

INDEPENDENT TECHNICAL REPORT

on the

NorthMet Project

Located in N-E Minnesota, USA, near the town of Babbitt

*Technical Update and Preliminary Assessment of the NorthMet
Project in connection with the Revised Preliminary Mine Plan &
Production Schedule*

for

POLYMET MINING CORP.

By

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GLOSSARY OF TERMS

Argosy	Argosy-Fleck Resources
Co	Cobalt
Cu	Copper
DFS	Definitive Feasibility Study
CUPREX	Proprietary hydrometallurgical extractive process
DNR	The Minnesota Department of Natural Resources
EIS	Environmental Impact Statement
Fleck	Fleck Resources
Ga	Geological unit of time – 10^9 years
ICP-AES	Inductively coupled plasma atomic emission spectroscopy
Lakefield	Lakefield Research Limited
LTVSMC	LTV Steel Mining Company
MW	mega watts
NERCO	NERCO Minerals Company
NI	National Instrument
Ni	Nickel
North	North Limited
PGE	Platinum Group Elements
PGM	Platinum Group Metals
PRI	Partridge River intrusion
PolyMet	PolyMet Mining Corp.
RC	Reverse Circulation drilling
SEDAR	System for Electronic Document Analysis and Retrieval
The Company	PolyMet Mining Corp.
The Project	NorthMet Project
TSE	Toronto Stock Exchange
USS	U.S. Steel
BQ, BX, BTW NTW, PQ	Nomenclature describing diamond drill bit diameters.

3. Summary

This report has been written in accordance with the reporting requirements of National Instrument 43-101. The reader is requested to refer to the PolyMet Mining Corp. (“PolyMet”) Pre-feasibility Study Report of April 2001, which may be found on the SEDAR website, as well as two more recent reports. The first, dated April 2004 by P. Downey and Associates, is entitled “Technical Update of the NorthMet Project Incorporating the established Cliffs-Erie crushing/milling/concentration facilities with the Hydrometallurgical Processes described in the May 2001 Pre-feasibility Study.” Reference should also be made to a second SEDAR-filed report dated October 2004 by Dr. Rodney Hammond and entitled “Technical Update of the NorthMet Project in connection with the proposed diamond drilling program.” The April 2004 report by P. Downey and Associates, recommends proceeding to the next stage of project development, which is to carry out a Feasibility Study, and the October 2004 report by Dr. Hammond recommends proceeding with the proposed drilling program, which forms an integral part of the Feasibility Study.

Development of a Definitive Feasibility Study (“DFS”) is now in progress and the proposed diamond-drilling program got underway in February 2005. The drilling program, which is a key component of the DFS, is intended to provide additional material for ore characterization, metallurgical pilot scale testwork, for added confidence in resource definition and to provide waste, lithological, structural, geotechnical and hydrogeological data. Other activities associated with the DFS include:

- Metallurgical and hydrometallurgical testwork including flotation testwork, the determination of crushing and grinding indices, continuous locked cycle leaching tests to confirm process design parameters and to characterize products and waste streams;
- Process design and engineering;
- Mine design and engineering leading to development of a Reserve Statement and production schedule;
- Infrastructure design and engineering;
- Environmental data collection and associated studies related to environmental permitting;
- Socio-economic studies related to permitting; and

- Capital and operating cost estimation together with risk assessment and mitigation.

The purpose of this Technical Report is to describe the results of a preliminary pit optimization and mine planning exercise recently carried out by Australian Mine Design and Development Pty Ltd (AMDAD, consulting mining engineers) as part of the Definitive Feasibility Study of PolyMet's NorthMet Deposit located in northeastern Minnesota, USA. This preliminary mine planning exercise is intended to provide information for preliminary planning purposes, for environmental permitting purposes, to assist with the detailed planning and location of diamond drill holes and to provide preliminary mine design and planning data.

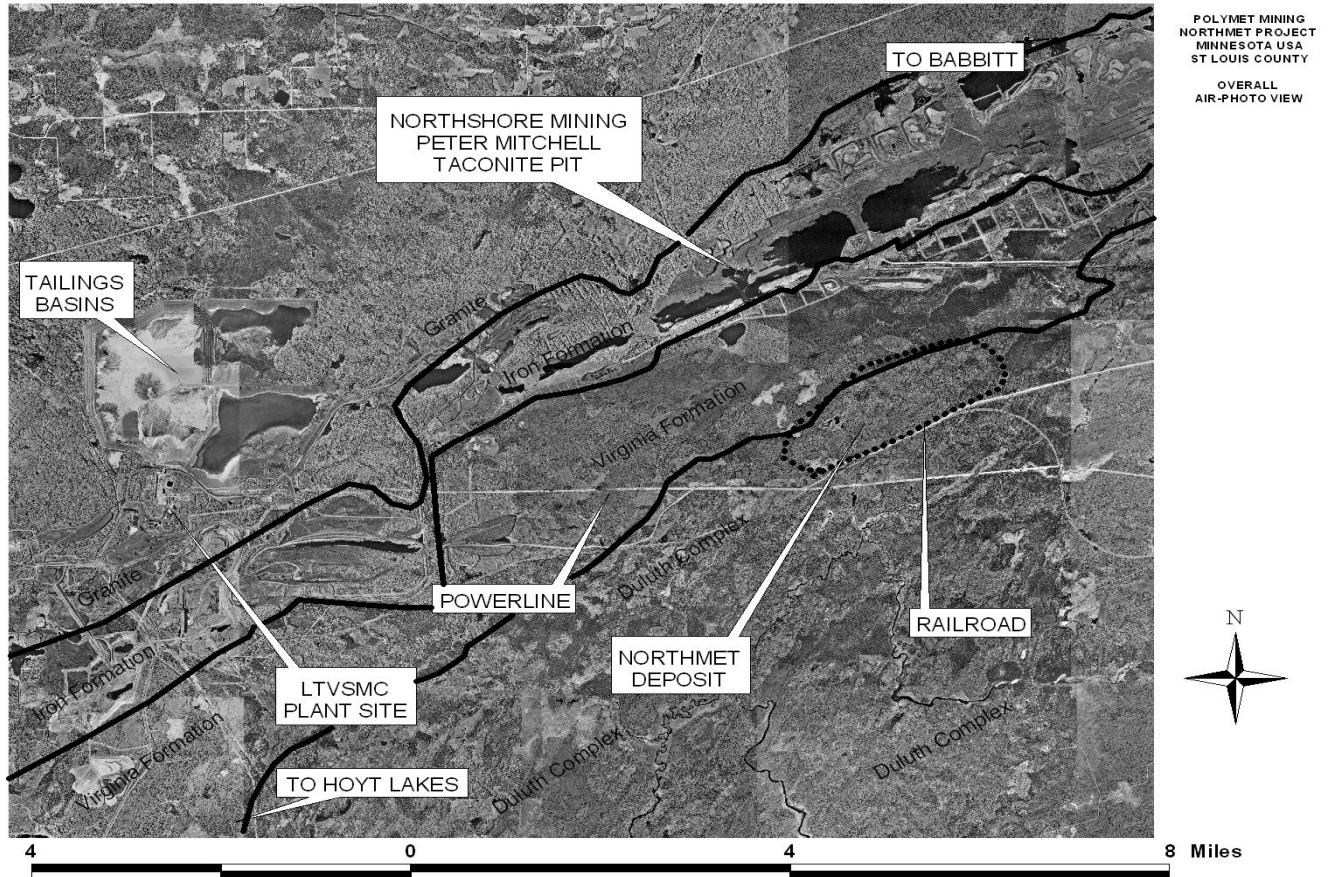
Figure 1
NorthMet Project – General Location Map



Figure 2
Project Location Map – NE Minnesota, USA



Figure 3
Aerial Photo Mosaic View of NorthMet Project Area



Scale is approximate

4. Introduction and Terms of Reference

This report has been compiled by way of collaboration between Mr. John Wyche, Principal and General Manager of AMDAD and Mr. Don Hunter, Project Manager, PolyMet Mining Corp. Mr. Wyche is the principal author.

Mr. Wyche is an experienced mining engineer, a resident of Sydney, Australia and is a Member in good standing of the Australasian Institute of Mining & Metallurgy (MAusIMM). He is also a Registered Chartered Professional specializing in mining, as defined by the AusIMM and a Member of the Mining Industry Consultants' Association. By virtue of approximately 23 years experience in the mining industry, of which approximately 9 years have been spent in mining operations and 14 years as a mining consultant, Mr. Wyche satisfies the criteria for a Qualified Person for this type of deposit and the proposed method of exploitation as defined by NI 43-101. Mr. Wyche visited the project site between the 20th and 22nd January 2005, during which time he held extensive discussions with project staff on aspects of the deposit's location and geology. While at the project site Mr. Wyche also viewed drill core, reviewed project documentation and spent time reviewing PolyMet's geological and drillhole data base in preparation for Whittle pit optimization and subsequent preliminary mine planning that were carried out in AMDAD's Sydney office.

Mr. Wyche has been assisted in preparing this report by Mr. Don Hunter, PolyMet's NorthMet Project Manager. Mr. Hunter is mining engineer with over 30 years experience in the industry, much of which has been devoted to mining project development. Mr. Hunter is a Fellow in good standing of the Australasian Institute of Mining and Metallurgy (FAusIMM), a Member of the Institute of Materials, Minerals & Mining (MIOM³) of the United Kingdom, an Associate of the Royal School of Mines (ARSM), a Chartered Professional specializing in Mining as defined by the AusIMM and a Chartered Engineer as recognized by the MIOM³. Mr. Hunter has spent a large part of the last year at the NorthMet project site in northeastern Minnesota and is familiar with all aspects of the project. By virtue of his professional training and experience, Mr. Hunter satisfies the criteria for a Qualified Person, although he is not independent as defined in NI 43-101.

5. Disclaimer

Mr. John Wyche acts as an Independent Consultant and does not own any equity stake in PolyMet Mining Corporation or any related entities. Mr. Wyche has been remunerated for preparing this report at AMDAD's standard charge out rate.

Mr. Wyche visited the NorthMet project site between the 20th and 22nd January 2005 for the purpose of gaining first hand knowledge of the project, the mine site and surrounding areas and to hold face-to-face discussions with key project proponents. These included the Senior Project Geologist, Mr. Richard Patelke, the Assistant Project Manager, Mr. Jim Scott, who has specific responsibility for environmental permitting, and the Project Manager, Mr. Hunter.

The preliminary mine plan and production schedule that are the subjects of this report have been developed from a pit optimization routine using industry standard Whittle 4-X Multi Element optimization software. In preparing the pit optimization, Mr. Wyche had relied upon a geological and a drillhole grade model prepared by Mr. Phil Hellman, Principal of consulting engineers Hellman & Schofield. Mr. Hellman's digital models have, in turn, relied on the drillhole data provided by PolyMet. (Mr. Hellman's work is the subject of a separate NI 43-101 report to be published shortly.)

6. Property Description & Location

The NorthMet deposit is situated on a mineral lease located in St. Louis County in northeastern Minnesota at Latitude 47° 36' north, Longitude 91° 58' west, about 80 miles north of the City of Duluth and 10 miles south of the town of Babbitt (Figure 1). PolyMet, as Fleck Resources, acquired a 20-year renewable mineral rights lease to the deposit in 1989 from U.S. Steel (USS). During a process of commercial rationalization, USS disposed of much of its non-core real estate and as a result control of the NorthMet lease passed to RGGS Inc. (RGGS) of Houston, Texas. The lease is subject to yearly lease payments before production and then to a sliding scale Net Smelter Return royalty ranging from 3 – 5% with lease payments made before production being considered as advance royalties and credited to the production royalty.

Mineral and surface rights have been severed, with the US Forest Service being the surface owner of most of the lease area. Under the original terms that ceded surface title to the Forest Service, USS retained the mineral rights and the rights to explore and mine on the site. These rights have now been transferred to RGGS with the result that the US Forest Service cannot prohibit mining on the lease.

