Constantine Releases Positive Preliminary Economic Assessment for Palmer Zinc-Copper-Silver-Gold Project, Southeast Alaska Post-Tax NPV of US$266 million

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Vancouver, June 3, 2019 - Constantine Metal Resources Ltd. (TSXV: CEM) (OTCQX: CNSNF) ("Constantine" or the "Company") is pleased to report that the Constantine Mining LLC Joint Venture, of which Constantine owns a 51% interest, has completed a Preliminary Economic Assessment ("PEA") on the Palmer Zinc-Copper-Gold-Silver Project, Southeast Alaska ("Palmer" or the "Project"). The PEA presents a low capex, low operating cost, high margin underground mining operation with attractive environmental attributes. All results presented herein are on a 100% Constantine Mining LLC basis and reported in US dollars.

PEA Highlights

Highlights of the PEA, assuming base case metal price of $1.22 per pound zinc, $2.82 per pound copper, $16.3 per ounce silver, $1296 per ounce gold and $220 per metric tonne barite, include:

- $354M pre-tax Net Present Value ("NPV") at 7% discount rate
- $266M after-tax NPV at 7% discount rate
- 24% pre-tax Internal Rate of Return ("IRR") and 21% post-tax IRR
- Mine life of 11 years after 24-months pre-production (based on current mineral resource)
- 3,500 tonnes-per-day steady state mining and processing rate
- Operating cost of $54.2/tonne (mining, processing, General &Administrative)
- Operating plus sustaining capital cost of $65.4/tonne
- Net operating income of $92.6/tonne ($81.4/tonne including sustaining capital costs)
- Zinc cash cost including sustaining capital of $0.11 per lb net of by-product credits
- Pre-production development capital cost of $278 million
- Sustaining capital and closure cost of $140 million; total Life of Mine ("LOM") capital cost of $418 million
- Post-tax payback period of 3.3 years
- 12.48 million tonnes ("Mt") mined at a diluted head grade of 4.24% zinc, 0.81% copper, 49.6 grams per tonne ("g/t") silver, 0.33 g/t gold and 22.6% barite ("BaSO4")
- LOM recovered metal production of 1,068 M lbs of zinc, 196 M lbs of copper, 18 M oz of silver, 91 K oz of gold and 2.89 M tonnes of BaSO4
- Important US source of the critical mineral barite

The PEA is preliminary in nature and includes inferred mineral resources that are too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that PEA results will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

"This PEA is the most significant milestone for Constantine to date, demonstrating a high-quality project with strong economics and a progressive, environmentally conscious mine design," Commented President & CEO Garfield MacVeigh. "Quality North American development-stage zinc-copper projects are in scarce supply, particularly projects with high operating margins and resilience to low metal price environments as demonstrated by the Palmer PEA. What sets the Palmer Project apart from its peers is excellent access by paved all-season highway and secondary roads, close proximity to an existing Pacific port ore terminal, reasonable and manageable capital costs, significant district-scale upside for additional mineral resources, and a joint venture that includes a global leader in the zinc smelting business."

For additional commentary on the significance of the results of this PEA, please click here (https://youtu.be/1WfcWkG-tAY) for a Proactive Investor interview with Constantine VP Exploration, Darwin

Green.

Constantine and joint venture partner Dowa Metals & Mining Co. Ltd. will now evaluate next steps to advance the project while continuing to focus on resource expansion and testing for additional deposits. The long-term vision is to define a multi-decade mining operation at Palmer.

Overview of PEA Parameters and Results

The PEA was prepared by independent consultant JDS Energy and Mining, Inc. ("JDS"). The Company also engaged Klohn Crippen Berger Ltd. ("KCB") for water management and waste management design components, and processing plant site foundation assessment. For readers to fully understand the information in this news release, they should read the PEA technical report (to be available on SEDAR or at www.constantinemetals.com within 45 days of this press release) in its entirety, including all qualifications, assumptions and exclusions that relate to the information set out in the technical report.

