LG COMPOSITE	IC-HG COMPOSITE	HC-HG COMPOSITE
Cu recovery	%	86.0	93.2	93.0
Au recovery	%	79.4	79.3	85.2

Source: PEA - Cascabel Project, Northern Ecuador Alpala Copper-Gold-Silver Deposit, ALS Report

- Very low levels of dilution by non-sulphide minerals

UNIT	Cu	S	Fe	Total	HC
%	30.6	37.2	31.3	99.1	

Source: ALS Report

- Extremely low content of deleterious elements in concentrate; most measured at only trace levels
- Appointment of Dr Gregory J Harbort, General Manager Process and Metallurgy

- Confirmation of Wood Mackenzie, a leading market analyst, to undertake a copper market report, which will include shipping cost estimates, a value-in use and pay ability analysis and the economic assessment for the on-going PFS (to be reported in accordance with Canada's National Instrument 43-101)
- Appointment of Bluequest Resources AG to consult SolGold on commercial and logistical matters for concentrate marketing

FURTHER INFORMATION:

Background on the Metallurgical Test Work and Design

Metallurgical test work on the Alpala project is being conducted by ALS Metallurgy Kamloops, British Columbia. The high precious metal bearing copper concentrates produced from the locked-cycle tests at Kamloops were then analyzed for trace elements by ALS Geochemistry in North Vancouver, BC.

The test work program was carried out under the supervision and guidance of Dr. Gregory J. Harbort, General Manager Process and Metallurgy (SolGold Plc) (see summary below).

SolGold Plc have specified a test program aligned with the resource size and quality to maximize capital payback early in the project. The ALS Report considered 5,500 kg of drill core from fifty-three variability samples representing different lithology, alteration styles and head grades, selected to provide a good spatial distribution within the mine plan. Further, the samples were composited into three master composites based on gold and copper head grade, to allow for optimization and locked cycle flotation tests and solid-liquid tests.

Master Composite	Assay – percent or grams/tonne						
	Cu	Fe	S	S(s)	Ag	Au	TOC
Low Copper (LC)	0.77	6.7	3.34	2.26	2	0.76	0.03
Intermediate Copper (IC)	1.19	8.8	5.38	4.74	3	2.39	0.05
High Copper (HC)	1.93	8.9	4.64	3.51	5	2.61	0.02

Note: Silver and gold assays are displayed in g/tonne; other assays displayed in percent

Variability testing of the 53 samples has included extensive comminution testing² with SAG Mill Comminution (SMC) (profiling an orebody to predict its comminution circuit throughput as well as its rock mass characteristics and blasting properties), Bond Abrasion Index, and Bond Ball Mill Work Index testing. Bond rod mill work index tests were also conducted on selected samples, where sufficient material was available.

Assessment of the elemental content of each Master Composite and variability sample was conducted via standard analytical techniques and multi-element ICP analyses. In addition, detailed scanning electron microscope (SEM) mineralogy was undertaken.

Variability flotation test work included both kinetic roughing tests and open circuit cleaning tests. Davis Tube Recovery (DTR) tests were conducted on the rougher tailing to determine the amount of recoverable magnetite.

Master Composite optimization tests focused on developing conditions to enhance recovery and concentrate grade, including size-by-assay analysis and diagnostic leach tests on the cleaner tailing stream.

Locked cycle flotation tests were conducted under optimized conditions to produce expected plant recoveries, concentrate grades and mass balances to feed into the PFS. Concentrates produced were/are being assayed for an extended assay suite to confirm concentrate quality. The assays will also be used to evaluate the recovery of molybdenum and a valuable rhenium credit.

Please refer to Table 1: Critical timeline for test work in:

<http://www.cornerstoneresources.com/i/pdf/NR19-31Figures.pdf>

Please refer to Figure 1: Master Composite Locked Cycle Test Summary – Locked Cycle Flowsheet in: <http://www.cornerstoneresources.com/i/pdf/NR19-31Figures.pdf>

Appointment of Dr Gregory J Harbort, General Manager Process and Metallurgy

Greg has 33 years of in-depth experience in copper and precious metals extraction and mineral processing, including heap leaching, gravity concentration, flotation, leaching and purification, roasting, and fuming. He authored 47 technical publications, contributed to seven books on mineral processing technology, flotation development and flotation optimization and is the co-author of “History of Flotation” and contributing author of SME “Mineral Processing & Extractive Metallurgy Handbook”.