The NorthMet lease held by PolyMet does not cover all areas expected to be disturbed by diamond drilling and eventual mining. Other areas involved are comparatively small and their surface rights are held by the US Forest Service, Cliffs-Erie, and St. Louis County. The Longyear Mesaba Trust holds the mineral rights to the small area adjacent to the NorthMet Lease and whose surface rights are controlled by the US Forest Service.

The NorthMet deposit is situated 5 miles east of the former LTV Steel Mining Company (LTVSMC) taconite concentrator and pellet plant which ceased operations in 2000 (Figure 2). Although it has not operated since then, this facility, and supporting infrastructure, which includes the taconite tailings disposal basin, is robust, intact and in good condition. Moreover, it is PolyMet's intention to refurbish and use selected parts of the crushing, milling and concentrator facilities to process ore from NorthMet. In order to do this PolyMet has secured from current owners, Cliffs Erie LLC, an option to purchase selected parts of the process facilities and the entire tailings basin. The option is valid for 5 years and the consideration is US\$5 million when exercised.

The project area amounts to approximately 7,500 acres.

The only currently known mineralized zone on the lease is the NorthMet deposit. Woodland in the area has been extensively and repeatedly clear felled. There are no mine workings, waste stockpiles, or tailings impoundments on the NorthMet lease although adjacent areas have been extensively mined for taconite iron ore and contain an abundance of abandoned open pits, access roads and waste dumps. The NorthMet site and surrounding areas comprise mainly woodland and wetlands surrounded by private mining lands. Therefore, there is no general public access to the PolyMet project site. An un-metalled, private mine access road runs parallel to the south side of the NorthMet deposit and connects the former LTVSMC plant site with the main public access road to the Northshore open pit mine site. There is also a now infrequently used LTVSMC railroad that runs parallel to the road and traverses the southern part of the lease. Neither the road nor the railroad is expected to impact the area where mining operations will be carried out though both will be re-activated when the mine comes into production.

7. Accessibility, Climate, Local Resources, Infrastructure & Physiography

The project site is situated in the eastern part of the historically important Mesabi Iron Range in northeastern Minnesota, United States. It is approximately 120 miles south of the border with Ontario and about 80 miles west of the western shore of Lake Superior. An historically important source of iron ore over the last approximately 150 years, the Iron Range still accounts for the production of about 38 million tons per annum of taconite pellets and iron ore concentrate. There are currently six producing iron ore mines on the Range of which the nearby Northshore Peter Mitchell open pit mine operated by Cleveland-Cliffs is one of the largest. Northshore is located approximately 2 miles north of the NorthMet deposit.

Access to the property is by a good quality asphalted public road to the former LTVSMC plant site and then by private gravel road from the LTVSMC plant site to the mine site. The nearest centers of population are the towns of Hoyt Lakes to the south, which has a population of about 2,500 and the town of Babbitt 10 miles to the north, which has a population of 2,600. There are a number of similarly sized communities in the vicinity, all of which are well serviced, provide ready accommodation, and have been or still are directly associated with the region's extensive taconite mining industry. The road network in the area is well developed though not heavily trafficked and there is an extensive railroad network which serves the taconite mining industry across the entire Range. There is access for ocean shipping up to Panamax size vessels via Duluth and other lake ports, through the Great Lakes and the St. Lawrence Seaway.

The Iron Range forms an extensive and prominent regional topographic feature and the project site is located on the southern flank of the Range, where the surrounding countryside is characterized as being gently undulating. Elevation at the project site is about 1,600 feet above sea level (1,000 feet above Lake Superior). Much of the region is poorly drained and the predominant vegetation comprises wetlands and boreal forest. Forestry is a major local industry and the project site and much of the surrounding area has been repeatedly logged.

Climate is continental and characterized by wide temperature variations and significant precipitation. The temperature in the town of Babbitt, about 10 miles north of the deposit, averages 4° F in January and 66°F in July. For short periods in summer, temperatures may

reach as high as 90°F with high humidity. Average annual precipitation is about 28 inches with about 30% of this falling mostly as snow between November and April. Annual snowfall is typically about 60 inches with 1 to 2 feet on the ground at any one time. The local taconite mines operate year round and it is rare for snow or inclement weather to cause production delays.

The area has been economically dependent on the iron ore industry for many years and while there is an abundance of skilled labor and local mining expertise, the closure in 2000 of the LTVSMC open pit mine and taconite processing facility has had a significant negative impact on the local economy and population growth. There are, however, a number of other operating mines in other parts of the Iron Range and hence the mining, support industries, and industrial infrastructure remains well developed and of a high standard. Forestry is also a significant local source of employment with associated earthmoving and haulage capability.

The LTVSMC plant site is still connected to the active electrical power supply grid and a main HV electrical power line runs parallel to the road and railroad, which traverses the southern part of the mining lease area. There is a 130-megawatt (MW) coal fired power station operated by Minnesota Power situated just west of Hoyt Lakes and about 8 miles from the LTVSMC plant site. There are abundant local sources of fresh water.

The whole Iron Range is covered by an extensive network of railroads, some of which are owned and operated by the mining companies. These railroads not only provide access to the iron ore processing and shipping facilities on the shores of Lake Superior but also connect with the more extensive national railroad network thereby providing a reliable method of transporting bulk materials.

8. History

There has been no prior mineral production from the NorthMet deposit though it has been subject to several episodes of exploration and drilling since its discovery in 1969 by U.S. Steel. Table 1 summarizes the exploration drilling activities that have occurred since 1969.

Table 1 Summary of NorthMet exploration activity since 1969

Company	Period	Drilling Type	Number of Holes	Number of Feet Drilled	Number of Assay Intervals (approx.)
U S Steel	1969-1973	BX core	112	133,346	3,875+
U S Steel	1971-1972	Three surface bulk samples for metallurgical testing taken from two locations			
NERCO	1991	BQ core/PQ core	2 (2 pairs)	842	165
NERCO	1991	Bulk metallurgical sample from large size core used for tests of CUPREX hydrometallurgical process			
PolyMet	1998-2000	6" RC	52	24,650	4,890
PolyMet	1998-2000	BTW and NTW core	32	22,146	3,795
PolyMet	1998-2000	6" RC with AQ core tail	3	2,707	counted above
PolyMet	1998 & 2000	Two flotation pilot plant campaigns used about 60 tons of sample derived from RC drilling programs.			
Humble Oil (Exxon)*	1968-1969	Core size unknown	3 (several miles south of deposit)	9,912	none used

*The Humble Oil drilling has been used for stratigraphic control only.

U.S. Steel held mineral and surface rights over much of the area, including the NorthMet lease until the 1930's when for political and land management reasons surface title was ceded to the US Forest Service. In negotiating the deeds that separated the titles, U.S. Steel retained the mineral rights and the rights to explore and mine any minerals on the site, effectively removing the possibility of veto to such activities by the US Forest Service.

In 1989 Fleck Resources Ltd. (Fleck), a company registered in British Columbia, Canada, acquired a 20-year renewable mineral rights lease to the NorthMet deposit from U.S. Steel and undertook exploration of the deposit. Fleck also developed joint ventures with NERCO Minerals Company (NERCO) and Argosy-Fleck Resources (Argosy) in order to progress exploration. In 1998, Fleck Resources Ltd. changed its name to PolyMet Mining Corp. which, with the exception of an hiatus between 2001 and 2003, has continued exploration and evaluation of the deposit up to the present. In 2004, U.S. Steel sold much of its real estate and mineral rights in the area, including the NorthMet deposit lease, to a private company, RGGS. PolyMet's U.S. Steel mineral lease was transferred to RGGS at that time.

In 2000, PolyMet commissioned Independent Mining Consultants, Inc. of Tucson, Arizona (IMC) to carry out a Pre-feasibility Study of exploiting the deposit and the report, which was published in 2001, was filed on SEDAR. One of the conclusions of the IMC Pre-feasibility Study report was that proceeding to the preparation of a full Feasibility Study was warranted.

In 2001, PolyMet entered into a joint venture with Australian mining company, North Ltd., to finance and progress project development through the latter stages and after completion of the pre-feasibility study. North Ltd. was taken over in 2002 by Rio Tinto who decided not to advance the project any further and terminated the joint venture. This in turn provided an opportunity for a new management team that took over control of PolyMet in 2003 and re-defined many of the project development parameters. Possibly the most significant development since then has been the securing in 2003 by PolyMet of an option to purchase selected parts of the former LTVSMC taconite concentrator and associated infrastructure. The LTVSMC facilities were shut down in 2000 as a result of bankruptcy and were subsequently acquired by Cleveland Cliffs LLC. PolyMet's option includes the crushing, grinding and flotation facilities, the adjacent workshops, the main high tension sub-station and feeders, the fresh water reservoir, the entire 3,000 acre tailings impoundment, a heavy mining equipment workshop, railroad permanent way and various components of mine infrastructure including 2 rail load out hoppers for handling run of mine ore. The significance to PolyMet of the optioned facilities lies in their ability to be re-activated and, with some modifications, to be used to process NorthMet ore to produce a bulk sulfide concentrate. This concentrate will then be leached under pressure with the addition of oxygen in a conventional autoclave to oxidize the sulfides. The

resultant aqueous solution will then be treated hydrometallurgically to recover the economically important metals while the residue will be disposed of in specially designed, lined cells within the existing taconite tailings disposal impoundment. It is proposed to recover copper metal in the form of high purity cathode by conventional solvent extraction and electrowinning while nickel and cobalt, and the platinum group metals, gold and some silver will be recovered as separate precipitates.

Environmental data collection has been ongoing for more than a year, as have various environmental studies in preparation for the initiation of a mandatory project Environmental Impact Statement (EIS) and submission of applications for environmental permits. A major metallurgical pilot testing program was carried out at the Lakefield Laboratories (Lakefield) facility near Lakefield, Ontario in 2001. Bench-scale testwork has also been carried out and the most recent testwork program at Lakefield to characterize certain aspects of pressure leaching behavior of the ore was completed in February 2005. A second pilot scale metallurgical testwork program is scheduled for mid-2005 using a bulk sample comprising some 40 tons of ore grade material that is being recovered as part of the current diamond drilling program. The same diamond drilling program includes approximately 90,000 feet of additional in-fill resource definition drilling the objective of which is to increase the level of grade and mineralization continuity confidence.

9. Geological Setting

The following section, as well as sections 10, 11 and 12, have been taken from Dr. Rodney Hammond's October 2004 report entitled "Technical Update of the NorthMet Project in connection with the proposed diamond drilling program."

The Duluth Complex in northeastern Minnesota is a large, composite, grossly layered, tholeiitic mafic intrusion that was emplaced into comagmatic flood basalts along a portion of the Middle Proterozoic (1.1 Ga, Keweenaw) Midcontinent Rift System. In addition to the NorthMet deposit, several Cu-Ni deposits/prospects occur along the western edge of the Duluth Complex, and within the Partridge River intrusion (PRI) and South Kawishiwi intrusions. The NorthMet deposit is situated within the PRI and consists of varied troctolitic and gabbroic rock types that have been subdivided into a number of mineralogically very similar igneous stratigraphic units.

The regional and local geology are well known (Figure 3),(Geerts, 1994, Severson et al., 1996, 2000, Hauck et al., 1997, Miller et al., 2001, 2002). There are over 1,000 exploration drill holes on this part of the Complex, and nearly 1'000,000 feet of core have been re-logged in the past fifteen years by a small group of company and university research geologists (Patelke, 2003). All of the igneous units, which are described below, exhibit shallow dips (10°-25°E) to the south-southeast (see Figure 4).