This PEA models concurrent mining of both the Palmer and AG Zone Deposits. Site topography enables lateral underground access to the base of the deposits and bottom-up, gravity assisted mining. Mine design utilizes longhole mining methods, subvertical ore passes, and an underground crusher and conveyor to deliver mineralized material to the mill. Three high-quality saleable concentrates will be produced (zinc, copper and barite). A fourth concentrate (pyrite) will also be produced for placement underground as backfill. Desulfurized tailings are classified as non-potentially acid generating and will be disposed of both as backfill and in a 'dry stack' filtered-tailings facility.

Table 1 - Summary of Economic Inputs and Results

Assumptions	Unit
Copper Price	$ per lb
Zinc Price	$ per lb
Silver Price	$ per oz
Gold Price	$ per oz
Barite Price (2)	$ per ton
Economics	
Pre-Tax	
Cash Flows (Undiscounted)	$ million
NPV at 7%	$ million
IRR	%
Payback Period	Years
Post-Tax	
Cash Flows (Undiscounted)	$ million
NPV at 7%	$ million
IRR	%
Payback Period	Years
Capital Costs	
Pre-production Capital Cost	$ million
Sustaining Capital + Closure Cost	$ million
Total Capital Cost	$ million
Revenue (per tonne processed)	
Net Smelter Return (3)	$ per ton
Royalty (2.5%)	$ per ton
Operating Cost and Margin (per tonne processed)	
Operating Cost (mining, processing, G&A)	$ per ton
Net Operating Income	$ per ton
Sustaining Capital & Closure	$ per ton
All-In Sustaining Operating Cost	$ per ton
All-in Sustaining Net Operating Income	$ per ton
Cash Cost (net of by-product credits)	
Zinc Cash Cost (C1)	$ per lb

Zinc Total Cash Cost (including sustaining capital & closure)	$ per lb

1. Base case prices for copper, zinc, gold and silver are the average of three years past and projected two years forward by analysis of London Metal Exchange futures as of April 16th, 2019.
2. Base case price for barite provided by third party barite industry experts, based on direct quotes from multiple wholesale providers in relevant oil basin markets (quoted short ton prices converted to metric tonne equivalent).
3. Net smelter returns are net of off-site costs including Treatment Charge/Refinement Charges, freight, and penalties, and exclusive of royalties.

Table 2 - Production and Processing Statistics

Total Mine Production	Zinc
12.48 Million Tonnes (diluted mine head grade)	4.24%
Metal Production	M lbs
Total Recovered (LOM)	1,068
Average Annual Recovered	100
Total Payable (LOM)	908
Average Annual Payable	85
Revenue by Metal (base case)	$M
Total LOM NSR value	900
Average Annual NSR value	84
Percent of Total Value	48%

Table 3 - Capital Costs

Capital Cost Items ("CapEx")	Initial ($M
Mining	$55
Site Development	$12
Mineral Processing	$75
Tailings Management	$2
Onsite Infrastructure	$34
Project Indirects	$26
EPCM	$32
Owner Costs	$8
Closure	$0
Salvage Value	
Subtotal	$245
Contingencies	$33
Total Project	$278

Table 4 - Operating Costs

Operating Cost ("OPEX")	
Underground Mining	$/tonne m
Processing	$/tonne
G&A	$/tonne
Total OPEX	$/tonne

Capital and Operating Cost Estimate Summary

The PEA is based on a capital cost summary with an estimated accuracy of +/- 25%, which is shown in the table below. Capital and operating costs were developed from first principles for construction, mining, processing, and administration using the mine plan, incorporating development rates, labour, materials, and consumables. JDS used vendor quotes on nearly all equipment.

