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Trading symbol: **BMC.V**

## **BUCHANS MINERALS ANNOUNCES POSITIVE PRELIMINARY ECONOMIC ASSESSMENT ON LUNDBERG BASE METAL PROJECT**

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**Buchans Minerals Corporation (BMC-TSX-V)** ("Buchans Minerals" or the "Company") is pleased to announce the completion of a positive Preliminary Economic Assessment ("PEA") on its 100% owned Lundberg base metal project near Buchans, central Newfoundland. The PEA is compliant with National Instrument 43-101 ("NI 43-101") and was completed by Wardrop Engineering, a Tetra Tech Company ("Wardrop"). The PEA is based on a 5,000 tonne per day open pit mining and milling operation over a 10 year mine life. The project's base case is forecast to provide a pre-tax internal rate of return ("IRR") of **40.92%** and a net present value ("NPV") at a 6% discount rate of **CDN\$192.6 million**. At base case metal prices plus 10% the IRR is **50.84%** and the NPV at a 6% discount rate is **CDN\$266.2 million**.

### **Highlights:**

- Pre-tax IRR of **40.92%** and an NPV at a 6% discount rate of **\$192.6 million** on total life of mine (LOM) cash-flow of **\$433.3 million**.
- Average operating costs for the first five years of the project are **\$26.74** per tonne on net revenue of **\$61.76** per tonne. This translates to a revenue to cost ratio of **2.3:1**. For the 10 year LOM the average operating costs are **\$26.00** per tonne on net revenue of **\$52.95** per tonne for a revenue to cost ratio of **2.0:1**.
- Payback for the project is estimated at 1.5 years on initial capital of \$119.6 million and sustaining capital of \$32.4 million for total capital expenditures of \$152.0 million. Capital estimates includes \$10.2 million indirect costs, \$3.8 million owners costs and \$19.1 million contingency.
- Average throughput of 5,000 tonnes per day, with a stripping ratio of 3.06 to 1, producing separate zinc, copper and lead concentrates with silver credits in both the lead concentrate and to a lesser degree the copper concentrate.
- Average annual production of metal in the concentrate is estimated to be **27.1 million** pounds of zinc (Zn), **5.5 million** pounds of copper (Cu), **16.3 million** pounds of lead (Pb) and **47.9 thousand** ounces of silver (Ag).
- A National Instrument 43-101 ("NI 43-101") Inferred Resource was used by Wardrop in the conceptual open pit design (see Resources & Conceptual Mine Plan below). The open pit design is comprised of 17.28 million tonnes of the Inferred Resource averaging grades of 1.63% zinc (Zn), 0.69% lead (Pb), 0.40% copper (Cu) and 5.96 g/t silver (Ag) over LOM. In the event metal prices improve in the future, the remaining insitu inferred resource that is excluded from the current Wardrop open pit mine design of 4.93 million tonnes may be included in a future economic evaluation.

The Company is considering undertaking further evaluations of several aspects of the project that may extend the life and/or profitability of the project that include:

- Conducting additional metallurgical tests to improve zinc recoveries, optimize reagent consumption and investigate producing a barite concentrate to enhance the project revenue.
- Conducting geotechnical studies to determine if the amount of waste rock can be reduced in the open pit design by steepening the pit slope beyond its current conservative design of 45 degrees.
- Completing metallurgical tests and a conceptual mining plan on the Company's 100% owned Daniels Pond deposit with a view to evaluating it as a possible satellite mining operation and providing additional feed to the proposed Lundberg milling facility (located 80 kilometres away). Details of the Daniels Pond NI 43-101 compliant Indicated Resource of 929,000 tonnes and Inferred Resource of 332,000 tonnes (at a 2% Zn cut-off) may be viewed at <http://www.buchansminerals.com>.
- Engaging in discussions with other companies in the region that have developed NI 43-101 compliant base metal resources that may also be considered for evaluation as satellite deposits to the Lundberg milling facility.
- Exploring for additional high grade massive sulphide resources at the 100% owned Buchans North and Clementine West prospects located in close proximity to Lundberg.

