



Updated NI 43-101 Technical Report on the NorthMet Deposit Minnesota, USA

Prepared for:
PolyMet Mining Corp.

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1.7 Economics

The economic summary reflects the 2008 DFS Update. Key economic metrics include earnings before interest, tax, depreciation, and amortization (EBITDA) which is projected to be \$217.3 million on average over the first five years of operations. The net present value of future cash flow (after tax) discounted at 7.5% is estimated to be \$649.4 million compared, and the after tax internal rate of return is estimated at 30.6%. Table 1-2 also sets out the affect on EBITDA of a 10% change in each metal price. The figures show a comparison with the NI 43-101 filed with the completion of the DFS in 2006.

Table 1-2: Key Economic Highlights

		Update May-08	DFS Sep-06
Operating plan			
Proven and probable reserves	million t	274.7	181.7
Ore mined - life of operation	million t	224.0	181.7
Overburden removed (capitalized under site preparation)	million t	18.5	-
Waste	million t	285.3	302.3
Operating costs per ton processed			
Mining and delivery to plant	\$/t	4.31	3.80
Processing	\$/t	8.07	6.75
G&A	\$/t	0.94	0.46
Total	\$/t	13.33	11.02
Metal price assumptions (SEC-standard)			
Copper	\$/lb	2.90	2.25
Nickel	\$/lb	12.20	7.80
Cobalt	\$/lb	23.50	16.34
Palladium	\$/oz	320	274
Platinum	\$/oz	1,230	1,040
Gold	\$/oz	635	540
Economic summary			
Annual earnings before interest, tax, depreciation and amortization (EBITDA) - average first five years	\$ million	217.3	175.3
Net present value of future after tax cash flow discounted at 7.5%	\$ million	649.4	595.4
Internal rate of return (after tax)		30.6%	26.7%
Sensitivity: 10% = price = \$Δ million in EBITDA			
Copper	\$ million	18.6	15.7
Nickel	\$ million	13.3	9.3
Cobalt	\$ million	0.9	0.9
Palladium	\$ million	1.7	2.0
Platinum	\$ million	1.7	2.1
Gold	\$ million	0.3	0.5
Copper costs			
cash - co-product method	\$/lb	1.05	0.81
cash - by-product method	\$/lb	(0.28)	0.06



- Gross Metal Value = value of metals considering price, recovery and downstream costs
- Mining Cost = cost to mine ore and waste adjusted for haulage path
- Processing Cost = cost to process ore tonnes
- G&A = anticipated General and Administrative costs

The block value was stored in each block and a cutoff where the block value was greater than or equal to \$0.01. This implies that the block would make \$0.01 or greater of net revenue (not considering capital) to mine the block and process it for the contained metal. Blocks with a value of \$0.00 or less were deemed to be waste material.

Table 15-1 Updated Reserve Estimate – September 2007

Class	Tonnage (Mst)	Grades (Diluted)					
		Copper (%)	Nickel (%)	Platinum (ppb)	Palladium (ppb)	Gold (ppb)	Cobalt (ppm)
Proven	118.1	0.30	0.09	75	275	38	75
Probable	156.5	0.27	0.08	75	248	37	72
Total	274.7	0.28	0.08	75	260	37	73

The following notes should be read in conjunction with Table 15-1:

Rounding as required by reporting guidelines may result in apparent summation differences between tons, grade and contained metal.

Tonnage and grade measurements are in Imperial units.

The reserves are bound within the DFS pit shell.

15.4 Factors That May Affect the Mineral Reserve Estimate

The mine reserves are based on the complete DFS pit shell from the 2006 study, using the updated geologic resource as of September 2007. AGP has developed and prepared costing for a larger pit, but restricted the final phase in the detailed work to maintain similar production tonnage to the September 2007 reserve statement. If Polymet were to decide to extend the mine life, the additional phase (32.5 million tons) could readily be brought into the reserve category indicating potential upside to the project with an additional 2.8 years.

A sustained higher metal price regime has the potential to allow expansion of the existing pit phases both laterally and to depth. In addition, higher metal prices may assist in lowering the cutoff grade within each phase if sufficient plant and stockpile capacity exist.

