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BOLIDEN WESTMIN (CANADA) LTD.

Myra Falls Operations

Operating Strategic Plan 1999 - 2012

MYRA FALLS OPERATIONS

STRATEGIC PLAN: 1999 - 2012

STRATEGIC PLAN: 1999-2012

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Summary

The Strategic Plan for Myra Falls Operations (MFO) is governed by the vision of a future that has evolved through the strategic planning process. Our vision has become clear and is based on a **paradigm shift** that will see a mining operation driven, in all aspects, by quality. We believe this shift from volume to quality production is the natural consequence of a strong focus on making full use of our strengths and advantages. At Myra Falls, these include: high grade orebodies with excellent potential to greatly expand the reserve base, a well developed mining infrastructure, a highly automated and flexible milling facility, and an experienced and innovative workforce.

Coupled with this emphasis on our existing strengths is a strong commitment to continuous improvement in all areas. This will empower us to overcome the challenges ahead and enable us to seize the opportunities that are presented. Improvement and investment in mining methods, ground control, dilution control, new infrastructure, tailings disposal and advanced technologies will establish MFO as a world class producer of high quality ore concentrates.

The financial indicators (NPV, DCF etc.) of this strategic plan are impressive. They give us **confidence** that we can achieve our goal of safe, consistent, sustainable and profitable production well into the next century.

Year 2000 is seen as a building and consolidating period which will confirm our paradigm shift. We plan a 1 million tonne production rate; while we build the focus on high grade, quality mill feed. As this process is successful it will validate our strategy and provide a solid base for growth. We have great confidence that continued exploration investment will replenish our reserve base and supply quality Zinc and Copper concentrate tonnes for the foreseeable future.

VISION AND BUSINESS CONCEPT

Myra Falls Operations' personnel and the Boliden Technical Group have worked hard and creatively to build a Strategic Plan. This plan has been constructed through the focused interaction of all Departments and has involved management, technical staff and the union. Our first priority was to find and define a vision of our future, a future extending well beyond the current ore reserve base and possibly outside our claim block base.

This vision has become clear. **We will build a competitive business, utilizing current strengths and adding new ones.**

Our present strengths are many. They can be summarized as follows:

- High grade, high quality massive sulphide orebodies, producing first-rate Zinc and Copper concentrates.
- mining reserves sufficient for 7 years production.
- known areas of mineralization that can be upgraded to the mining reserve.
- a proven history of exploration success.
- good infrastructure and an excellent milling facility.
- a high level of environmental compliance.
- a trained and experienced workforce.

The Strategic Plan developmental process defined a number of areas for improvement, investment and creative change.

Continuous improvement in a number of areas, summarized below, is essential to the success of our Strategic Plan:

- productivity, or more efficient use of our resources and investments in producing tonnes of concentrate.
- quality control throughout, from planning to mining to milling, through focus on key factors such as consistency, dependability, process control and product quality.
- conversion ratio of geological reserves and resources into mineable reserves, through accelerated definition drilling and technical review.
- developing more effective cost measurement and control.

We will continue to invest in projects that support our vision and ensure our future viability. These planned investments include:

- ramp access from surface to and between mining areas, is a vital component of our long-term mining plans. This is required to upgrade our mining infrastructure in a number of key aspects, ventilation, materials handling, equipment usage, ore and waste haulage, exploration access and maintenance costs.
- a comprehensive site waste management plan. This will address the long-term waste rock and tailings distribution and placement. Our goal is to ensure that the correct investments are made without placing limitations on our future.
- technical improvements and new technologies. These are needed to maintain our competitive position.
- mine site exploration, at a significant and sustained level of investment. This is essential to build our ore reserve base and bring new mining areas into the long-term production plan.