Mining and Processing

The mine and processing plant have been designed for 3,500 tonnes per day. Initial material from the Palmer Deposit will be recovered at a rate of approximately 2,700 tonnes per day by underground longhole stoping mining methods. During the third year, production will commence at the AG Zone Deposit and increase total production to approximately 3,500 tonnes per day. Stopes will be filled with a combination of waste rock from development and paste backfill generated from the pyrite concentrate and de-sulphide tails. Mine access portals at multiple elevations are planned to maximize natural ventilation and dewatering of underground operations.

Diesel-powered mobile equipment will be used to conduct all underground mining activities. Underground crushing and conveying will provide low cost mineral transport from the Palmer Deposit to the processing facility. Mineralization from the AG Zone Deposit will be trucked via lateral underground access ramps to the underground crushing station at the Palmer Deposit.

The Project incorporates a standard 3,500 tonne per day comminution, flotation separation flow sheet including a primary underground crusher feeding a single semi-autogenous ("SAG") mill, thence a ball mill, followed by selective two and three-stage flotation to produce three concentrate products (copper, zinc, barite) for shipment to offsite smelters. A fourth concentrate (pyrite) will also be produced for placement underground as paste backfill. Millsite foundation assessment and foundation design were completed by KCB.

Metallurgical assumptions for the Palmer Deposit are based on locked cycle flotation and grindability tests completed in 2018 that yielded high recoveries at a moderate grind size to separate copper, zinc and barite concentrates. The majority of precious metals report to the copper concentrate, yielding higher overall payable fractions. AG Zone Deposit metallurgical assumptions are a modification of Palmer Deposit parameters based on metallurgically focused mineralogy studies. Deleterious elements are projected to be below penalty level. Zinc present within the copper concentrate will incur a small penalty.

Table 5 - Metallurgical Recovery Assumptions

Metal Recoveries (%)	Zinc
Palmer Deposit - Zinc Concentrate	93
Palmer Deposit - Copper Concentrate	4.8
Palmer Deposit - Barite Concentrate	-
AG Zone Deposit - Zinc Concentrate	88
AG Zone Deposit - Copper Concentrate	4.8
AG Zone Deposit - Barite Concentrate	-

Concentrate Transport and Refining

Copper and zinc concentrates will be shipped by covered, dual-trailer, 40-tonne concentrate trucks to the port of Haines, Alaska where the concentrate trailers will be shuttled by barge to the existing ore-terminal located in Skagway for eventual loadout onto ocean going cargo vessels to Asian smelters. All-in cost for transportation from mine site to end destination for copper and zinc concentrates is $91 per tonne of concentrate.

Barite concentrate will be placed in one tonne 'super sacks' on site and transported by truck within intermodal containers to Haines and then barged to the ship-to-rail container terminal in Prince Rupert, British Columbia. The final destinations for the barite concentrate include both western Canada and mid-west US oil basins. All-in cost for transportation from mine site to end destinations averages $132 per tonne of barite concentrate, inclusive of trucking, barging, rail, re-handling and container leasing.

Barite is a high-density, stable and chemically inert mineral (barium sulfate, $BaSO_4$) that is an important industrial mineral commodity predominantly used for drill mud in oil and gas drilling. It is one of 23 critical minerals listed by the United States Geological Survey that are defined as essential to economic and national security and vulnerable to supply chain disruptions due to reliance on foreign imports. At present, approximately 80% of the U.S. barite market is imported from foreign sources. The barite concentrate produced from the Palmer Project will be an end-user ready product that does not require additional

processing or refining off site.

The trucking distance from the proposed mine site to the port facility in Haines, Alaska is 72 km, consisting of 22 km of gravel road and 50 km of paved highway. The barging distance from Haines to the existing ore terminal in Skagway is 25 km. Skagway is one of North America's closest ports to Asia. Prince Rupert is located 400 nautical miles from Haines and is a major North American rail terminal.