Unit 1: Consists of a heterogeneous mixture of troctolitic to gabbroic rocks, with abundant inclusions of hornfelsed sedimentary footwall rocks and lesser discontinuous layers of ultramafic rock. Unit 1 is the dominant sulphide-bearing member in the NorthMet deposit. At least three Platinum group element (PGE) enriched "stratabound" layers are present within Unit 1, the uppermost of which has the highest concentrations of PGE. Unit 1 is 200 feet to 1000 feet thick, averaging 450 feet.

Unit 2: Consists of homogenous troctolitic rocks, with minor sulphide mineralization, and a fairly persistent basal ultramafic layer that separates Unit 2 from Unit 1. Unit 2 averages about 200 feet thick.

- Unit 3: Consists of a fine-grained, poikilitic, anorthositic troctolite. Unit 3 is the major marker bed within the deposit due to its fine-grained nature and the presence of distinctive olivine oikocrysts that give the rock a mottled appearance. Unit 3 contains little or no mineralization and averages 250 feet thick.
- Unit 4: Consists of homogenous ophitic augite troctolite with a local ultramafic layer at, or near, the base of the unit. There is little or no mineralization in this unit and it averages about 300 feet thick.
- Units 5, 6, and 7: Consist of homogenous anorthositic troctolite grading to ophitic augite troctolite; units 6 and 7 have persistent ultramafic bases. There is little or no economic sulphide mineralization except for a small horizon in six drill holes in Unit 6. These generally unmineralized units average about 1,200 feet in thickness, but because the top of Unit 7 has not been seen in drill core, this figure is probably a minimum. Preliminary assessment shows that PolyMet would intersect very little of these upper units in its pit development.

The footwall rock at NorthMet is the sedimentary Lower Proterozoic (1.8 Ga) Virginia Formation which is underlain by the Biwabik Iron-Formation.

Figure 4
Regional Geology of the NorthMet Project Area

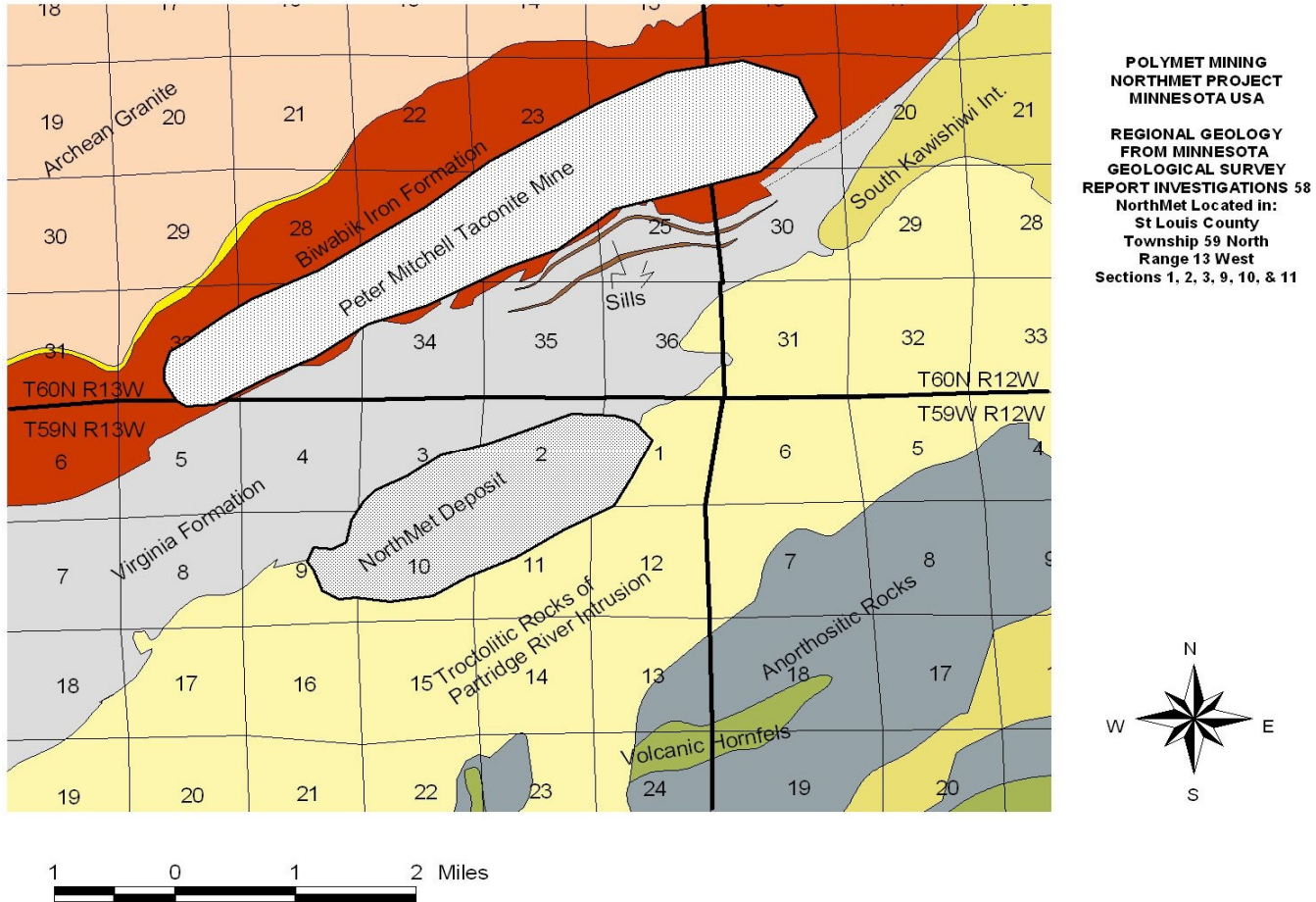
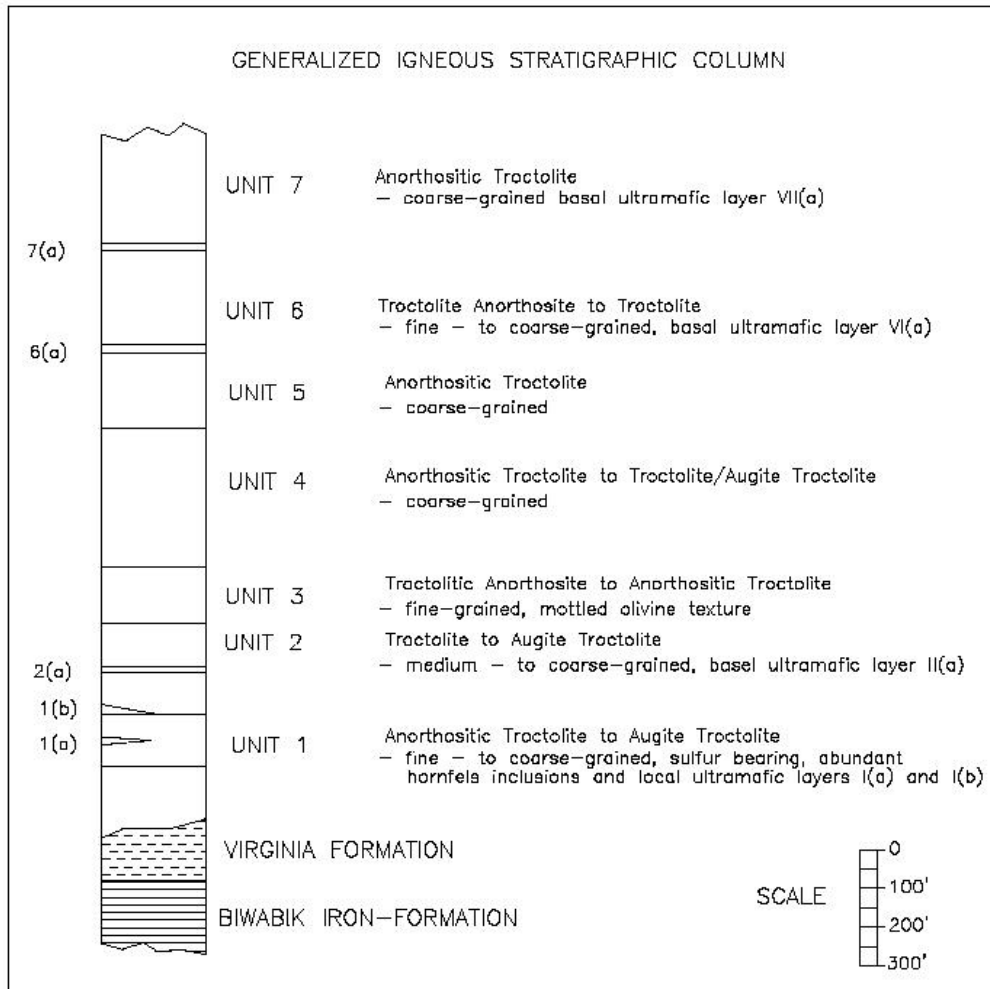


Figure 5
Stratigraphic Section for the NorthMet Project



10. Deposit Type

The NorthMet deposit itself is a low-grade, large-tonnage, disseminated accumulation of sulphide in mafic rocks with rare massive sulphides. Copper to nickel ratios generally range from 3:1 to 4:1. Primary mineralization is probably magmatic, though the possibility of structurally controlled re-mobilization of the mineralization (especially PGE's) has not been ruled out. Sulfur source is both local and magmatic (Theriault et al., 2000). Extensive detailed logging has shown no definitive relation between specific rock type and the quantity of sulphide mineralization in the Unit 1 mineralized zone or in other units, though the localized noritic rocks (related to footwall assimilation) tend to be of poorer PGE grade and higher in sulfur (Figures 5 and 6).

Footwall faults are inferred from bedding dips in the underlying sedimentary rocks, considering the possibility that Keweenawan syn-rift faults may affect these underlying units and have less movement, or indeed no effect on the igneous units. Nonetheless, without faults, the dips do not reconcile well with the overall slope of the footwall. There are some apparent offsets in the igneous units, but definitive fault zones have not been identified. So far, no apparent local relation between the inferred location of faults and mineralization has been delineated.