Warren MacLeod, President and CEO of Buchans Minerals stated, *"We are very pleased to reveal the excellent preliminary economic assessment for Lundberg and believe that it clearly provides a solid foundation for valuing the Company far in excess of its current market valuation. Now that the PEA has identified the potential for Lundberg to be a stand alone mine, the Company will evaluate the best corporate mechanism to deliver maximum shareholder value. In addition to Lundberg, the Company is now actively pursuing the development of the Woodstock manganese project and continuing exploration on its recent Goldquest discovery with Benton Resources"*.

Please go to <http://www.buchansminerals.com> in order to view an online video powerpoint presentation by Warren MacLeod on the merits of the Lundberg project.

### **Economics:**

The PEA is based on Inferred Mineral Resources, which are not Mineral Reserves and do not have demonstrated economic viability. Inferred Mineral Resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves and there is therefore no certainty that the conclusions of the PEA will be realized.

The key economic and operating input factors for the PEA are as follows:

<b>Item</b>	<b>Unit</b>	<b>Base Case</b>
Exchange Rate	Value of CND\$	US\$0.988
Zinc resource grade	%	1.63
Copper resource grade	%	0.40
Lead resource grade	%	0.69

Silver resource grade	g/t	5.96
Zinc concentrate grade	%	53.04
Copper concentrate grade	%	24.08
Lead concentrate grade	%	73.92
Zinc process recovery	%	66.16
Copper process recovery	%	89.33
Lead process recovery	%	78.67
Metal Price - Zinc	US\$/lb	1.22
Metal Price – Copper	US\$/lb	3.62
Metal Price – Lead	US\$/lb	1.10
Metal Price - Silver	US\$/oz	22.74
Net Smelter Royalty	%	3
Operating Costs – Mining	CAN\$/tonne milled	9.23
Operating Costs – Processing	CAN\$/tonne milled	14.74
Operating Costs – G&A	CAN\$/tonne milled	2.03
Total Operating Costs	CAN\$/tonne milled	26.00
Total Capital	CAN\$ million	152.0
Life of Mine Cash Flow	CAN\$ million	433.3
<b>Pre-Tax IRR</b>	<b>%</b>	<b>40.92</b>
<b>Pre-Tax NPV @ 6%</b>	<b>CAN\$ million</b>	<b>192.6</b>
Pre-Tax NPV @ 8%	CAN\$ million	164.3
Life of Mine	Years	10
Payback Period	Years	1.5

### **Resources & Conceptual Mine Plan:**

For purposes of designing the open pit, Mercator Geological Services Ltd. modified their original NI 43-101 compliant resource block model (see news release on November 7, 2008) by elimination of sub-blocking within the model. This resulted in a consistent 5m x 5m x5m block size for the entire modified model. At a cutoff value of 1% Zn-Pb-Cu the modified block model contains 22.21 million tonnes with average grades of 1.62% Zn, 0.69% Pb, 0.38% Cu, and 5.81g/t Ag. From this modified block model Wardrop calculated an Inferred Resource within the conceptual open pit mine design of 17.28 million tonnes with average grades of 1.63% zinc (Zn), 0.69% lead (Pb), 0.40% copper (Cu), and 5.96 g/t silver (Ag) at the same cutoff value, for a combined base metal grade of 2.72% (Zn-Pb-Cu). The conceptual open pit mine design developed by Wardrop is anticipated to be comprised of 20 benches down to a depth of 200 metres with a final footprint having approximate dimensions of 800 metres north-south by 900 metres east-west. With a stripping ratio of 3.06 to 1 it is estimated that 52.93 million tonnes of waste will be removed from within the conceptual open pit mine design.

The design employs conventional open pit mining methods of truck and shovel with an equipment fleet comprising a single, 251 mm diameter rotary blast hole drill rig for mining both the resource and waste, an 11 m<sup>3</sup> (bucket capacity) hydraulic face shovel with a fleet of haul trucks (91 tonne). Supplementary equipment would also include a loader, grader, dozers, and a backhoe excavator plus other ancillary equipment. The design forecasts a mill feed at a rate of 5,000 tonnes per day, beginning in the first year of the mine life.

