Avanti Mining Further Optimizes Kitsault Feasibility Study

14.11.2013 | Marketwired

VANCOUVER, BRITISH COLUMBIA--(Marketwired - Nov 14, 2013) - Avanti Mining Inc. (TSX VENTURE:AVT)(PINKSHEETS:AVNMF) ("Avanti") is pleased to provide the results of the most recent study to further optimize the February 2013 Feasibility Study Update ("FSU") prepared by AMEC on its 100% owned Kitsault Molybdenum-Silver property in northwest British Columbia, Canada. The optimization started with a new mine plan including new capital and operating cost estimates intended to bring cash flow forward thereby improving the project economics. This optimized FSU will become the basis for discussions with financial institutions regarding the projects debt and equity financing needs.

"We are pleased to present an optimized version of our 2013 Feasibility Study Update by AMEC and other contributors on the Kitsault Molybdenum Project," stated Mark G. Premo, Avanti's President and CEO. "Kitsault's projected cash costs are in the lowest quartile of primary molybdenum producers worldwide."

Because there were no material changes to mineral reserves or mineral resources, the technical report summarizing this update will be filed with Avanti's Annual Information Form on SEDAR and Avanti's web site, www.avantimining.com in the second quarter of 2014. All economic figures contained in this press release are expressed in Canadian dollars except where noted (USD exchange rate varies in the model between 0.95 to 0.93 per CAD$, details are provided in table 4).

Highlights of the project include:

- Initial capital costs including working capital have been revised and are estimated at $812 million and the life of mine (LOM) sustaining capital at $132 million (+/- 15% accuracy). This represents a reduction of $126 million for initial capital and an overall reduction to total capital of $67 million over the LOM.
- Cash operating cost at the mine site are estimated at $6.58 per pound of molybdenum (Mo) produced. It drops to $5.60 (US$ 5.21), when a Silver by-product credit of $0.98 per pound of Mo is realized. Total cash cost including transportation and smelter charges would be $7.07 (US$ 6.57) per pound of Mo.
- The new mine plan based upon the resource model developed in 2012 calls for a total of 226 million tonnes of proven and probable reserves grading 0.083% Mo and 5.3 g/t silver to be mined over a 14-year mine life, producing 367 million pounds of Mo and 15.3 million ounces of silver. The Mo grade to the mill over the first five years of production averages 0.101% Mo;
- At a long term price Mo price of US$14.50/lb, (long term price projections are supported by CPM July 2013 commodity report), the project has an after tax Net Present Value (NPV) at an 8% discount rate of $417 million and a 17.3% IRR. Sensitivity analysis to Mo prices is provided in this report.
- The mine has certain infrastructure in place with road access and will be serviced by the existing BC Hydro transmission grid;
- The reopening of the mine is projected to create over 300 high paying local jobs during its 14-year life, and at the peak of construction, over 700 jobs. The construction period is estimated at 25 months;
- The Project received the BC Environmental Assessment Certificate in March 2013 and subsequently applied for the British Columbia permits for construction in April 2013. The permitting process is well advanced and the permits are expected by the end of this year. The Kitsault Project underwent a comprehensive study as required by the Comprehensive Studies Regulation of the Canadian Environmental Assessment Act (CEAA), with key triggers being the requirement for a Fisheries Act permit and explosives permit under the Explosives Act. The federal review of Avanti's Environmental Impact Statement (EIS) was completed on September 22, 2013. The federal Minister of Environment will render a decision on the EIS before the end of 2013.