Figure 6
Typical Cross-Section through the NorthMet Deposit

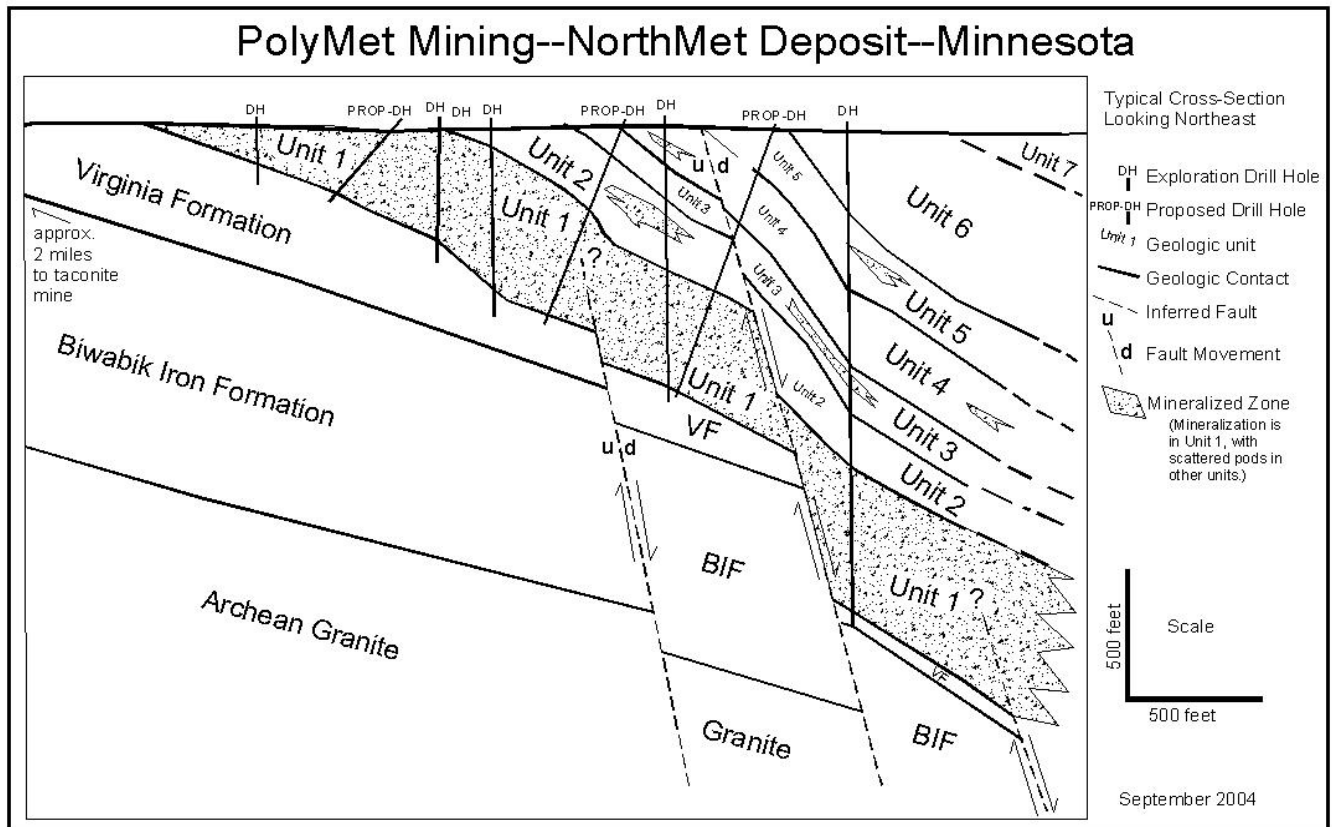
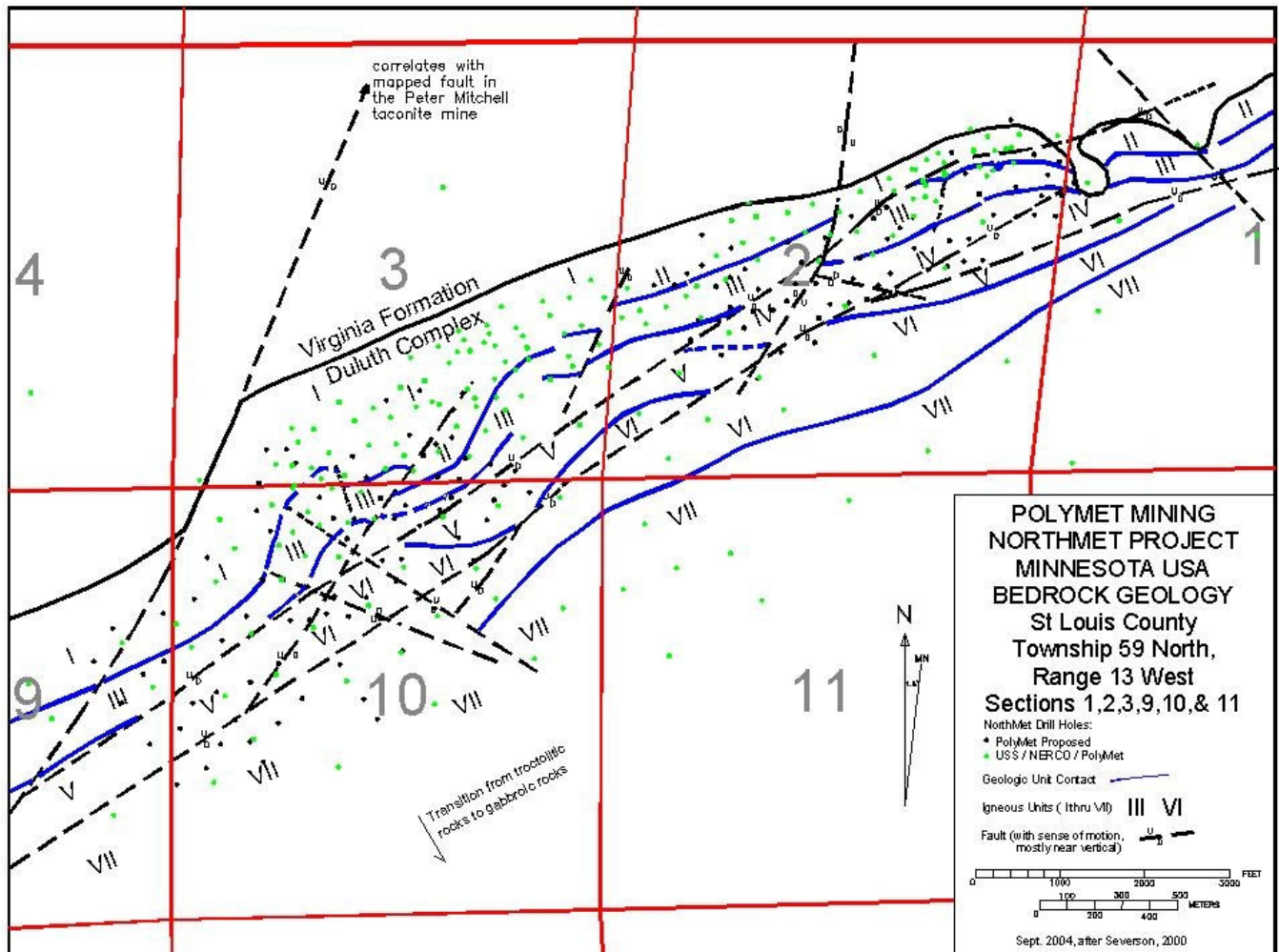


Figure 7
NorthMet Deposit – Plan View Geology



11. Mineralization

The metals of interest at NorthMet are copper, nickel, cobalt, platinum, palladium, gold, some silver and very small amounts of rhodium and ruthenium. In general, the metals are positively correlated with copper mineralization; cobalt is the exception. Mineralization occurs in four broadly defined horizons throughout the NorthMet property. Three of these horizons are within basal Unit 1, and in some drill core the horizons are visually indistinguishable from each other. The thickness of each of the three enriched horizons varies from 5 feet to more than 200 feet. Unit 1 mineralization is found throughout the base of the deposit. A less extensive mineralized zone is found in Unit 6, and it is relatively enriched in PGE's compared to Unit 1.

Sulphide mineralization consists of chalcopyrite and cubanite (in roughly equal proportions), pyrrhotite, and pentlandite, with minor bornite, violarite, pyrite, sphalerite, galena, talnakhite, mackinawite, and valleriite. Sulphide minerals occur mainly as blebs interstitial to plagioclase, olivine, and augite grains, but also may occur within plagioclase and augite grains, as intergrowths with silicates, or as fine veinlets. Small globular aggregates of sulphides (< 2 cm) have also been observed in the small test pit on the site. The percentage of sulphide varies from trace to about 5%, but is rarely greater than 2%. Palladium, platinum, and gold are associated with the sulphides.

12. Exploration

Exploration history is outlined above in Section 8, Project History.

In general, the early drilling by U.S. Steel is widely spaced but comparatively regularly distributed (approximate 600 ft x 600 ft grid), with some omissions that left substantial undrilled areas (more so down-dip, particularly in the E parts of the deposit). Subsequent programs, largely by PolyMet, were focused on extracting metallurgical sample, and on proving the up-dip, more readily accessible parts of the deposit. During 2000 and 2001 PolyMet drilled 13 holes to in-fill a marked gap, and in so doing achieved an adequate coverage of the near-surface sections of the deposit (hole spacings generally in the order of 150 to 300 ft).

Those parts of the deposit at moderate depth (400 – 800 ft below surface) largely continue to have the original U.S. Steel drill-hole spacing, which, in the eastern half of the deposit, is approximately 600 ft x 1,200 ft. The proposed program will necessarily focus on closing down the drill-spacing in the economically most important shallow to moderate depth parts of the deposit, particularly within the area of the existing (updated pre-feasibility) pit design.

Drill spacing in the deepest known section of the deposit (greater than 800 ft below surface) is approximately 1,200 ft x 1,200 ft. The deposit is definitely open at depth and while the deeper parts of the deposit (below about 1,000 ft below surface) may be of interest in the future, they are considered to fall outside the scope of the proposed drilling program and the DFS.

The current drilling is regarded as both a development and an in-fill drilling program and is focused in the areas likely to be exploited during the early stages of a mining operation where average drill spacing will be reduced to between 200 – 300 ft. Because metal grades and geology are well known from previous drilling, the principal aims of the current program are to obtain material (+/- 40 tons) for additional, locked-cycle continuous pilot metallurgical testing, more certainly define the geological structure, and to increase the level of confidence in mineralization continuity, long- and short-range variability and grade estimation. The opportunity will also be taken to gather geotechnical data by logging each new hole and to collect waste characterization and hydrogeological data.

Table 2 summarizes the average drillhole spacing.

Table 2 – Average Drillhole Spacing

Area	Drillholes		Avg Hole Spacing (feet)
	Drilling proponent/campaign	No. of holes	
2003 Project Review ultimate pit outline	USS, PolyMet, NERCO	161	410
5 year pit* outlines	Existing USS, PolyMet, NERCO	40	395
5 year pit* outlines	Existing USS, PolyMet, NERCO plus planned PolyMet drilling 2004-2005	72	294
10 year pit* outlines	Existing USS, PolyMet, NERCO	75	390
10 year pit* outlines	Existing USS, PolyMet, NERCO plus planned PolyMet drilling 2004-2005	138	288
15 year pit* outlines	Existing USS, PolyMet, NERCO	103	405
15 year pit* outlines	Existing USS, PolyMet, NERCO plus planned PolyMet drilling 2004-2005	178	308
20 year pit* outlines	Existing USS, PolyMet, NERCO	149	400
20 year pit* outlines	Existing USS, PolyMet, NERCO plus planned PolyMet drilling 2004-2005	245	312

* Pit outlines refer to preliminary, conceptual level of definition pit outlines produced from a revised geological and grade model produced by consultant, Dr. Philip Hellman, principal of the firm of consulting economic geologists, Hellman & Schofield Pty Ltd.

13. Drilling

The current drilling program comprises two parts that may run concurrently. The first part involves the drilling of about 100 holes totaling approximately 90,000 linear feet of NTW size diamond drilling to produce 2.2-inch diameter core. Hole lengths will vary from 200 to 1,500 feet and average about 800 feet. Most holes will be angled 70° to the north-northwest in an attempt to better identify faults which, at this stage, are largely inferred as being steep to near vertical. This part of the program is being carried out by experienced drilling contractors, one of whom is local, is familiar with the site and who, in recent years, has also carried out substantial amounts of drilling in the Duluth Complex and for the local iron ore mines.

The second part of the program requires diamond drilling of approximately 6,000 feet of 4-inch diameter core for the provision of material for pilot scale metallurgical testing and for product and process effluent characterization.

Figure 7 shows the location of proposed drillholes, though it should be noted that these positions are not fixed and that variations may be required as results are returned and the distribution and continuity of grade and mineralization become better understood.

Drilling will be concentrated in the area that lies within the 10-year pit outline as defined in the preliminary pit optimization exercise that was carried out in late 2004. The pit optimization and second iteration of preliminary mine planning that is the subject of this report have also been used to better define the optimal location of both large diameter metallurgical core sample and the smaller diameter resource definition drilling. Because the deposit is located in a flat lying, poorly drained area characterized by abundant wetlands and swamp, drill sites located in swamp or wetland can only be drilled during the winter from January to early April 2005 when the area is sufficiently frozen to allow safe access by heavy equipment and the drilling rigs. Thus, for practical purposes the total drilling program is divided into notional “summer” and “winter” drilling phases with approximately 60% of the planned holes located in wetlands that can only be drilled in winter.