### **Metallurgy & Processing:**

Metallurgical testing was performed by SGS Canada Inc. (“SGS”) and included thirty two (32) flotation scoping tests and three (3) locked cycle flotation tests on a variety of samples from the deposit. Based on SGS’s test results, Wardrop used the following concentrate grades and metal recoveries in the PEA;

Copper:	24.1% concentrate grade	89.3% recovery
Lead:	73.9% concentrate grade	78.7% recovery
Zinc:	53.0% concentrate grade	66.2% recovery
Silver in Lead concentrate:	27.8% recovery at a grade of 359.5 g/t	
Silver in Copper concentrate:	10.5% recovery at a grade of 37.8 g/t	

The PEA assumes installation of a mill/concentrator facility producing saleable concentrates for each zinc, copper and lead. It is assumed that concentrates would be trucked to port facilities in Newfoundland for shipping to smelters.

### **Site Plan & Reclamation:**

To minimize the impact on adjacent green-field areas, the conceptual mine plan proposes locating the mine facilities on “brown field sites” or ground that was previously impacted by the former Buchans mine that closed down in 1984. The proposed mine plan is only conceptual in nature and in the event the Lundberg project proceeds to the pre-feasibility stage, future mine plans will be subject to public and regulatory consultation.

It is anticipated that the open pit itself will be located just west of the town of Buchans, underlying the former “Lucky Strike” glory hole and mill site, whilst the proposed location for the new processing facilities is northwest of the open pit, adjacent to the former Rothermere shaft. The proposed tailings site is expected to overlay the footprint of the old Buchans mine tailings pond, located just south of the open pit and is expected to have sufficient capacity to contain all the tailings from the 5,000 tonnes per day operation over LOM of 10 years, plus additional capacity for a further 8 years if needed. The waste rock dump is expected to be located 1 kilometre south of the open pit and east of the existing tailings pond. This location was selected because of its close proximity to the open pit, distance from the town, bowl shaped topography and its location within drainage already impacted by historic operations.

Closure and reclamation of the project site is expected to involve the removal/demolition of all surface structures and buildings, whereby concrete foundations will be demolished to grade and covered with non acid generating crushed waste rock. All disturbed areas are expected to be graded to restore the natural drainage patterns to the extent possible, followed by scarifying and seeding to promote revegetation. It is anticipated that waste rock stockpiles will be contoured to promote drainage and maintain slope stability, covered with 30 cm of overburden and seeded to promote revegetation. The tailings management area is expected to be closed out with a dry, water shedding cover. It is also anticipated that seeding will apply grass species appropriate to the local ecology and that runoff and seepage quality will be monitored following completion of the closure works to verify the performance of the works in maintaining acceptable water quality.

### **Community:**

The proposed open pit is located close to the town of Buchans and may ultimately impact the local community. As the Company moves towards development of the Lundberg project, it anticipates engaging in discussions with local landowners, the municipality of Buchans and regulatory authorities with a view to agreeing on plans that best suit all parties impacted by the proposed operation. The Company believes it is worth noting that there are several recent examples of Canadian mining companies that have successfully worked with local communities to allow open pit mining operations in close proximity to those communities.

**Risks:**

As with all mine development projects, there are a number of risks that can affect the successful outcome of the project, including without limitation:

- Decreased metal prices and / or detrimental exchange rates.
- Variation between the calculated resource estimate and actual resource, potentially leading to higher dilution, modifications in the mining method or requiring additional definition drilling.
- Reduction in metallurgical recoveries and concentrate grades upon conducting further metallurgical tests on samples that are more representative of the entire resource.
- Operating and capital costs may vary as more detailed engineering work is completed.
- Generally accepted concentrate sales terms utilized in the PEA may be more beneficial or detrimental in the future.
- Ability to obtain necessary permits in a timely manner.
- Ability to negotiate with local landowners, businesses and/or local municipality in regards to possible purchase, relocation or re-building of homes, facilities, services and/or structures.