People are an integral part of achieving success at MFO, as indicated below:

- training and education of employees is a key to making change a positive experience, both for the individual and the company.
- management and union leadership are encouraged to work together to plan and build our future (co-management).
- creativity and innovation will be encouraged through recognition and reward systems.
- we are building a synergistic relationship within Boliden, which will encourage sharing of expertise, technologies and research to our mutual advantage.

Success in making improvements, empowering employees and justifying required investments, coupled with our existing strengths and abilities, will confirm our strategic goal of safe, consistent, sustainable and profitable production of high quality concentrates.

QUALITY STATEMENT

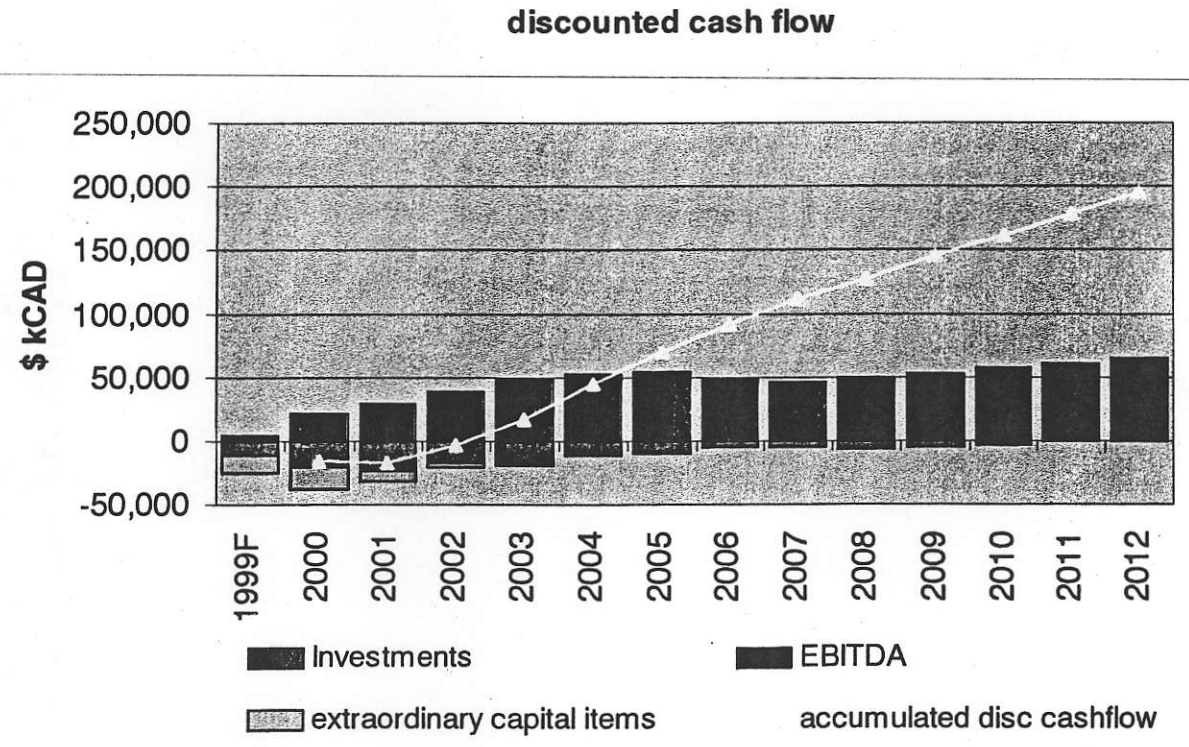
A central theme of the Strategic Plan is quality. Quality is based on the knowledge, experience and education of the workforce. It is monitored through guidelines and routine checks and it is driven by a personal commitment to achieve the best. We will be receptive to new ideas and the radical thinking of others.

Quality will be adopted as the standard by which we work at MFO. Quality will be actively encouraged and will be continuously pursued in all aspects of the operation. Quality will be the means by which we ensure personal and operational growth at MFO.