Table 6 - Transportation and TC/RC Parameters

Concentrate Transportation, Treatment, Refining and Royalty Cost	
Zinc and Copper Transportation charges	$/wmt co
Barite Transportation costs	$/dmt cor
Treatment charges - Zinc	$/dmt cor
Treatment charges - Copper	$/dmt cor
Penalty - zinc >4% in copper concentrate	$/dmt cor
Refinement charges	$/lb of pa
Royalties	% of Net

*wmt: wet metric tonne; dmt: dry metric tonne; Zinc treatment charge based on 3-year trailing average

Mineral Resources

The table below outlines the total Indicated and Inferred Mineral Resources for the Palmer Deposit and the AG Zone Deposit.

An NSR cut-off of $80 per tonne was utilized for inclusion of resources in the PEA. The PEA mine plan includes a combined total of 12.48 Mt from the two deposits. The RW Zone portion of the Palmer Deposit did not meet internal criteria for inclusion in the base case mine plan and represents a potential future opportunity.

Table 7 - Total 2018 Mineral Resource Estimate for the Palmer Project (all deposits)

Deposit	Cut-off
Palmer Deposit South Wall & RW	$75/t NSI
AG Zone Deposit	5.0% ZnE
Total	

Notes:

1. See news release dated December 18th, 2018 for Palmer Project resource estimate.
2. Net Smelter Return ("NSR") equals (US$16.01 x Zn% + US$48.67 x Cu% + US$23.45 x Au g/t + US$0.32 x Ag g/t). NSR formula is based on estimated metallurgical recoveries, assumed metal prices, and assumed offsite costs that include transportation of concentrate, smelter treatment charges, and refining charges.
3. ZnEq equals = ($66 x Cu% + $25.3 x Zn% + $22 x Pb% + $0.51 x Ag g/t + $40.19 x Au g/t) / 25.3.
4. Assumed metal prices for NSR and ZnEq formulas are US$3.00/lb for copper (Cu), US$1.15/lb for zinc (Zn), US$ $1.00/lb for lead, US$1250/oz for gold (Au), US$16/oz for silver (Ag).
5. Estimated metal recoveries for Palmer Deposit are 93.1% for zinc, 88.9% for copper, 90.9% for silver (70.8% to the Cu concentrate and.1% to the Zn concentrate) and 69.6% for gold (49.5% to the Cu concentrate and 20.1% to the Zn concentrate) as determined from metallurgical locked cycle flotation tests completed in 2018. No recovery data is available for AG Zone deposit.
6. Barite (BaSO4) not included in the Cut-off determination or reported ZnEq.

Table 8 - Total Contained Metal for the Palmer Project (all deposits)

Resource Category	Zn (M lb)
Indicated	539
Inferred	1,047

For details of the mineral resource estimate for the Palmer Project including the quality assurance program and quality control measures applied and key assumptions, parameters and methods used to estimate the mineral resource set forth herein please refer to the technical report entitled "NI 43-101 Technical Report and Updated Resource Estimate to include the AG Zone for the Palmer Exploration Project" dated effective December 18, 2018 (the "Palmer Technical Report"). The Palmer Technical Report is available on the Company's issuer profile on SEDAR at www.sedar.com.

Tailings and Waste Rock

Tailings and waste rock management and water management facilities and assumptions were developed by KCB. These designs included a combined tailings management and waste rock storage facility on surface, non-contact water diversions and provisions for contact water collection and disposal. Site wide water management also includes collection, treatment (if required) and disposal of underground water that reports to surface, runoff from the Millsite and process water from the Mill.

An estimated 78% of tailings will be utilized as backfill, including all pyrite concentrate and over half of the desulfurized tailings. Residual desulfurized tailings requiring surface storage represents a relatively small fraction (15%) of total material mined and milled. The desulfurized tailings are classified as non-potentially acid generating.

Non-potentially acid generating ("NPAG") waste rock from underground development will be stored on surface. Potentially acid generating ("PAG") waste rock generated from underground workings will be disposed of underground as backfill. Some PAG waste rock will be stored temporarily at surface during the initial years of operation in a segregated lined facility until adequate space is available underground for disposal.