The drilling program has the following objectives:

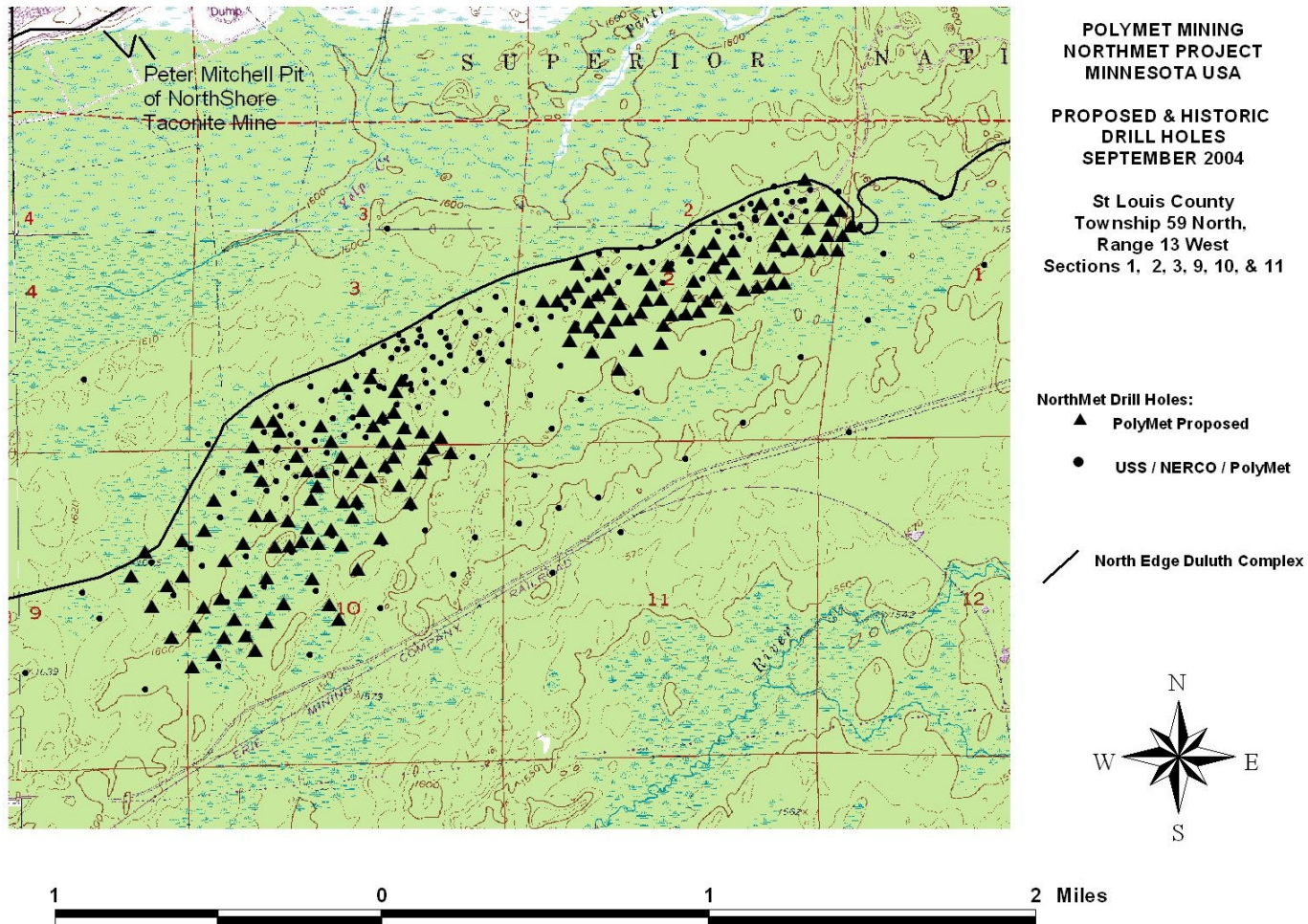
- to provide a sufficient quantity of material to conduct a series of continuous, locked cycle, pilot scale, pressure leach tests to confirm process design parameters and to enable characterization of the various product and effluent streams. Each test will be run continuously for up to 10 days in order to establish steady state conditions in the test cells and thereby replicate (as far as possible) the operating conditions that may be expected in a production scale plant. An additional objective of the pilot scale testwork is to generate sufficient product to allow potential off-take partners to confirm its suitability for their requirements;
- to provide geotechnical and hydrogeological data essential for subsequent mine planning purposes; and
- for waste rock characterization by systematic sampling and analysis. This will be required for permitting, for waste disposal management, control of acid mine drainage and planning and engineering of appropriate mitigation measures.

The following additional key objectives are necessary from a geological and resource standpoint:

- to provide sufficient additional geological and grade data which when added to the drilling database developed during previous drilling will enhance the level of confidence in the resource estimate to a standard applicable to a bankable feasibility study; and
- to improve the level of knowledge and understanding of the structural controls on the distribution of mineralization.

It should be noted that the results of the current drilling program will be used to update the existing geological and grade models which, in turn, form the basis for development of the DFS. Hence, all aspects of the drilling program are being carefully supervised and have stringent quality assurance and quality control measures applied.

Figure 8
Planned & Existing Exploration Drill Holes at NorthMet



14. Sampling Method & Approach

Sampling methodology has already been described in Dr. Rodney Hammond's October 2004 report and is not directly relevant for this report. It is, however, worth noting that after logging and marking up by an experienced field geologist, PolyMet expects to cut and sample virtually all core in the basal mineralized horizon (Unit 1) and wherever visible sulphide mineralization occurs outside the main mineralized horizon. For consistency with the majority of earlier drilling and sampling (about 13,000 samples) the majority of the current drilling will also be sampled at 5-foot intervals, adjusted for geological contacts. Large diameter metallurgical core will be sampled over 4 foot intervals, which corresponds to the length of core that can be stored in a single core box. This will greatly facilitate core handling and, importantly, will minimize the possibility of losing or mislabeling shorter sections that would otherwise have to be boxed and handled separately.

Samples will be analyzed for copper, nickel, sulfur and platinum group elements and for a suite of other elements using an ICP-AES multi-element exploration analysis package. Systematic sampling will also be conducted in waste, primarily for waste characterization, at a density of one 5 foot sample interval every 50 feet. Samples for waste characterization will be subject to whole rock and trace element analysis. A total of between 10,000 and 12,000 new samples are expected to be generated during this program, which is equivalent to sampling about half of the total drilled footage. Core will also be logged for geotechnical characterization while selected drill holes will be packer and or pump tested and have instrumentation installed for ground water monitoring purposes.

15. Sample Preparation, Analysis and Approach

NTW drill core will be photographed, logged for geology and geotechnical data, and sample intervals flagged by PolyMet geologists for diamond saw cutting. Half core will be sent for analysis and the remainder retained for future reference. Core will be sawn on-site, sample numbers assigned, and samples bagged and sealed by PolyMet employees. Samples will be transported to an analytical laboratory where they will be prepared for analysis under the quality assurance program of that laboratory. PolyMet has prepared quality assurance procedures for core handling in the field, for core logging, tagging and sample preparation and these will be reviewed by an independent expert for suitability.

Sample analysis will focus primarily on copper, nickel, cobalt, silver, zinc, lead, sulfur, platinum, palladium, and gold though multi-element analyses will also be provided.

The object of drilling the large diameter metallurgical drill holes is to provide the maximum amount of material for metallurgical testing. Hence, after photographing and logging in the usual way, core will be cut with a diamond saw to provide one $\frac{1}{8}$ section for analysis and one $\frac{1}{8}$ section for reference. The remaining $\frac{3}{4}$ core plus coarse sample rejects will be used for metallurgical testing at Lakefield Laboratories (Lakefield) in Lakefield, Ontario.

16. Data Verification

Data verification as applied to drilling prior to January 2005 has been described in detail in Dr. Hammond's October 2004 report and it is not necessary to repeat the description here.

In preparing the pit optimization and production schedules that are the subject of this report, AMDAD's Mr. John Wyche has used and relied upon the geological and grade models prepared by Mr. Phil Hellman of Hellman & Schofield. Verification of the data used by Mr. Hellman in the preparation of his block models is described in a separate, shortly to be released NI 43-101 compliant Technical Report.

17. Adjacent Properties

There are no adjacent properties that PolyMet is proposing to explore, drill or otherwise include or study, either as part of the broader Definitive Feasibility Study or, more specifically, in connection with the preliminary mine planning that is subject of this report.

18. Mineral Processing & Metallurgical Testing

There has been no material development with respect to mineral processing and metallurgical testing since the filing on SEDAR of the “*Technical Update of the NorthMet Project incorporating the established Cliffs-Erie crushing/milling/concentration facilities with the Hydrometallurgical processes described in the May 2001 Pre-feasibility study.*” by P. Downey and Associates, in July 2004.

However, it should be noted that a program of pilot plant-scale metallurgical testwork is planned for July - August 2005 and this will be the subject of another NI 43-101 Technical Report at that time.

19. Mineral Resource & Mineral Reserve Estimates

Mr. Phil Hellman, principal of Hellman & Schofield (H&S) was commissioned in late 2004 to review then existing geological and grade models and revise and update them, as necessary. The pre-2004 grade model was based on a digital database that had been used for the 2001 Pre-feasibility Study. However, in 2004, PolyMet's geologists carried out a painstaking review of the 2001 database and, in addition to removing unsupported or inconsistent data, added some 5,000 assay results for which assay certificates were available but which had never been included in the original database. A separate NI 43-101 compliant Technical Report will be issued in the near future describing Mr. Hellman's re-build of the geological model and the revision of the grade model.

It should be noted that because the pit optimization carried out by AMDAD is of a preliminary nature and included Inferred category material, the resultant optimized pit shells cannot be regarded as a Mineral Reserve. The grades and quantities presented in this report should be read in the context of a Preliminary Assessment as defined in Section 2.3 (3) of National Instrument 43-101.

20. Other Relevant Data and Information

20.1 Mining Method

U.S. Steel discovered the NorthMet deposit in 1969 and originally drilled with the expectation of defining a massive sulfide deposit exploitable by underground methods. In the process, U.S. Steel identified polymetallic sulfide mineralisation to depths of over 2,500 feet. However, at that time there was no economic way of extracting value from the platinum group elements that might have provided an incentive to investigate further. Since then a number of companies, including principally PolyMet have carried out a several episodes of both diamond and reverse circulation exploration drilling which have progressively added to the geological and grade database. Up to January 2005 the deposit has been defined by over 200 drill holes totalling in excess of 185,000 feet. The current drilling program will ultimately add approximately 90,000 feet of further resource definition drilling.

NorthMet is a large, medium to low grade, polymetallic deposit hosted in a series of thick, strong, intrusive rocks that appear to follow the south-west to north-east strike of the surrounding sedimentary units and dip at 15° to 25° to the southeast. These intrusives, known as the Duluth Mafic Complex, are underlain by sedimentary rocks of the Virginia formation. Outcrop is rare as most of the deposit and the surrounding area are covered by 5 to 25 feet of glacial till. Steeply dipping faults with throws of up to 600 feet have been inferred as being generally parallel to the regional strike direction. These have not been confirmed in previous drilling but the current program, with holes inclined at 65°-70° to the horizontal, is designed to identify more readily steep dipping structures and faults.

For geological purposes, the intrusive sequence has been sub-divided into seven units numbered 1 through 7 from lowest to highest. Most of the potentially economic grades defined to date are in Unit 1, which is the lowest of these intrusive units. Elevated metal grades also occur in Units 2 through 7 though Unit 1 shows better grade continuity than the other overlying intrusives.