Greg brings a wealth of porphyry copper experience to SolGold plc, including five years working for Philex Mining Corp Padcal site, recognized as one of the world’s most efficient block cave operations and two year’s involvement with design, construction, commission and operation of the Minera Alumbrera concentrator. He had a five-year involvement with the CMOC NorthParkes operation, working on process optimization, refurbishment and life of mine geo-metallurgical planning. In the two years prior to joining SolGold he was involved with design and life of mine geo-metallurgical planning for the Oyu Tolgoi concentrator expansion to allow treatment of the Hugo North block cave ore.

Greg holds a Ph.D. from University of Queensland, Australia, 2005 and holds a bachelor’s degree of Engineering Metallurgy, University of Queensland, 1990.

Mineralogy at Alcala drives exceptional recoveries and produces a clean high-quality copper and precious metals concentrate.

Summary of Mineral Processing and Metallurgical Testing to Date

The flotation locked cycle test is critical to simulating plant operation with regard to recirculating loads, water quality and reagents and has been the industry standard for developing circuit design for several decades. The locked cycle program has shown that the Alcala material responds rapidly to flotation, with low circulating loads and reagent addition. Please refer to Table 2 in the Figures document (<http://www.cornerstoneresources.com/i/pdf/NR19-31Figures.pdf>).

Further Planned Test Work

During 2020 a pilot plant operation is planned, to treat approximately 30 tonnes of core and coarse rejects. The material has been sourced and is currently being packaged. The pilot plant will allow for confirmation of the flowsheet at a larger design and provide copper sufficient concentrate to operate a molybdenum-rhenium recovery evaluation, conduct vendor thickening and filtration tests, measure rheological properties for concentrate pipeline design and measure transport moisture limits (TML) and supply samples for smelter evaluation.

The large quantity of flotation tailing will allow testing of rougher recovery enhancements and magnetite recovery at a substantial scale, in addition to allowing for tailing deposition and environment tests. The production of significant pyrite concentrate allows for pilot testing of the cleaner recovery enhancement. The pilot is designed to be an effective blueprint for the first ten years of performance.

At the same time material flow tests will be conducted allowing for ore chute and stockpile design. It is anticipated that several hundred kilograms will also undergo ore sorting evaluation trials.

Summary of the Quality of Concentrates and Concentrate Specifications

The concentrate assay indicates a premium quality; high in copper and gold and low in deleterious elements.

Copper measured between 29% and 31%, iron measured between 29% and 31%, and sulphur measured between 37% and 38%. Combined, these three elements account for 96% to 99% of the concentrate mass, indicating a very low level of dilution of these concentrates by non-sulphide minerals.

None of the measured deleterious elements such as arsenic, bismuth, cadmium, chlorine, fluorine, mercury, selenium, tellurium, or uranium, were present at levels that typically are of concern; most measured at only trace levels. Similarly, Only trace amounts of magnesium and total organic carbon (TOC) were measured in the Alpala concentrates. This suggests little to no presence of typically hydrophobic non-sulphide gangue minerals. Very low levels of lead and zinc measured indicate little to no galena or sphalerite content in the concentrates.

Element	Symbol	Units	Sample		
			LC Composite T31 Cycle VI Copper Con	IC Composite T32 Cycle VI Copper Con	HC Composite T33 Cycle VI Copper Con
Antimony	Sb	g/tonne	22.2	58.6	15.5
Arsenic	As	g/tonne	180	481	325
Bismuth	Bi	g/tonne	5.6	7	7.9
Cadmium	Cd	g/tonne	3	0.6	1.3
Chlorine	Cl	g/tonne	80	80	110
Copper*	Cu	%	30.4	28.4	30.7
Fluorine	F	g/tonne	<20	30	30
Gold*	Au	g/tonne	28.3	46.2	41.0
Iron*	Fe	%	28.8	32.2	30.6
Lead	Pb	g/tonne	77	16	20
Magnesium	Mg	%	0.05	0.02	0.02
Mercury	Hg	g/tonne	0.06	0.09	0.17
Organic Carbon TOC	TOC	%	0.03	0.03	0.02
Selenium	Se	g/tonne	150	140	150
Silver*	Ag	g/tonne	45	39	58
Sulphur*	S	%	36.8	38.0	37.3
Tellurium	Te	g/tonne	4.8	5.4	7.7
Thorium	Th	g/tonne	<2	<2	<2
Uranium	U	g/tonne	<1	<1	<1
Zinc	Zn	g/tonne	130	40	50

It is expected that there will be strong demand for the concentrate from South East Asian, North and South American, European and a limited number of Chinese smelters seeking to optimize their economics with a premium quality concentrate such as Alpala.