Conceptual designs for tailings and waste rock management alternatives were developed for 12 candidate sites. Filtered tailings with NPAG waste rock placed as outer containment berms in the same lined facility was selected as the preferred waste management method. Life of mine total tailings production requiring storage on surface will be approximately 1.83 million tonnes along with 1.10 million tonnes of NPAG waste rock.

Infrastructure and Other

The Project is located in the Porcupine Mining District of the Haines Borough, Alaska and benefits from well-developed infrastructure including existing road access to a year-round deep-sea port and proximity to an established mining community.

The town of Haines and surrounding rural communities (population 2,400) have been providing services, skilled labor, accommodations and equipment to support Constantine's exploration activities and local placer gold operations. Residents also work at the nearby Kensington and Greens Creek mines. For the purpose of the PEA, it is anticipated that the majority of the mine's workforce would reside in the local community. The mine plan will provide year-round stable employment in the region, a priority in community plans. The total direct workforce is expected to be 220 full time employees with approximately 40 additional fulltime contractor jobs for concentrate trucking, barging, and crew transportation.

Existing power lines extend to within a few kilometers of the Project; however, the local grid does not currently provide sufficient power to support the Project's needs. The PEA includes installation of a 12.5 MW liquefied natural gas ("LNG") power plant, using five CAT 2500 kW generators. The cost of power is estimated at $0.15/kWh exclusive of genset operating and maintenance labor costs, which are accounted for in project OPEX.

Environment and Closure

A combination of natural geological characteristics and deliberate design choices result in a project that will be a North American leader in low impact, environmentally conscious mine design. Environment protection and naturally sustainable closure were integral components in the mine design. Key features include:

- Small footprint, high-grade underground mine
- Low waste to ore ratio
- No permanent surface storage of potentially acid generating waste rock or tailings
- Pyrite selectively recovered to produce a de-sulfurized tailings product which is returned to the underground mine
- Majority of tailings returned underground for backfill, including all pyrite concentrate
- Tailings stored on surface represents only 14% (1.8 Mt) of all milled material (12.48 Mt) and consist of environmentally benign minerals (quartz, feldspar, mica, carbonate and chlorite).
- Avoidance of significant disturbance to wetlands or water bodies
- Upon closure cement portal plugs will be installed to seal underground workings and prevent mine water discharge to surface
- Utilizes existing resource access roads and overlaps areas of historic and current logging and placer mining
- Community consensus agreement and local and State land use management plans that support mineral development within the project area

The Company has made community engagement a priority and takes great pride in how the PEA mine design addresses the environmental concerns brought forward by project stakeholders. The Project design began with sustainability in mind, providing the foundation for responsible environmental and social closure. The Company will continue engaging in meaningful conversations with stakeholders as the Project moves forward.

Sensitivity Analysis

Sensitivity to the pre-tax NPV7% to changes to significant value drivers is shown below. The analysis demonstrates the Project is resilient to lower metal prices and higher costs. The Project is most sensitive to the price of zinc, with strong leverage to higher prices.

Table 9 - Sensitivity Analysis

	NPV7% $
	-20%
Zinc Price	217
Copper Price	288
Opex	442
Capex	425

Project Opportunities

The PEA identifies several project challenges and opportunities that were addressed to a level satisfactory for this PEA and represent optimization opportunities for the next study level to further enhance project economics. These include:

- Palmer Deposit and the AG Zone Deposit are open at depth and potential is considered excellent for the discovery of additional zones within the greater Palmer District
- Preliminary metallurgical test work on the AG Zone Deposit is recommended to assess potential to enhance metal recoveries and grades, particularly for silver
- Future trade-off studies for off-site infrastructure such as an ore terminal in Haines or expanded hydro power capacity within the local grid.