Earlier studies found that mineralized grades are too low to support underground mining though open pit exploitation was a possibility. Since 1998 exploration and project development studies by PolyMet have concentrated on open pit mining with pit optimization studies having been carried out by Independent Mining

Consultants, Inc (IMC) in 2003 as part of the Pre-feasibility Study and by Australian Mine Design and Development Pty Ltd (AMDAD) in November 2004 and February 2005. These studies demonstrated the open pit potential of the deposit. In addition, a number of events over the last two years have provided further project development incentive:

- In early 2003 a new PolyMet management team reviewed the project development strategy and opted for throughput rate that was significantly lower than that used for the Pre-feasibility Study and with simplified process flowsheets to reduce capital and operating costs.
- In late 2003 PolyMet reached agreement with Cleveland Cliffs to acquire the idle former LTV Steel Mining Company's taconite concentrator which is within 7 miles of the NorthMet deposit along an existing rail line. The intention is to re-activate the concentrator to produce bulk concentrate for the metallurgical ore treatment process with minimal modification of the existing facility. This has the potential to reduce project risk and capital costs.
- Pilot plant testing in 2000 of the hydrometallurgical process confirmed consistently acceptable recoveries of copper, nickel, cobalt, gold, platinum and palladium.
- During the latter part of 2004, PolyMet geologists carried out a meticulous and painstaking review and validation of the NorthMet drill hole database. This involved cross checking of assay values in the database with assay certificates and drill logs, elimination of values that could not be supported with assay certificates, re-checking and, if necessary, removal of assays where metal values or metal value ratios were outside established value ranges and removal of intervals that had been analysed by two or more laboratories and where the difference in assay values could not be explained. In addition, the database was updated with the addition of a large number of interval assays which were supported by laboratory certificates but never included in the database. The validation and updating process increased the number of sample interval datasets from about 11,900 to over 17,000.
- In late 2004 mining consultants Hellman & Schofield Pty Ltd (H&S) were commissioned to review and re-build the geological and grade block models

using the updated NorthMet database. These revised models provided better continuity of the potential ore zones near surface and along strike. This, in turn, greatly improved the economics for open pit mining by providing early phase, shallow ore and allowing the development of long access ramps down the footwall rather than having to construct ramps on the steeper hangingwall side of the elongated pit. This had the added advantage of reducing the amount of additional waste stripping required to accommodate main access ramps.

- The project can be developed in time to take advantage of increased metals prices, particularly for copper, nickel and palladium. Moreover, projected demand for these metals and precious metals is expected to hold prices above the pre-2004 levels used in earlier studies for the mid to long term.

Many of the pit optimisation inputs such as mining costs have only been estimated at a preliminary level and Inferred Mineral Resource blocks are included in the mine planning to support continuity of the pit along strike. For these reasons the results of the current mine planning work cannot yet be presented as a Mineral Reserve. However the results represent a material change in the status of the project in its evolution from an exploration target to a potential mine development so they can be presented in the context of a Preliminary Assessment as defined by Section 2.3 (3) of the Canadian National Instrument 43-101.

20.2 Preliminary Pit Optimization

The most recent pit optimization was run in February 2005 by AMDAD using Whittle 4X Multi Element software on the resource block model developed by H&S in late 2004. It showed the potential to mine over 250 million tons of ore at a ratio of 1.2 tons of waste per ton of ore.

Whittle software uses a modified Lerchs Grossman algorithm to define a set of nested shells based on a range of revenue factors. The lowest revenue factor determines the smallest, highest value shell, normally based on a low waste to ore ratio, high metal grade, low process cost, high recovery or some combination of these factors. The highest revenue factor returns the largest shell because higher values per recoverable unit of grade allow higher waste to ore ratios, lower cut off grades, higher process costs and/or lower recoveries.

As well as selecting the shell with the highest undiscounted value for a given set of metal prices, the software allows the shells to be mined in a nominated sequence. When a discount factor is applied to the cost and revenue streams for this mining sequence the cashflow benefits of staging can be modelled by allowing high value sections of the deposit to be mined before the lower value sections. Typically this would mean mining a small, low waste to ore ratio starter pit and then expanding the pit through a series of pushbacks with increasingly high waste to ore ratios until the final optimal shell is reached.

The inputs for the optimisation process include:

- Overall slopes for the pit walls.
- Mining loss and dilution.
- Required production rate in terms of metal produced or mill feed tons and any production constraints such as maximum mining rates.
- Process recoveries. In the case of NorthMet this is the product of the recovery of metal to concentrate and the recovery from concentrate to metal.
- Mining, process and administration costs.
- Selling costs such as metal transport, insurance, marketing or refining costs.
- Prices for each metal.
- Discount rate to assess present value of mining sequences.

Inputs to AMDAD's February 2005 optimization are discussed in the following sections.

Overall Pit Slopes

An average overall slope of 50° was assumed. This is based on the original geotechnical pit slope assessment carried out for the Pre-feasibility Study by geotechnical consultants Call & Nicholas, Inc. in 2001. Subsequently visual assessment of drill core by the principal author in 2005 indicated a strong, competent rock mass with high RQD and few fractures, joints or other discontinuities that might adversely impact slope stability. Hence it was felt that

the 50° slope angle adopted for this assessment was reasonable and likely to be conservative. It should be noted that pit slope stability will be re-assessed later this year by a geotechnical engineering specialist as part of the ongoing DFS. Although this preliminary pit slope angle is relatively steep for a pit designed to go to 800 – 1,000 feet in depth, the rock mass as seen in core appears strong and competent and hence this is considered a reasonable first assumption for the following reasons:

- The north western pit wall will tend to follow the footwall contact of Unit 1 with the Virginia Formation. This contact is generally flatter than 50°.
- Since the final pit is over 2 miles long most of the access ramp can be placed along the footwall contact.
- With the exception of the thin layer of till at surface, the entire south eastern wall will be in the strong intrusive rocks of Units 1 to 7. The overall slope on this wall will be governed by rock strength and structure since the main access ramps will be on the north western wall.

A key factor in the geotechnical assessment will be definition of the faulting and its effect on wall stability which the current inclined drilling program is designed to address.

Mining Loss and Dilution

The optimization model does not include any adjustments for mining loss or dilution at this stage. It is assumed that the ore zones will be broad and that dilution will have minimal effect on head grade. This assumption will require review as ongoing work provides better definition of the continuity of the mineralisation.

Production Rate

Planning is based on a process facility throughput rate of 25,000 tons per day or 9.125 Mtons per year. This rate is based on an assessment of the capital cost required to establish a project with an acceptable cash flow. It leaves scope for expansion since the Cliffs Erie concentrator is capable of about 100,000 tons per day. At 9.125 Mtons per year the total required mining rate (ore and waste) varies from 15 to 24 Mtons per year, which is well within the capability of the equipment fleet which could work within a pit of this size.

Process Recoveries

The following recoveries are based on flotation and hydrometallurgical tests of NorthMet samples in a pilot plant at SGS Lakefield:

Table 3 Process Recoveries

Metal	Recovery to Conc.	Metal from Conc.	Overall Recovery
Copper	93.70%	97.50%	91.36%
Nickel	77.50%	94.50%	73.24%
Cobalt	50.00%	92.50%	46.25%
Palladium	76.00%	94.00%	71.44%
Platinum	76.00%	95.00%	72.20%
Gold	77.00%	94.00%	72.38%

Mining, Processing and Administration Costs

Mining costs are assumed to be US\$1.00 per ton for both ore and waste and assumed to increase by US\$0.009 per ton for each 20 foot bench below the 1,580 ft elevation. This estimate is based on preliminary discussions with a major North American mining contractor and recent estimates for work in Central America. Now that a preliminary mine plan is established, the mining costs can be estimated more reliably in future work by calling for contractor quotes or by estimating costs for an owner operator fleet.

Bateman Engineers provided a preliminary estimate of the Process cost at US\$6.03 per ton of ore and Site Administration costs at US\$0.53 per ton of ore, or US\$4.8M per year.

Selling Costs

The optimisation model does not currently include any selling costs for the metal produced. The hydrometallurgical process will produce metal on site so there are no concentrate transport or smelter charges. However, future work is planned to estimate transport, insurance, refining, marketing and royalty charges for each metal up to the point of sale.

Metal Prices

Polymet Mining Corporation advised the following long term metal price assumptions:

Table 4 Metal Prices

Metal	Price Units	Price	Grade Units in Resource Model	Optimization Price Units	Price
Copper	US\$/lb	0.95	%	US\$/20 lbs	19.00
Nickel	US\$/lb	4.20	%	US\$/20 lbs	84.00
Cobalt	US\$/lb	12.00	ppm	US\$/ppm ton	0.024
Palladium	US\$/oz	250.00	ppb	US\$/ppb ton	0.007292
Platinum	US\$/oz	600.00	ppb	US\$/ppb ton	0.017500
Gold	US\$/oz	350.00	ppb	US\$/ppb ton	0.010208

Discount Rate

A nominal discount rate of 10% was applied to the operating cash flows in the Whittle analyses to assess the effect of pit staging on the present value of the open cut operation.

The February 2005 optimization uses Measured, Indicated and Inferred Mineral Resource blocks to show the potential for open cut mining. The inclusion of Inferred Mineral Resources and the preliminary nature of many of the optimization inputs mean that the optimized shells cannot be regarded as a Mineral Reserve. The quantities, grades and values presented in this report are in the context of a Preliminary Assessment as defined by Section 2.3 (3) of National Instrument 43-101.

20.3 Development Strategy and Preliminary Pit Design

Development Strategy

Given the assumptions above, the Whittle optimization results showed increasing present value up to Shell 22. Many of the nested shells are very close in space so it would be impractical to gain the maximum present value by mining all the

shells in sequence. However, by examining the increase in value from shell to shell it is possible to select a sequence of shells which are widely enough separated to allow room for the pushbacks to be mined and which target the stages where the maximum increases in value occur.

Using this rationale, a four stage pit development was selected based on Shells 7, 13, 15, 19 and 22. The relative values of the shells are shown by the Discounted Cash Flow (DCF) value line in Figure 9.

A preliminary production schedule was run for the four stage pit to assess the mining rates required to maintain a mill feed rate of 25,000 tons per day. Table 6 and Figure 10 show that a total mining rate (ore and waste) of 15 Mtons per year is required for 9 years. This rises to 24 Mtons over the next 10 years as the high waste to ore ratio upper benches of Shell 19 and 22 pushbacks are mined. The waste to ore ratio gradually reduces again near the base of the final pit. Total mine life is 29 years.

Table 6 gives an indication of the variation in head grades expected over the mine life. The schedule shows that the first two Pit Stages (Whittle Shells 7 and 13) are targeting near surface zones of elevated grades of all metals but particularly Ni.

Practical Pit Design

Figure 11 shows the practical final pit design based on Whittle Shell 22. It confirms the concept of placing long access ramps on the north western side of the pit along the Unit 1 footwall and it shows that steep overall slopes can be designed on the south eastern side of the pit in Units 2 to 7 if ramps are not inserted. General criteria used in this design are:

Table 5 Mine Design Criteria

Parameter	Design Criteria
Face Height	60 feet
Face Slope	65 degrees
Berm Width	20 feet
Ramp Width	115 feet reducing to 50 feet near base of pit
Maximum Ramp Grade	1 in 10

Waste dumps have not been designed in detail yet but the general concept will be to wrap them around the pit but within the mining lease boundary.

Production Schedule

Table 6 below shows the preliminary production schedule by years.