**Qualified Person:**

Mike McLaughlin, P.Eng., is a project manager with Wardrop and is acting as a Qualified Person for the financial analysis.

Dan Gagnon, P.Eng. is an open pit mine engineering with Wardrop and is acting as Qualified Person for the open pit mine design and the associated estimated capital and operating cost for the open pit mine.

Daniel Coley, MBA, B.Sc., P.Eng., Senior Process Engineer with Wardrop, is a Qualified Person as defined by NI 43-101 and has reviewed and approved the results of the metallurgical test work conducted by SGS Canada for Buchans Minerals Corporation regarding the Lundberg deposit.

Peter Webster P.Geo. is President of Mercator Geological Services Limited and is acting as a Qualified Person for the Mineral Resource Estimate.

**Technical Report:**

The full PEA will be filed under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com) within 45 days.

**About Buchans Minerals:**

Buchans Minerals is an Atlantic Canada based resource company that is primarily focused on exploring and developing mineral properties in New Brunswick and the historic Buchans mining camp in central Newfoundland, Canada.

**Forward Looking Information:**

This news release contains or refers to "forward looking information" within the meaning of applicable Canadian securities legislation. All statements in this release, other than statements of historical fact, which address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future are forward looking information. Wherever possible, words such as "plans", "expects" or "does not expect", "budget", "scheduled", "estimates", "forecasts", "anticipates" or "does not anticipate", "believes", "intends" and similar expressions or statements that certain actions, events or results "may", "could", " "would", "might" or "will" be taken, occur or be achieved, have been used to identify forward looking information.

In particular, all statements in this news release that address estimated resource quantities, grades and contained metals, possible future mining, and exploration and development activities are forward looking statements. By its very nature, a Preliminary Economic Assessment is preliminary. The PEA includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the findings of the PEA will be realized. Wardrop's assumptions, estimates, expectations, analysis and opinions used in the PEA are based on the information available to Buchans Minerals and Wardrop as of the date of this news release. Wardrop's assumptions and estimates are based on experience and perceptions of trends, current conditions and expected development as well as other factors that Wardrop believes are relevant and reasonable in the circumstances, but which may prove to be incorrect. In particular, assumptions have been made regarding a number of variables that impact the Lundberg project and include, among other things, market prices for metals, exchange rates, inferred resource tonnages & grades, stripping ratios, processing techniques, through-put rates, flotation recoveries, concentrate grades, smelter charges, transportation charges, tailings disposal, waste rock disposal, site reclamation, equipment salvage, operating costs (including mining, processing & general administrative costs), capital costs and assumptions that all the necessary regulatory (including environmental) permits will be issued in respect of the project.

Readers are cautioned that the foregoing list is not exhaustive of all factors, variables and assumptions which may have been used. Buchans Minerals is subject to the specific risks inherent in the mining business as well as general economic and business conditions. Buchans Minerals' actual results, programs and financial position could differ materially from those anticipated in such forward looking statements as a result of a number of factors, many of which are beyond the Company's control. These factors include, but are not necessarily limited to, results of the exploration activities and development of mineral properties, the interpretation of drilling results and other geological data, the uncertainties of resource estimations, receipt and security of mineral property titles, receipt of licenses required to conduct mining activities, country risks, project cost overruns or unanticipated costs and expenses, the availability of funds, fluctuations in metal prices, currency fluctuations, and general market and industry conditions. Although the Company believes the expectations expressed in the PEA and other forward looking statements are based on reasonable assumptions, there is no assurance that forward looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, such statements should not

be in any way construed as guarantees of future performance as actual results or developments may differ materially from those forward looking statements and readers should not place undue reliance on this information. Buchans Minerals does not undertake to update any forward looking information, except as, and to the extent required by, applicable securities laws.

**FOR FURTHER INFORMATION, PLEASE CONTACT:**

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