Qualified Persons Statements

The scientific and technical information in this news release with respect to the PEA (except as set forth below) has been reviewed and approved by Richard Goodwin, P.Eng., Project Manager for JDS, who is an

independent "qualified person" under National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI-43- 101") and the scientific and technical information in this news release related to the design of the water and waste management components in the PEA has been reviewed and approved by Jim Casey, P.E., Project Engineer for Klohn Crippen Berger Ltd., who is an independent "qualified person" under NI 43-101. All other scientific and technical information in this news release has been approved by Darwin Green, P.Geo., the Vice President Exploration for Constantine Metal Resources Ltd. Mr. Green is a qualified person for the purposes of NI 43-101.

About the Company

Constantine is a mineral exploration company led by an experienced and proven technical team with a focus on premier North American mining environments. The Company's flagship asset is the Palmer Project, a high-grade volcanogenic massive sulphide-sulphate (VMS) project being advanced as a joint venture between Constantine (51%) and Dowa Metals & Mining Co., Ltd. (49%), with Constantine as operator. Constantine also controls a portfolio of high-quality, 100% owned, gold projects, and intends to proceed with a restructuring transaction whereby it would spin-out these gold assets into its wholly-owned subsidiary, HighGold Mining Inc. (see Constantine news release dated May 21, 2019). These include the very high-grade Johnson Tract Au-Ag-Zn-Cu-Pb deposit, located in coastal south-central, Alaska and projects in the Timmins, Ontario gold camp that include the large, well-located Golden Mile property and the Munro Croesus Gold property, which is renowned for its exceptionally high-grade gold mineralization and the most-recently acquired Golden Perimeter property. Management is committed to providing shareholder value through discovery, meaningful community engagement, environmental stewardship, and responsible mineral exploration and development activities that support local jobs and businesses.

On Behalf of Constantine Metal Resources Ltd.

"Garfield MacVeigh"
President

For further information, please visit the Constantine Metal Resources Ltd. website at www.constantinemetals.com, or contact:

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Notes:

The information contained herein contains "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 and "forward-looking information" within the meaning of applicable Canadian securities legislation. "Forward-looking information" includes, but is not limited to, statements with respect to the activities, events or developments that the Company expects or anticipates will or may occur in the future, including, without limitation, the completion of the technical report in support of the PEA, statements regarding the mineral resource estimate, potential mineralization and geological merits of the Palmer Project. Generally, but not always, forward-looking information and statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes" or the negative connotation thereof or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" or the negative connotation thereof. Forward-looking information and statements are based on the then current expectations, beliefs, assumptions, estimates and forecasts about the Company's business and the industry and markets in which it operates.

Forward-looking information and statements are made based upon numerous assumptions, including among others, that the results of planned exploration activities are as anticipated, commodity prices, the cost of planned exploration activities, that financing will be available if and when needed and on reasonable terms, that third party contractors, equipment, supplies and governmental and other approvals required to conduct the Company's planned exploration activities will be available on reasonable terms and in a timely manner and that general business and economic conditions will not change in a material adverse manner. Although the assumptions made by the Company in providing forward looking information or making forward looking statements are considered reasonable by management at the time, there can be no assurance that such assumptions will prove to be accurate.

Forward-looking information and statements also involve known and unknown risks and uncertainties and other factors, which may cause actual results, performances and achievements of Constantine to differ materially from any projections of results, performances and achievements of Constantine expressed or implied by such forward-looking information or statements, including, among others, negative operating cash flow and dependence on third party financing, uncertainty of the availability of additional financing, imprecision of mineral resource estimates, aboriginal title and consultation issues, exploration risks, reliance upon key management and other personnel, deficiencies in the Company's title to its properties, uninsurable risks, failure to manage conflicts of interest, failure to obtain or maintain required permits and licenses, changes in laws, regulations and policy, competition for resources and financing and other factors discussed or referred to in the Company's most recent MD&A under "Risk Factors".

Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in the forward-looking information or implied by forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking information and statements will prove to be accurate, as actual results and future events could differ materially from those anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking statements or information. The Company undertakes no obligation to update or reissue forward-looking information as a result of new information or events except as required by applicable securities laws.

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