FINANCIAL SUMMARY

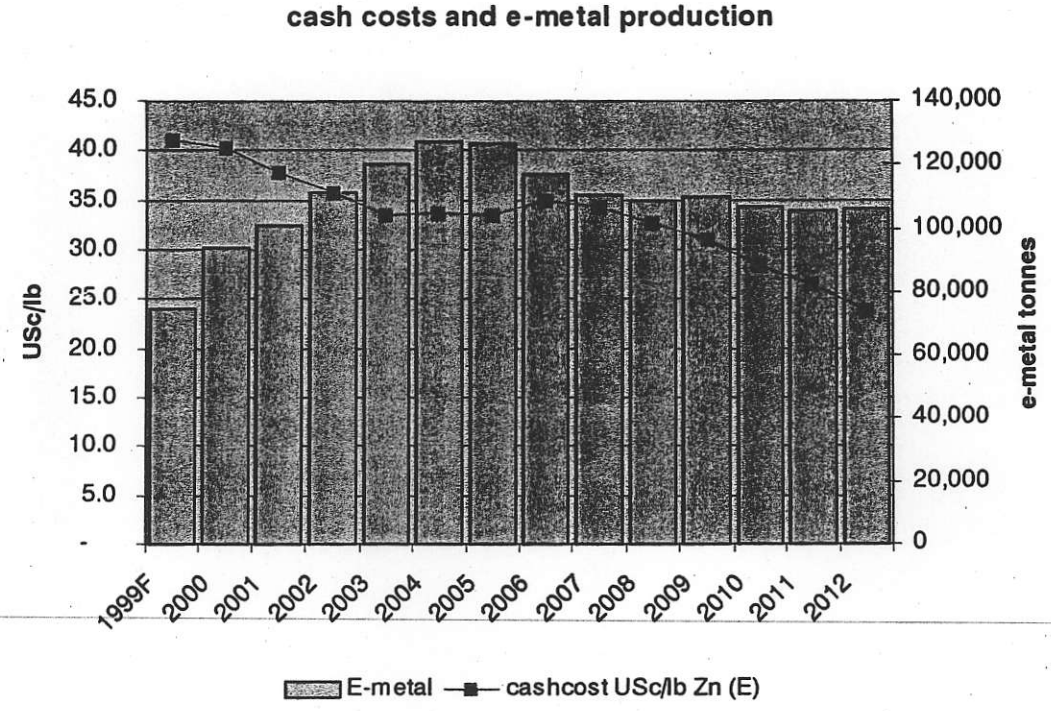
Myra Falls Operations are forecast to generate a total positive cash flow of $468 MCAD over the thirteen-year life of the plan after capital spending of $154 million. The net present value of these cash flows, discounted at 12 % is $196 MCAD.

Cumulative EBIT, which includes depreciation, depletion and a provision for the eventual cost of reclamation, is $328 MCAD over the plan period. The projected results indicate a negative cash flow in year 2000 and 2001 reflecting the heavy capital investment on the tailings dam stability project, paste fill, surface ramp and mine infrastructure. Without the extraordinary capital items (which provide no financial