The project is pursuing environmental permitting which may restrict the overall potential of the proposed mine, although the resources outside the current permit plan indicates that further constraint is unlikely. Any conditions from the permitting review may have the potential to reduce the overall size of the project. These would need to be examined in detail to see what impact, if any potential conditions may have.



22.1.3 2008 DFS Update

Capital Costs

Since the September 2006 DFS, and on a like-for-like basis, the total capital cost has increased by 36% to \$516.8 million. This increase reflects both cost inflation and design scope changes since the DFS, including facilities needed to ship concentrate during the construction and commissioning of the new hydrometallurgical plant.

In addition, PolyMet anticipated \$85.1 million of expenditures on measures to protect the environment, over and above the measures contemplated in the DFS. \$76.6 million for mining equipment that was assumed to be provided by a mining contract in the DFS has been incorporated as an operating lease in updated operating costs.

PolyMet has previously stated that it has been reviewing the possibility of selling concentrate during the construction and commissioning of new metallurgical facilities. This staged approach shortens the initial construction period, makes the Project less sensitive to the delivery schedule for long lead-time equipment such as autoclave vessels, and means that PolyMet can commence operations of the mine, the existing crushing and milling plant, the existing tailings disposal facilities, and the new flotation circuit, before starting the new hydrometallurgical plant.

As a result of the staged approach, the total capital required prior to initial production and sales declines to \$312.3 million, which includes \$64.7 million of additional environmental safeguards for this level of activity (Table 22-4).

Table 22-4: Capital Costs (US\$ M)

	Full Project	Change from DFS	Initial Concentrate Sales
Definitive Feasibility Study	379.8		138.7
Escalation and other scope changes	137.0	36%	108.9
Total	516.8		247.6
Environmental measures	85.1		64.7
Total change	222.1	58%	173.6
TOTAL	601.9		312.3

Operating Plans and Costs

The overall mining and operating plan remains the same as that defined in the DFS and which forms the basis of the plan being analyzed in the environmental impact statement. PolyMet intends to mine 32,000 tons of ore per day for an operating life of twenty years, processing a total of 224 million tons of ore.

The mine plan continues to be based on the following metal prices: copper - \$1.25/lb, nickel - \$5.60 per pound, cobalt - \$15.25/lb, palladium - \$210 per ounce, platinum - \$800 per ounce, and gold - \$400 per ounce.



Operating costs per ton of ore processed have increased to \$13.33 from \$11.02 in the DFS reflecting higher fuel, mine equipment, and other consumable costs, as well as general inflation. The cost of mining and delivering ore to the plant is now estimated at \$4.31 per ton compared with \$3.80 per ton in the DFS. The increase in mining costs has been partially offset by the lower strip ratio, larger mining equipment, and owner versus contractor operation.

The economic analysis is based on SEC-reserve standards, namely the three-year trailing average, which we calculated at April 30, 2008 (the end of our first fiscal quarter). This price deck is copper - \$2.90/lb, nickel - \$12.20/lb, cobalt - \$23.50/lb, palladium - \$320/oz, platinum - \$1,230/oz, and gold - \$635/oz. While these prices are somewhat higher than those used on the economic analysis in the DFS, each price is well below current market levels – in the first quarter of 2008, the following prices prevailed: copper - \$3.52/lb, nickel - \$13.09/lb, cobalt - \$46.37/lb, palladium - \$441/oz, platinum - \$1,867/oz, and gold - \$925/oz.

This translates into copper cash costs of \$1.05 per pound using a co-product basis to calculate costs, compared with the DFS estimate of \$0.81/lb. Taking revenues from the other metals as a deduction against costs, the co-product basis shows a cost of \$(0.28) per pound compared with \$0.06 per pound in the DFS.

Economic Summary

Key economic metrics include earnings before interest, tax, depreciation, and amortization (EBITDA) which is projected to increase to \$217.3 million on average over the first five years of operations from \$175.3 million estimated in the DFS. The net present value of future cash flow (after tax) discounted at 7.5% is estimated to be \$649.4 million compared with \$595.4 million in the DFS, and the after tax internal rate of return is now estimated at 30.6% compared with 26.7% in the DFS. The table below also sets out the affect on EBITDA of a 10% change in each metal price.