Optimization approach

Early in 2013 Avanti engaged a group of engineering and consultancy firms including Whittle Consulting, Ausenco, AMEC and Knight Piésold to further optimize the Kitsault Molybdenum Project. The optimization initiative is aimed to rationalize the initial capital expenditure while providing higher returns in early stages of the project as well as the maximization of metal recovery at the later stages. The main aspects incorporated into the project as part of the optimization include:

- Fully variable elevated cutoff grades during the life of mine paired with the dynamic use of the ore stockpiles.
- Implementation of a flexible mineral processing regimen based on grind-throughput-recovery (GTR) relationships for the three main rock types contained in the deposit.
- Selection of the ultimate pit and internal operational phases incorporating the results of the Enterprise Optimization study.
- Optimization of equipment selection and layout in the process plant.
- Optimization of the grinding circuit to maximize throughput
- Incorporation of improvements to the silver recovery circuit.
- Rationalization of the initial and sustaining capital requirements, including optimization to the project infrastructure and tailings management facilities.

Project Description

The Kitsault property is located about 140 km north of Prince Rupert, British Columbia, and south of the head of Alice Arm, an inlet of the Pacific Ocean. The property includes three known molybdenum deposits: Kitsault, Bell Moly, and Roundy Creek. The Kitsault mine was a producer of molybdenum between 1967 and 1972 and from 1981 to 1982 with total production on the property during both periods being approximately 31 million pounds of molybdenum.

Kitsault has road access to the mine site and is serviced by the BC Hydro transmission grid. The November 2013 FS update estimates that the Kitsault Mine would operate at an annual mill throughput rate of 16.6 million tonnes, or 45,500 tpd, with an average strip ratio of 1:1 for a mine life of 14 years. The ore mined by conventional truck and shovel open pit methods will be crushed in a gyratory primary crusher, then ground using a SAG-ball mill configuration. Conventional flotation and five stages of cleaning will produce molybdenum concentrate that will be dried and packaged into bags for shipment. The life-of-mine molybdenum production is estimated at 367 million pounds of molybdenum contained in approximately 343 thousand wet tonnes of molybdenum concentrate produced from the processing of 226 million tonnes of ore grading 0.083% Mo. Total molybdenum recovery varies depending on mill head grade but is estimated to average 89% over the life of the mine. During the de-sulfidization of the tailings for environmental considerations, a process was developed to recover by-product silver that averages 5.3 g/t in the mill feed. Silver production of 15.2 million ounces is indicated at a metallurgical recovery of approximately 39%.

Mineral Reserves Statement

The Kitsault mine Mineral Reserves have been prepared by the consultants in accordance with NI 43-101 standards and CIM Definition Standards (2010). This statement was prepared by Mr. Ramon Mendoza Reyes (P.Eng.) of AMEC, a Qualified Person (QP) as defined in NI 43-101. These reserves are sufficient for 14 years of operation at a nominal production rate of 45,500 t/d. Mineral Reserves are summarized by category in Table 1. The notes accompanying Table 1 are an integral part of the Mineral Reserves and should be read in conjunction with the Mineral Reserve statement.

Table 1. Kitsault Mineral Reserves, Effective Date November 05, 2013, Ramon Mendoza Reyes, P. Eng. (cut-off 0.029% Mo)

Classification	Tonnage (Mt)	Mo (%)	Ag (g/t)	Contained Mo (M lb)	Contained Ag (M Oz)
Proven	130.7	0.092	5.2	264.2	21.7
Probable	95.6	0.071	5.5	150.0	17.0
Total Proven and Probable	226.3	0.083	5.3	414.2	38.7

Notes:

1. Mineral Reserves are defined within a mine plan, with pit phase designs guided by Lerchs-Grossmann (LG) pit shells, and reported at a 0.029% Mo cut-off grade, after dilution and mining loss adjustments. The LG shell generation was performed on Measured and Indicated mineral resources only, using a molybdenum price of $13.44/lb, an average mining cost of $1.82/t mined, stockpile rehandling cost of $0.60/t moved, a combined ore based cost of $5.91/t milled, and a selling cost of $0.30/lb of Mo sold. Metallurgical recovery used was a function of the rock type, head grade and target grinding size and was defined as follows:
    a. Monzonites, assuming a target grind size of 356 microns (51% of the resources in the mine plan)
    Recovery = $0.952x(-282.21(Mo\%)^2 + 91.062(Mo\%) + 87.97)$ with a cap of 90.75%
    b. Diorites, assuming a target grind size between 258 microns and 212 microns and a cap of 91.15% (28% of the resources in the mine plan)
    Recovery = $0.52x(0.952x(-282.21(Mo\%)^2 + 91.062(Mo\%) + 87.52)) + 0.48x(0.952x(-282.21(Mo\%)^2 + 91.062(Mo\%) + 89.33))$
    c. Hornfels, assuming a target grind size between 291 microns and 212 microns and a cap of 91.10% (20% of the resources in the mine plan)
    Recovery = $0.67x(0.952x(-282.21(Mo\%)^2 + 91.062(Mo\%) + 87.79)) + 0.33x(0.952x(-282.21(Mo\%)^2 + 91.062(Mo\%) + 89.41))$
    d. For other rock types (less than 1% of the resources in the mine plan)
    Recovery =7.5808xLn (Mo %) +108.63 with a cap applied at 95%

2. Revenue from silver was included in the LG shell generation assuming a price of $24.73/oz and an overall metallurgical recovery of 39% for all rock types.
3. Overall pit slopes varied from 42 to 48 degrees.
4. Dilution and Mining loss have been accounted for based on a contact dilution approach assuming a dilution band of one meter around the contact edges. 2.6Mt of Measured and Indicated mineral resources above cut-off was routed as waste. 1.4Mt of Measured and Indicated material below cut-off has been included as dilution material at the grade of those blocks. The 0.3Mt of Inferred dilution material had its grades set to zero.
5. Tonnages are rounded to the nearest 100,000 tonnes; grades are rounded to three decimal places for Mo and one decimal place for Ag.
6. Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade and contained metal content.
7. Tonnage and grade measurements are in metric units; contained molybdenum is in imperial pounds and contained silver is in troy ounces.
8. The life-of-mine strip ratio is 1:1

Capital Costs

Initial capital costs are estimated at $812 million compared with $938 million in the February 2013 update to the FS for a reduction of approximately 14%. Life-of-Mine sustaining capital (including reclamation bonding) was estimated to be $166 million, which is comprised mainly of mobile mine equipment replacement, ongoing Tailings Management Facility ("TMF") embankment construction. This compares with $106 million in the 2013 update for an increase of about 56%. All capital costs are [+/-15%] accuracy in this estimate.

The capital costs for the mine, plant and TMF and comparison with the February 2013 FSU are given in Table 2 below.

Table 2. Capital Cost Summary Comparison

Kitsault Capital Costs				
Preproduction Capital		2013 Feb Update	2013 Nov Update	% Difference
1000 Mining	$000	111,269	122,675	10%
2000 Site Preparation and Roads	$000	44,318	26,857	-39%

3000 Process Facilities	$000	238,665	226,153	-5%
4000 Tailings Management and Reclaim Systems	$000	120,936	81,329	-33%
5000 Utilities	$000	37,521	36,042	-4%
6000 Ancillary Buildings and Facilities	$000	49,896	33,856	-32%
8000 Owners Costs	$000	22,069	31,811	44%
9000 Indirects, excluding contingency	$000	173,951	150,642	-13%
9900 Contingency	$000	139,597	102,135	-27%
Total Pre-Production Capital	$000	938,221	811,500	-14%
Sustaining Capital				
Bonding	$000	33,960	33,960	0%
Sustaining Capital Operating Years	$000	72,357	132,294	83%
Total Sustaining Capital	$000	106,317	166,254	56%
Total Capital Cost	$000	1,044,538	977,754	-6%

Operating Costs

LOM cash mine site operating costs are estimated at $6.58 per pound of Mo (±15% accuracy). Total cash cost are $7.07 per pound of Mo, this includes a silver credit of $0.98 and transportation and smelter charges of $1.47. These costs are about 3% higher than the February 2013 FS Update. The LOM unit cash operating costs are also summarized in Table 3 below:

Table 3. Cash Operating Costs Summary Comparison (LOM average)