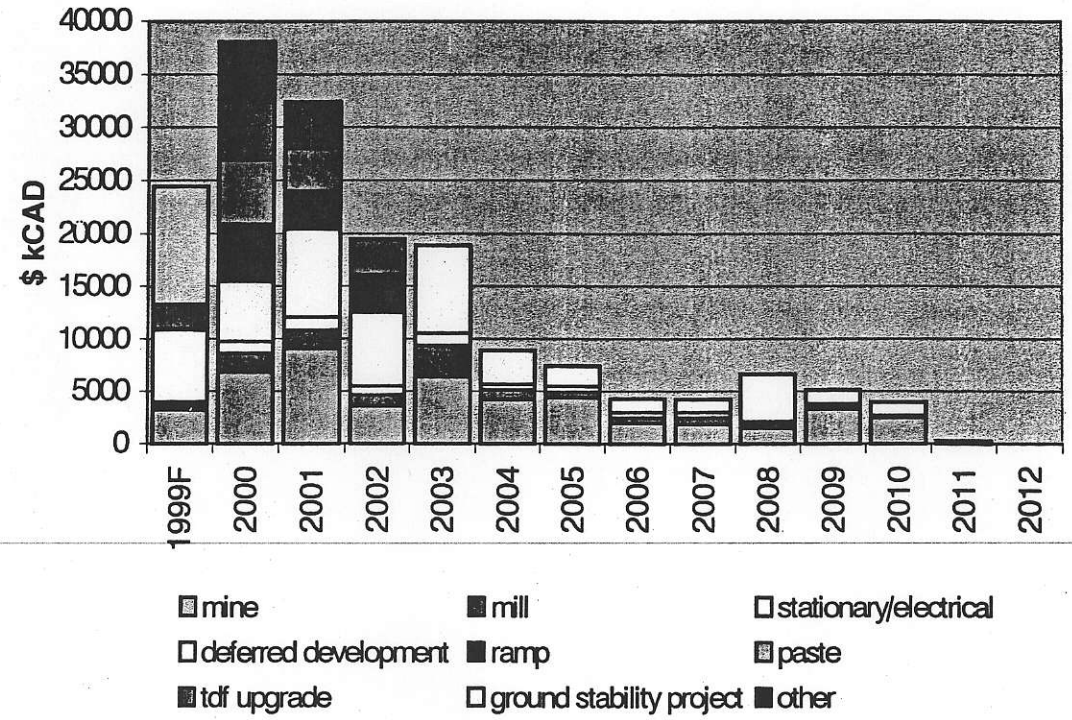
benefit to the plan) there is a positive cash flow in all years of the plan.

- net present value of cash flows discounted at 12% is $196 M CAD.
- positive EBITDA in all years.
- positive cash flow in all years accumulating to a non-discounted total of $468 M CAD over the thirteen year strategic plan.



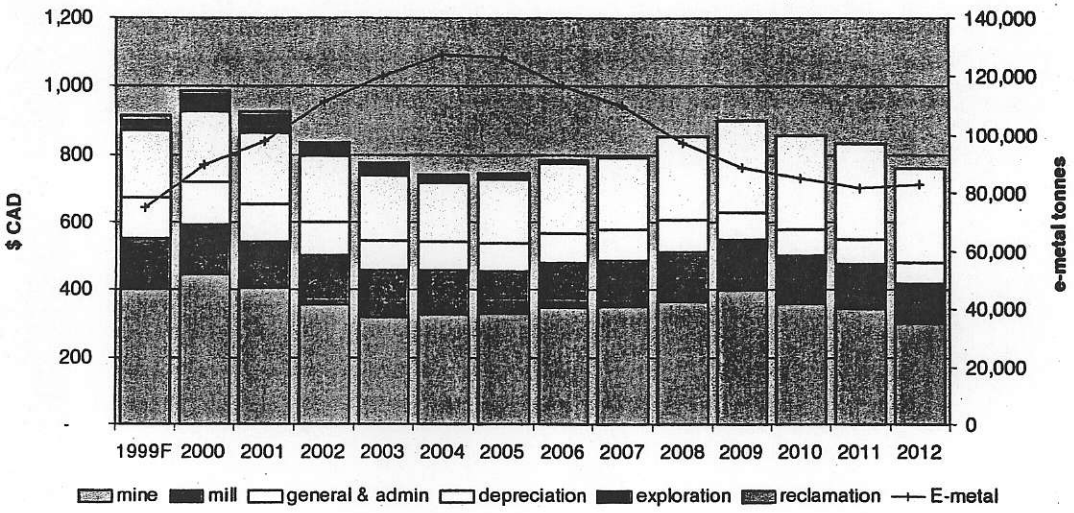
- Cash cost (USc/lb Zinc equivalent) decreasing from $0.40 in year 2000 down to a low of $0.24 in year 2012.
- E-metal tones starting at 94,000 in year 2000 peaking at 127,00 in year 2004 and 2005.