Year	Waste to Ore Ratio	Tons Mined x 1,000,000			Mill Head Grades						Metal Produced						Bench at EOY (0 = Surface to Surface - 20ft)				
		Total	Waste	Ore	Cu %	Ni %	Co ppm	Pd ppm	Pt ppm	Au ppm	Cu tons	Ni tons	Co tons	Pd oz	Pt oz	Au oz	Shell 7	Shell 13	Shell 15	Shell 19	Shell 22
1	1.16	10.0	5.4	4.6	0.34	0.10	69.21	0.38	0.09	0.04	14,467	3,223	148	36,517	8,921	4,268	5	1			
2	0.73	15.0	6.3	8.7	0.33	0.09	63.89	0.44	0.09	0.05	26,273	5,455	257	79,034	17,176	9,457	10	3			
3	0.77	15.0	6.5	8.5	0.31	0.09	69.75	0.37	0.09	0.06	24,243	5,459	274	65,016	15,678	9,872	15	5			
4	0.74	15.0	6.4	8.6	0.27	0.08	67.61	0.32	0.08	0.05	21,585	5,123	269	56,462	13,978	8,348	16	8			
5	0.65	15.0	5.9	9.1	0.30	0.08	64.72	0.34	0.09	0.05	24,871	5,494	273	64,628	17,039	9,300	16	12	1		
6	0.65	15.0	5.9	9.1	0.30	0.08	64.33	0.32	0.09	0.05	25,238	5,581	270	60,776	17,599	9,387	16	15	3		
7	0.68	15.0	6.1	8.9	0.34	0.09	68.42	0.35	0.10	0.05	28,046	6,180	282	64,175	18,502	9,542	16	20	5		
8	0.89	15.0	7.1	7.9	0.28	0.08	64.03	0.28	0.08	0.04	20,275	4,494	235	46,397	13,395	6,953	16	25	8		
9	0.76	15.0	6.5	8.5	0.25	0.06	54.61	0.26	0.09	0.05	19,535	3,969	216	47,035	15,838	8,230	16	25	13		
10	0.96	17.9	8.7	9.1	0.29	0.07	58.04	0.32	0.09	0.05	23,806	4,935	245	60,486	17,839	9,906	16	25	17	2	
11	1.34	21.0	12.0	9.0	0.32	0.08	62.20	0.32	0.09	0.05	26,530	5,333	259	59,455	17,548	9,353	16	25	22	3	
12	1.70	24.0	15.1	8.9	0.30	0.08	65.16	0.27	0.08	0.04	24,519	5,036	268	49,619	14,112	7,859	16	25	27	5	
13	1.73	24.0	15.2	8.8	0.25	0.07	66.06	0.22	0.07	0.03	19,863	4,494	269	40,099	12,754	6,378	16	25	32	7	
14	1.49	22.8	13.6	9.1	0.23	0.07	63.97	0.23	0.07	0.03	19,105	4,387	270	43,047	13,741	6,670	16	25	32	9	

Year	Waste to Ore Ratio	Tons Mined x 1,000,000			Mill Head Grades						Metal Produced						Bench at EOY (0 = Surface to Surface - 20ft)				
		Total	Waste	Ore	Cu %	Ni %	Co ppm	Pd ppm	Pt ppm	Au ppm	Cu tons	Ni tons	Co tons	Pd oz	Pt oz	Au oz	Shell 7	Shell 13	Shell 15	Shell 19	Shell 22
15	1.67	24.0	15.0	9.0	0.23	0.06	59.49	0.25	0.08	0.04	18,779	4,253	247	47,061	14,928	7,186	16	25	32	12	
16	2.00	24.0	16.0	8.0	0.24	0.07	59.83	0.27	0.08	0.04	17,781	4,013	221	44,406	13,121	6,671	16	25	32	16	0
17	2.25	24.0	16.6	7.4	0.25	0.07	61.46	0.27	0.08	0.04	17,046	3,844	210	41,687	12,565	6,317	16	25	32	19	3
18	2.15	24.0	16.4	7.6	0.25	0.07	62.83	0.25	0.07	0.04	17,572	4,022	221	39,871	11,976	6,021	16	25	32	21	5
19	1.53	23.1	14.0	9.1	0.26	0.07	61.94	0.27	0.08	0.04	21,573	4,758	261	52,255	15,090	7,365	16	25	32	23	7
20	1.40	21.9	12.7	9.1	0.25	0.07	63.97	0.27	0.07	0.04	20,851	4,838	270	51,051	14,129	6,909	16	25	32	24	9
21	0.80	16.4	7.3	9.1	0.26	0.08	65.20	0.27	0.08	0.04	22,023	5,013	275	51,642	14,459	7,399	16	25	32	26	10
22	0.97	18.0	8.8	9.1	0.29	0.08	66.27	0.28	0.08	0.04	24,204	5,322	280	53,978	14,822	8,041	16	25	32	28	12
23	0.92	17.5	8.4	9.1	0.30	0.08	65.37	0.30	0.09	0.05	25,419	5,429	276	57,178	16,971	8,933	16	25	32	31	15
24	0.94	17.7	8.6	9.1	0.31	0.08	64.59	0.29	0.09	0.05	25,474	5,319	273	55,575	17,232	8,913	16	25	32	33	17
25	0.90	17.3	8.2	9.1	0.30	0.08	63.95	0.28	0.09	0.04	25,376	5,423	270	54,004	17,407	8,105	16	25	32	36	20
26	1.19	20.0	10.9	9.1	0.29	0.08	63.19	0.28	0.08	0.04	23,978	5,239	267	53,493	15,606	7,766	16	25	32	40	24
27	1.21	20.1	11.0	9.1	0.30	0.08	63.82	0.28	0.07	0.04	24,774	5,162	269	52,914	14,125	7,654	16	25	32	43	31
28	0.30	11.9	2.8	9.1	0.36	0.09	67.08	0.35	0.09	0.05	30,231	6,257	283	67,034	16,339	9,257	16	25	32	44	36
29	0.09	9.1	0.7	8.4	0.39	0.09	64.31	0.39	0.10	0.05	29,624	5,640	250	68,155	17,507	9,151	16	25	32	44	50
Total	1.11	528.7	278.2	250.5	0.29	0.08	64	0.30	0.08	0.04	663,061	143,692	7,406	1,563,050	440,397	231,215					