Kitsault Operating Cost					
Area	Feb 2013 Update		Nov 2013 Update		% Difference
	Total LOM $000	Cash Cost $/lb Mo	Total LOM $000	Cash Cost $/lb Mo	
Mine Operations	933,896	2.50	940,101	2.56	1 %
Processing Operations	1,244,879	3.33	1,206,207	3.29	-3 %
G&A	307,166	0.82	270,075	0.74	-12 %
Subtotal Mine Site	2,485,941	6.65	2,416,383	6.58	-3 %
Ag Credit	(340,878)	(0.91)	(359,908)	(0.98)	6 %
Transportation and Smelter Charge	371,195	0.99	537,936	1.47	45 %
Total	2,516,259	6.73	2,594,411	7.07	3 %

Project Economics

The Feasibility Study economic results utilized assumptions summarized in the Table 4 below:

Table 4. Financial Analysis Parameters

Parameters
General Assumptions
Mine Life
Mill operating days per year
Mill Availability
Production Rate (average)
Average Process Recovery (Mo)
Average Process Recovery (Ag)
Molybdenum Concentrate Production - LOM
Concentrate Grade (% Mo)
Capital costs US$ to CDN$ exchange rate
Cash flow revenue US$ to CDN$ exchange rate
Market
Discount Rate
Base Case LOM average molybdenum price(3)
Base Case LOM average silver price
Royalty
Amax Zinc (Newfoundland) Ltd Net profits Interest
Alcoa Royalty NSR

The economic model for the base case in this study update assumes a long-term average molybdenum price

of $14.50/lb for revenue purposes.

The after-tax NPV at an 8% discount rate over the estimated mine life is $417 million. The after-tax IRR is 17.3%. Payback of the initial capital investment is estimated to occur in 4.4 years after the start of production.

Sensitivity

Sensitivity analysis for key economic parameters is shown in Table 5. This analysis suggests that the project is most sensitive to exchange rates followed by Mo prices. The project is least sensitive to operating and capital costs.

Table 5. Base Case Sensitivity to After-Tax NPV at 8% Discount Rate

			Change in Factor						
SENSITIVITY OF AFTER-TAX NPV @ 8%		Factor	-30%	-20%	-10%	0%	10%	20%	30%
Factor	Exchange rate	1	1,189	870	619	417	248	105	(19)
	Capital expenditure	2	586	530	474	417	359	300	241
	Operating expenditure	3	692	601	509	417	324	231	137
	Metal price	4	(167)	38	229	417	601	783	964

The financial model also examines the primary financial outputs at various LOM realized Mo prices and various discount rates. These results are displayed in Table 6.

Table 6. Sensitivity of NPVs, IRR and Payback of the Project at Various Metal Prices

Moly Price (US$/lb)	CNCF (Undisc.) (CDN $M)	NPV @ 6% (CDN $M)	NPV @ 8% (CDN $M)	NPV @ 10% (CDN $M)	IRR %	Payback (Years
9.00	(88)	(305)	(350)	(386)	0.0 %	16.0
12.00	656	215	118	36	11.0 %	5.6
15.00	1,303	653	507	386	20.4 %	3.6
18.00	1,948	1,079	885	723	28.6 %	2.7

Financing and Environmental Assessment Update

Avanti continues to advance its strategy to finance the development of the Kitsault Mine. Toward that end it has signed an off-take agreement with ThyssenKrupp Metallurgical Products, a German steel maker, for 50% of the production of Kitsault for the life of the mine. Contract volumes will be established annually based upon the mine plan and reference a market based monthly price for molybdenum. Based upon the strength of this off-take agreement and an application made by KfW IPEX-Bank GmbH (KfW), a member of Avanti's mandated banking syndicate, the project has received approval in principle for German government debt guarantee for up to US$300 million.

Avanti also continues discussions with a potential strategic partner that will assist in providing the equity component of the project financing.