Capex



- Extraordinary capital items (Tailings Dam Facility upgrade and paste fill plant) in first 3 years.
- Surface ramp and mine infrastructure investments ($7 MCAD ventilation) further contribute to higher capital expenditures in years 2000 to 2002.

e-metal production and cost per tonne of e-metal



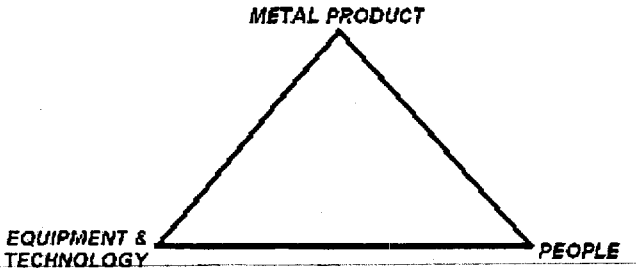
- Higher mining costs with change in mining method and new ground support standards.
- Cost reduction of 2% per year reflecting increased productivity and improved operating efficiencies. Further reductions of 1% to 9% in last four years as a result of reduced overheads and fixed costs related to operating near the end of mine life.
- Paste fill adds $3.00 per tonne to mill costs starting in year 2002.
- Maintenance costs reduced by 12% and mine overheads by $500,000 per year reflecting efficiencies and improvements associated with the surface ramp.
- Higher exploration and depreciation costs contribute to a slightly higher cost per tonne in the first 3 years before declining steadily over the rest on the plan.
- Marketing and overhead expense of $500,000 annually not previously included in Myra Falls costs.

Sensitivity analysis

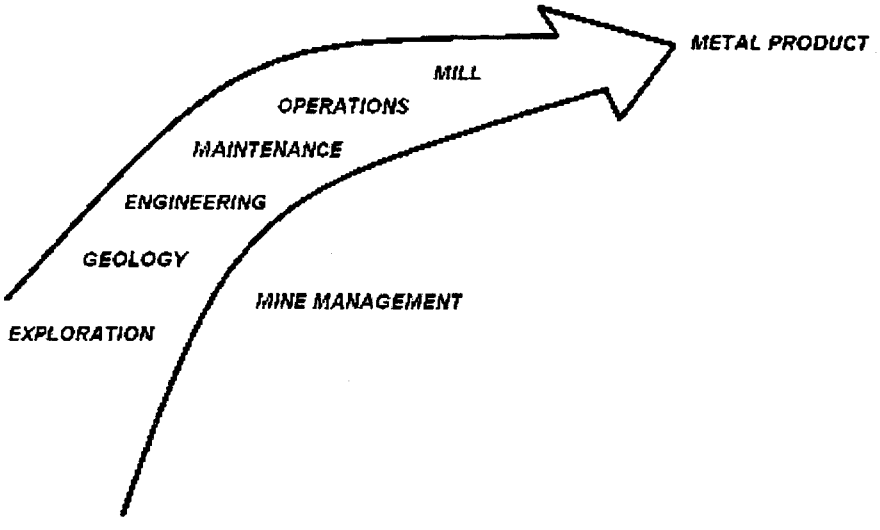
factor	units	1999 strategic plan	assumed change	total effect on npv ($ KCAD)	average non-discounted effect per year ($ KCAD)	change required to effect cash flow by $1 MCAD
copper price	$USD/lb	$1.00	+ $0.01	2,363	327	$0.03
zinc price	$USD/lb	$0.57	+ $0.01	9,319	1,387	$0.01
gold price	$USD/oz	$290	+ $10	2,011	308	$32
USD / CAD exchange	ratio	1.40	+0.01	5,365	790	0.01
dilution (average)	%	18%	-1%	7,032	1,048	-0.95%
zn head grade (average)	%	7.25%	+0.1%	6,702	1,021	0.10%
cu head grade (average)	%	1.26%	+0.1%	17,744	2,765	0.04%
au head grade (average)	g/tonne	1.62	+.1	4,692	649	0.15
ag head grade (average)	g/tonne	1.63	1	819	122	8
annual production	tonnes / yr	1,152,790	1,000	458	68	14,814

PEOPLE

There are three fundamental resources critical to our Strategic Plan; the metal contained in our ore reserves; the equipment and technology used to extract the metal, and the people who drive the process of extraction.