Deleterious elements are low for a copper concentrate which will enhance the ability to market the Alpala concentrate, including the potential to achieve market leading payability. Alpala concentrate will allow smelters to consume greater quantities of complex material for which smelters receive a penalty payment, therefore optimising a smelter's revenue without adversely affecting the smelter's overall feed grade.

Appointment of Bluequest Resources AG (BQR)

BQR is a specialist advisor on commercial and logistical matters for concentrate marketing. The firm brings a wealth of experience to SolGold, in developing marketing and logistics plans for early stage, late stage and operating assets.

Its personnel have been responsible for assisting companies in the marketing and transportation of concentrates from a number of world-class assets in recent years, including Timok (Nevsun), Fruta del Norte

(Lundin Gold), Khoemacau (Cupric Canyon), Quebradona (Anglogold Ashanti) and Minesa (Mubadala).

About the Cascabel Joint Venture with SolGold:

Exploraciones Novomining S.A. (“ENSA”), an Ecuadorian company owned by SolGold Plc and Cornerstone, holds 100% of the Cascabel concession. Subject to the satisfaction of certain conditions, including SolGold’s fully funding the project through to completion of a feasibility study, SolGold will own 85% of the equity of ENSA and Cornerstone will own the remaining 15% of ENSA. SolGold is funding 100% of the exploration at Cascabel and is the operator of the project. SolGold shall receive 90% of Cornerstone’s distribution of earnings or dividends from ENSA to which Cornerstone would otherwise be entitled until such time as the amounts so received equal the aggregate amount of expenditures incurred by SolGold that would have otherwise been payable by Cornerstone, plus interest thereon from the dates such expenditures were incurred at a rate per annum equal to LIBOR plus 2 per cent until such time as SolGold is fully reimbursed.

Qualified Person:

Yvan Crepeau, MBA, P.Geo., Cornerstone’s Vice President, Exploration and a qualified person in accordance with National Instrument 43-101, is responsible for supervising the exploration program at the Cascabel project for Cornerstone and has reviewed and approved the information contained in this news release.

Logging, sampling, assaying and reporting

Holes referred to in this release were or are being drilled using HTW, NTW, NQ and BQ core sizes (respectively 7.1, 5.6, 4.8 and 3.7 cm diameter). Geotechnical measurements such as core recovery, fracturing, rock quality designations (RQD’s), specific gravity and photographic logging are performed systematically prior to assaying. The core is logged, magnetic susceptibility measured and key alteration minerals identified by experienced loggers and sometimes using an on-site portable spectrometer. Core is then sawed in half at the ENSA core logging facility, and half of the core is delivered by ENSA employees for preparation at ALS Minerals Laboratories (ALS) sample preparation facility in Quito. Core samples are prepared crushing to 70% passing 2 mm (10 mesh), splitting 250 g and pulverizing to 85% passing 75 microns (200 mesh) (ALS code CRU-31, SPL21 and PUL-32). Prepared samples are then shipped to ALS in Lima, Peru where samples are assayed for a multi-element suite (ALS code ME-MSP61, 1g split, 4-acid digestion, ICP-MS finish). Over limit results for Ag (> 100 g/t) and Cu, (> 1%) are systematically re-assayed (ALS code Ag-AA62, 4-acid digestion, AAS finish). Gold is assayed using a 30 g split, Fire Assay (FA) and AA finish (ALS code Au-AA23).

About Cornerstone:

[Cornerstone Capital Resources Inc.](http://www.cornerstoneresources.com) is a mineral exploration company with a diversified portfolio of projects in Ecuador and Chile, including in the Cascabel gold-enriched copper porphyry joint venture in north west Ecuador.

Further information is available on Cornerstone’s website: www.cornerstoneresources.com and on Twitter. For investor, corporate or media inquiries, please contact:

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On Behalf of the Board,
Hugh Brooke Macdonald
President and CEO

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¹ See Cornerstone news releases dated May 20, 2019 (PEA results) and June 28, 2019 (SEDAR filing of NI 43-101 Technical Report for the PEA).

² Comminution refers to the reduction of solid materials from one average particle size to a smaller average particle size, by crushing, grinding, cutting, vibrating, or other processes.

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