Figure 9 Pit Optimization Results

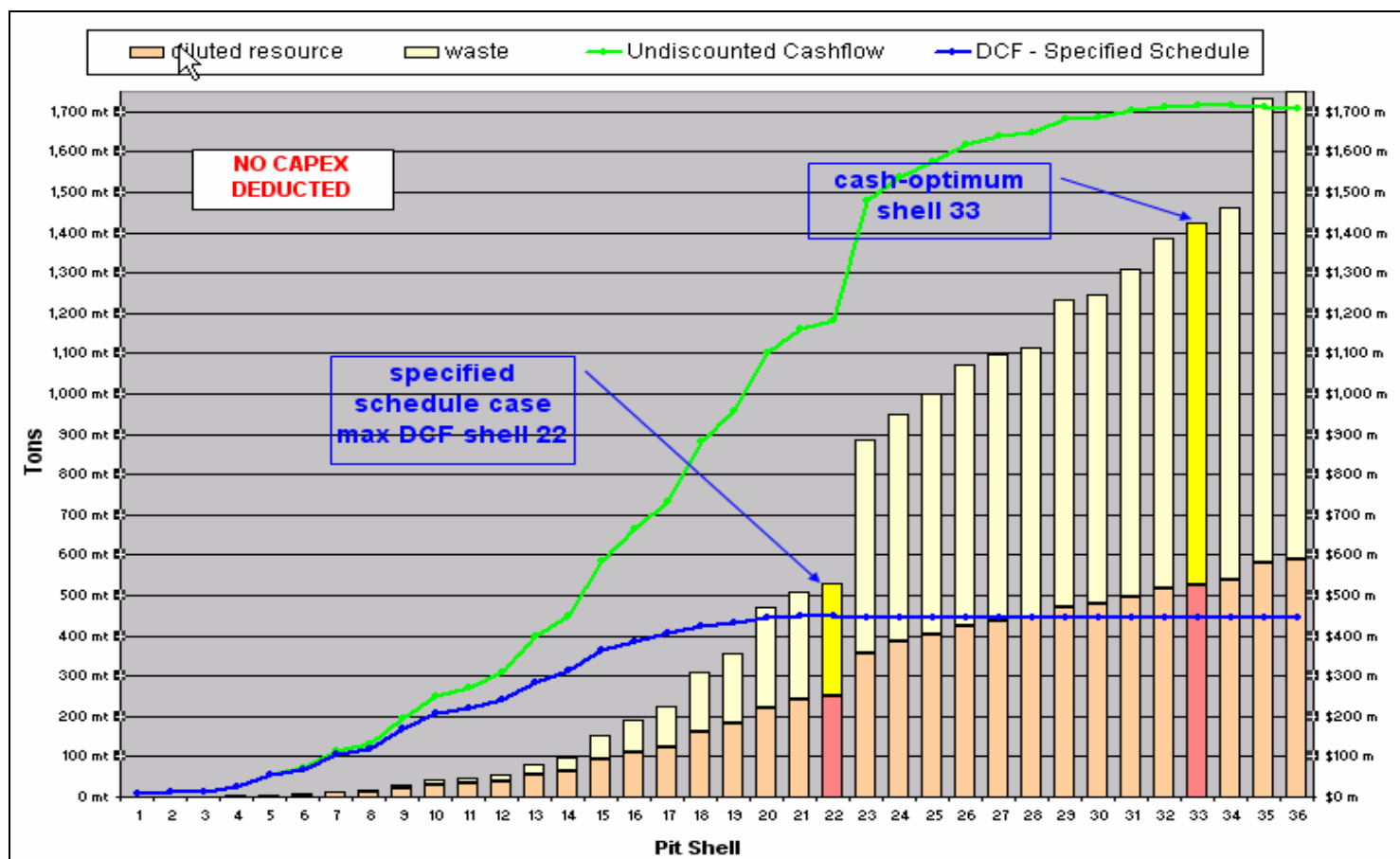


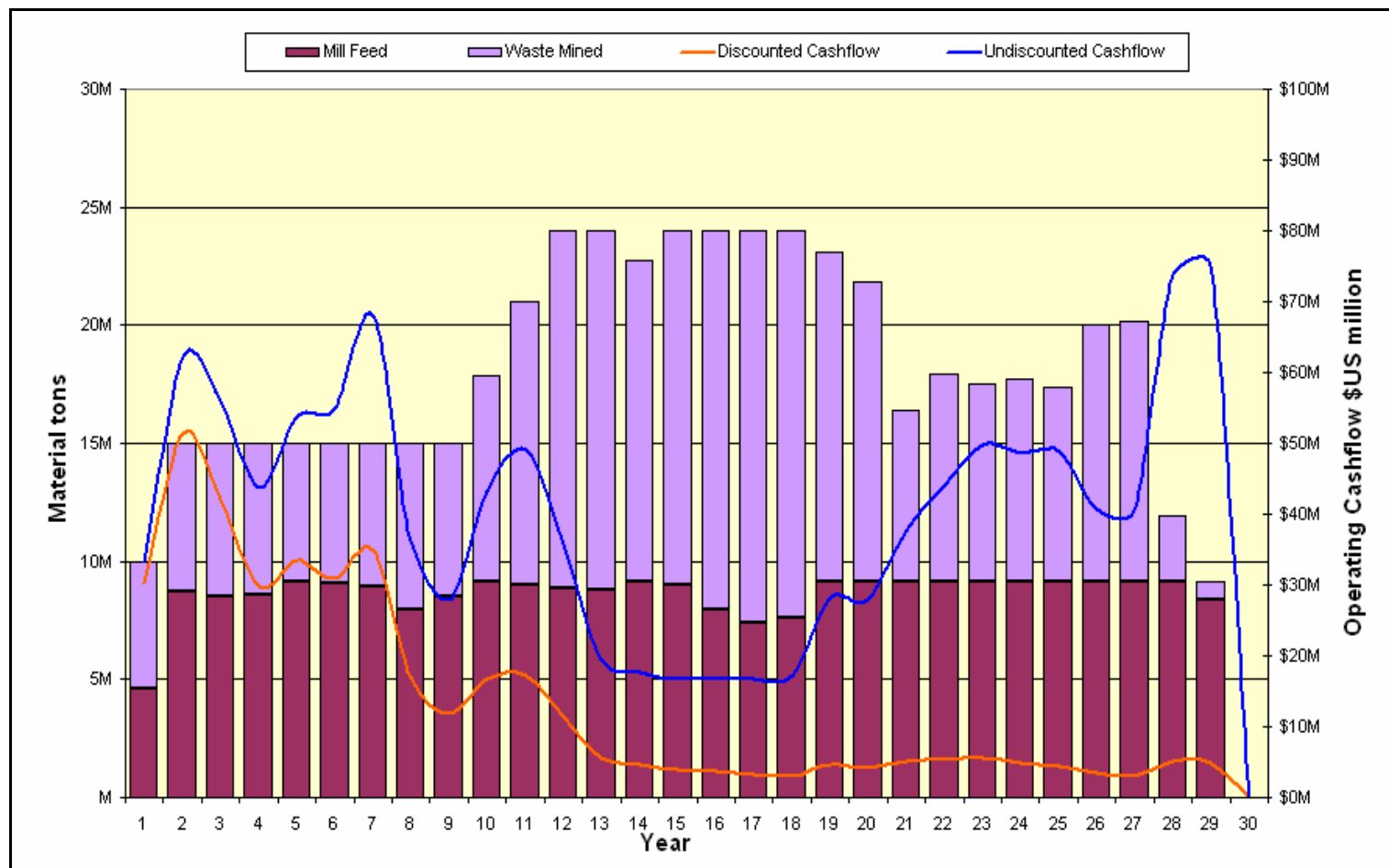
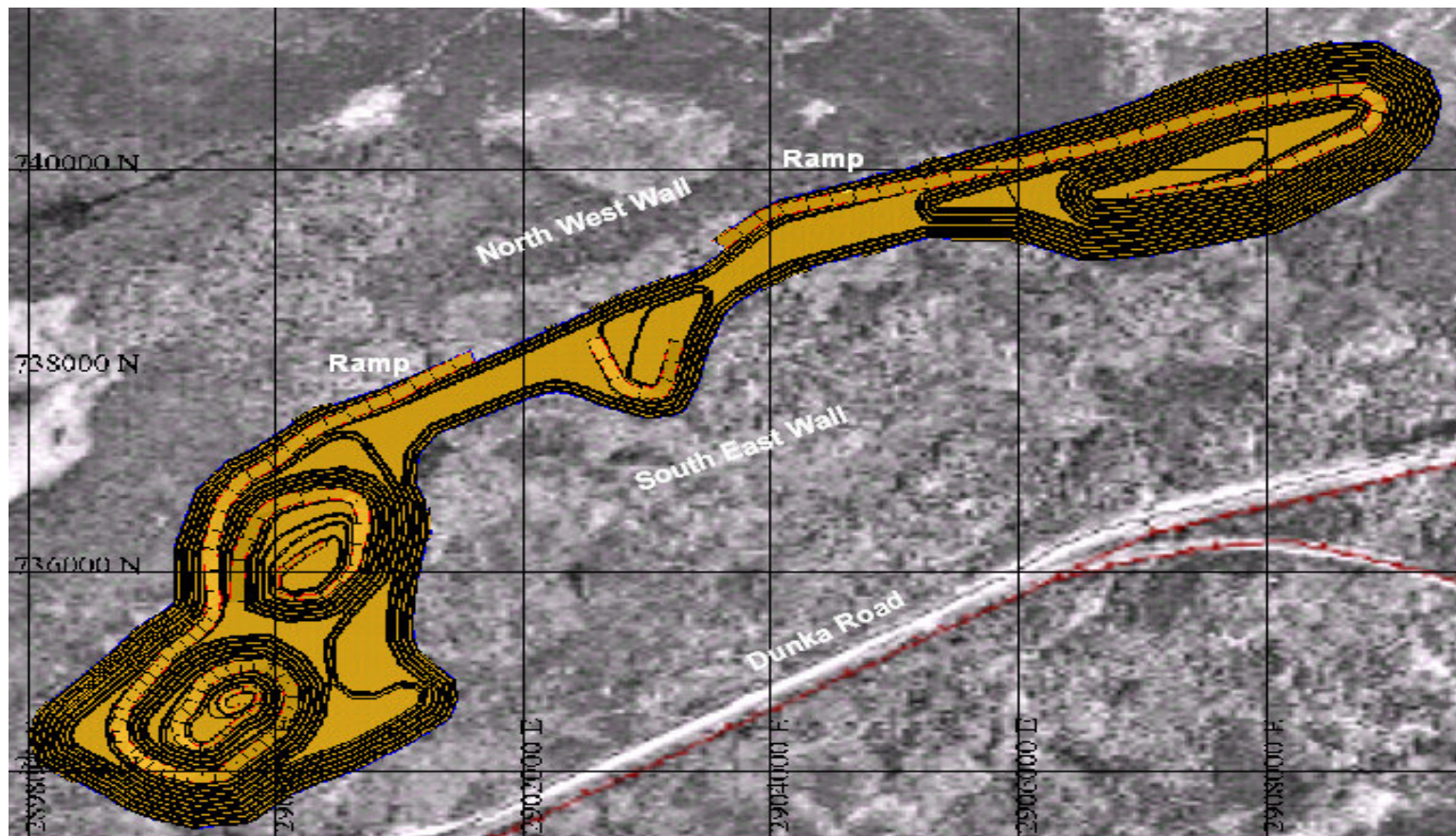
Figure 10 Production Schedule showing Operating Cashflow

Figure 11 Final Pit Design Based on Shell 22

21. Interpretation & Conclusion

The conclusion to be drawn from this preliminary pit optimization is that the NorthMet deposit can be mined by conventional open pit methods and that based on assumptions of grade, mineral distribution, metal prices, process recovery and operating costs, there is a reasonable expectation that the deposit can be exploited economically. The preliminary mine plan demonstrates that there are no aspects of the mining operation that give cause for concern regarding their operational practicality and that, over the first ten years of operation, the required annual mill feed rate can be achieved without significant annual variations in grade or material movements. The waste stripping rate increases between production years 10 and 20. However, since this is a preliminary plan and schedule, there is a reasonable expectation that with the additional drill hole data that will be collected from the current drilling program and another planning iteration, some improvement of the production schedule can be expected in terms of waste volume/tonnage movements.

Compared with previous planning exercises, AMDAD's most recent pit optimization and preliminary planning has demonstrated a significant improvement in stripping ratio together with a modest increase in average grade. The 2001 Pre-feasibility Study showed an average life of mine stripping ratio of about 4:1; AMDAD's November 2004 initial optimization resulted in an average life of mine stripping ratio of about 2.2:1 whereas this most recent exercise has reduced the life of mine average strip ratio to 1.11:1.

The results of AMDAD's preliminary mine plan and scheduling work further reinforce PolyMet's view that this is a robust project and provides justification for continuing with the Definitive Feasibility Study during which, among other things, the level of confidence on mine planning parameters will be significantly improved to meet "bankable" standards.

22. Recommendations

The following activities are recommended on the basis of the results of the preliminary pit optimization and mine planning exercise reported above;

- Complete the current program of in-fill diamond drilling to provide additional geological, grade and continuity data to raise the level of confidence in the resource such that a significant part of the deposit expected to be mined in the first approximately 10 years of mine life can be raised to Measured and Indicated category.
- Continue with geotechnical and hydrogeological data gathering and rock slope stability design studies to provide a confident estimate of safe pit slope angles for use in further mine planning.
- Continue with other feasibility study related investigation, design and engineering work to better define mine design parameters including process metallurgical recovery, environmental impacts mitigation, and capital and operating costs.
- Re-run pit optimization on a grade and geological block model, updated with all available drill hole and grade data as a basis for a feasibility study Reserve Estimate and associated mine plan and schedule. The objective is to define the resource and the planning parameters with sufficient confidence to categorize the Reserve as Proven and Probable. Ideally, a significant part of the mine plan for the first approximately 10 years of production should be categorized as Proven material.

23. References

Downey, P.A., 2004, Technical Update of the NorthMet Project Incorporating the established Cliffs-Erie crushing/milling/concentration facilities with the Hydrometallurgical processes described in the May 2001 Pre-feasibility study, available on-line at www.sedar.com

Independent Mining Consultants Inc., 2001, NorthMet Project Pre-feasibility study, Prepared for PolyMet Mining Corporation, Volume 1, Project Summary available on-line at www.sedar.com

24. Date

The date of this report is the 23rd March 2005.

25. Additional Requirements for Technical Reports on Development Properties and Production Properties

The property subject of this report is neither a Development nor a Production Property as defined in NI 43-101 therefore, there is no information to report under this heading in the pre-feasibility stage of exploration and project development.

26. Illustrations, Tables & Figures

Figure 1	NorthMet Project – General Location Map
Figure 2	Project Location Map – NE Minnesota, USA
Figure 3	Aerial Photo Mosaic View of NorthMet Project Area
Figure 4	Regional Geology of the NorthMet Project Area
Figure 5	Stratigraphic Section for the NorthMet Project
Figure 6	Typical Cross-Section through the NorthMet Deposit
Figure 7	NorthMet Deposit – Plan View Geology
Figure 8	Planned & Existing Exploration Drill Holes at NorthMet
Figure 9	Pit Optimization Results
Figure 10	Production Schedule showing Operating Cashflow
Figure 11	Final Pit Design Based on Shell 22

Table 1	Summary of NorthMet exploration activity since 1969
Table 2	Average Drill Hole Spacing
Table 3	Process Recoveries
Table 4	Metal Prices
Table 5	Mine Design Criteria
Table 6	Preliminary Production Schedule

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CERTIFICATE OF PRINCIPAL AUTHOR

I, **JOHN WYCHE** do hereby certify that:

1. I am not employed by PolyMet Mining Corp.
2. I graduated with an HONOURS DEGREE in MINING ENGINEERING.
3. I am registered as a CHARTERED PROFESSIONAL ENGINEER by THE AUSTRALASIAN INSTITUTE OF MINING AND METALLURGY.
4. I have worked as a MINING ENGINEER for a total of 24 years since my graduation from university.
5. I have read the definition of a “qualified person” set out in the National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
6. I am responsible for the preparation of this technical report relating to the NorthMet Project Property and I visited the property on 19TH, 20TH AND 21ST JANUARY, 2005.
7. I have had prior involvement with the property that is the subject of the Technical Report.
8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
9. I am independent of the issuer applying all of the tests in section 1.5 of the National Instrument 43-101.

10. I have read the National Instrument 43-101 and the Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 23rd day of March, 2005.



John Wyche

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CERTIFICATE OF COLLABORATING AUTHOR

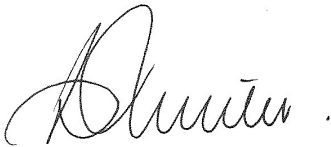
I, **Donald J. E. Hunter** do hereby certify that:

1. I am a consultant to PolyMet Mining Corp.
2. I graduated with a Bachelors Degree (with Honours) in Mining Engineering from the Royal School of Mines, University of London (UK) in 1973.
3. I am registered as a Chartered Professional (Mining) as defined by the Australasian Institute of Mining & Metallurgy (AusIMM) and as a Chartered Engineer as defined by the United Kingdom Institute of Materials, Minerals and Mining (IOM³). I am a Corporate Member in good standing of the IOM³ and a Fellow, also in good standing, of the AusIMM.
4. I have worked as a mining engineer for a total of 31 years since my graduation from university.
5. I have read the definition of a “qualified person” set out in the National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
6. I am partially responsible for the preparation of this technical report relating to the NorthMet Project Property. I regularly work on the Project site.
7. I have had prior involvement with the property that is the subject of the Technical Report.
9. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose

which makes the Technical Report misleading.

9. I am not independent of the issuer applying all of the tests in section 1.5 of the National Instrument 43-101.
10. I have read the National Instrument 43-101 and the Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 23rd day of March, 2005



Donald J. E. Hunter BSc. ARSM, FAusIMM, MIOM³, CP Min, C.Eng.