The Project received the BC Environmental Assessment Certificate in March 2013 and subsequently applied for the British Columbia permits for construction in April 2013. The permitting process is well advanced and the permits are expected by the end of this year. The Kitsault Project went through a comprehensive study as required by the Comprehensive Studies Regulation of the Canadian Environmental Assessment Act (CEAA), with key triggers being the requirement for a Fisheries Act permit and explosive permit under the Explosives Act. The federal review of Avanti's Environmental Impact Statement (EIS) was completed on September 22, 2013. The federal Minister of Environment will render a decision on the EIS before the end of 2013.

The QPs reviewed and approved the content of this news release summarized from the November 2013 Feasibility Study Optimization. The consultants (QPs) with their responsibilities are as follows:

AMEC Americas Limited, Mr. Ramon Mendoza Reyes (P.Eng.) for matters relating to mineral reserve

statements, mining plan, mining capital, and mine operating costs.

AMEC Americas Limited, Mr. Tony Lipiec (P.Eng.) for matters relating to the metallurgical testing review, mineral processing, and process operating costs.

AMEC Americas Limited under the supervision of Mr. Simon Allard (P.Eng.) for financial analysis.

AMEC Americas Limited under the supervision of Mr. Scott Fulton (P.Eng.) for matters relating to infrastructure and cost estimates.

SRK Consulting (Canada) Inc. (SRK Canada) under the direction of Mr. Peter Healey (P.Eng) for matters and costs relating to mine closure and reclamation.

Knight Piésold Ltd. (KP) under the direction of Mr. Bruno Borntraeger (P.Eng.) for matters and costs relating to plant site geotechnical conditions, surface water diversions and the Tailings Management Facility (TMF).

Avanti Mining Inc. is focused on the development of the past producing Kitsault molybdenum mine located north of Prince Rupert in British Columbia. Mr. Mark Premo, Chief Executive Officer for the Company has reviewed and approved the scientific or technical information in this press release including the financing update.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

Forward-Looking Statements: This news release contains certain forward-looking information concerning the business of Avanti Mining Inc. (the "Corporation"). All statements, other than statements of historical fact, included herein including, without limitation; statements about the recoverability of molybdenum and silver at the Kitsault property, the results of the feasibility study, the timing of the receipt of environmental approvals and other regulatory permits, operating cost, capital cost, cash flow, the anticipated dates of commencement of construction and production, production schedule, molybdenum products meeting the specifications of the London Metals Exchange, silver concentrate quality and other matters related to the development of the Kitsault molybdenum mine, are forward-looking statements. These forward-looking statements are based on the opinions of management at the date the statements are made and are based on assumptions and subject to a variety of risks and uncertainties and other factors that could cause actual events to differ materially from those projected in forward-looking statements. Important factors that could cause actual results to differ materially from the Corporation's expectations include fluctuations in commodity prices and currency exchange rates; uncertainties relating to interpretation of drill results and the geology, continuity and grade of mineral deposits; uncertainty of estimates of capital and operating costs, recovery rates, production estimates and estimated economic return; the need for cooperation of government agencies and native groups in the exploration and development of properties and the issuance of required permits; the need to obtain additional financing to develop properties and uncertainty as to the availability and terms of future financing; the possibility of delay in exploration or development programs or in construction projects and uncertainty of meeting anticipated program milestones; uncertainty as to timely availability of permits and other governmental approvals; and other risks and uncertainties disclosed in the Corporation's Annual Information Form for the year ended December 31, 2010, which is available at www. Sedar.com. The Corporation is under no obligation to update forward-looking statements if circumstances or management's opinions should change, except as required by applicable securities laws. The reader is cautioned not to place undue reliance on forward-looking statements.

(1) 0.95 FX rate reflects a rate close to current and applies to capex as most of it will occur early in the project life.

(2) 0.93 FX rate reflects a long term rate considered to be a consensus of bank estimates and applies to the revenues from metal sales over the life of the project which is over a period of 16 years.

(3) Long term Mo price projections are supported by CPM July 2013 commodity report.

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