There is an essential interdependence between these cornerstones. The involvement of people in an effective way is a critical element to our success.



The recently published **Human Resources Manual** is introduced by our President who says "In this Human Resources Manual for Boliden we have a general set of values and policies for the Company. The purpose of this manual is to communicate the basic principles that will define the spirit of Boliden and shape the culture of the organization".

Within this general structure we set out our Human Resource approach associated with the Strategic Plan for Myra Falls Operations.

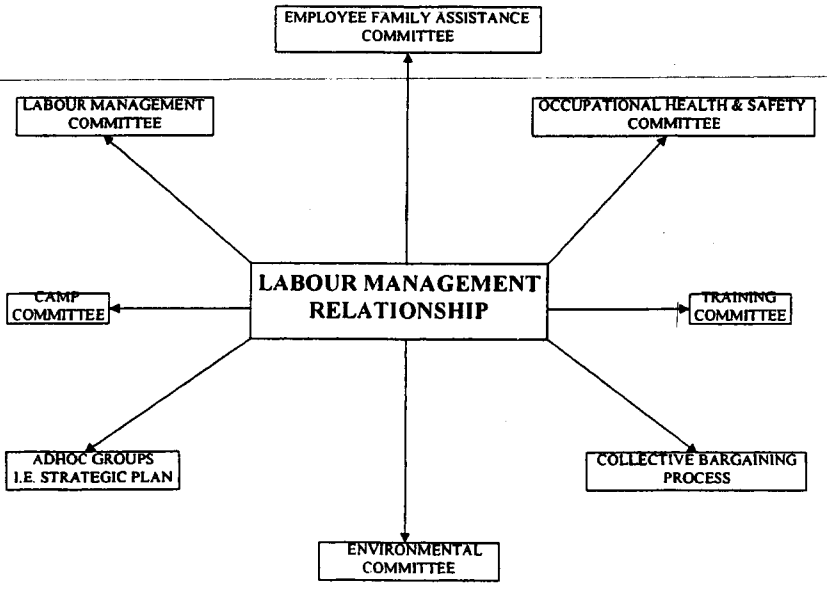
Union Management Relationship

We recognize that the essential ingredients of leadership at MFO are found here. The employees look to this leadership to provide effective and stable labour relations. As with any good relationship, active communication and good systems of problem solving continue to evolve. There is clearly momentum that already exists in this relationship.

Within this relationship there will be respect for the unique interests that are represented, while recognizing that we have a common goal – ensuring that MFO is a competitive and sustainable mining operation.

Examples: Interest Based Collective Bargaining

Effective Joint Committees (see Appendix)



Working Safely

Woven into the fabric of all that we do is the need to ensure that we are always focused on the health and safety of our employees. First and foremost, each of us must rely on our own alertness and knowledge. Programs and procedures will support this.

The Joint Occupational Health and Safety Committee is an important resource to help us focus and continuously audit ourselves.

Examples: Internal Responsibility System

Health Programs – Flu Shots / Smoking

Pirie & Associates Audit Process

Measures of Success

Through the period of the past several months including the Rehabilitation Program, we have become focused on critical factors which are measured and evaluated on a continuous basis. This is a process that will be ongoing. When all employees are knowledgeable and aware of these factors, we move in a common direction.

Some measurements will change from time to time, while others remain constant.

Examples: Rehab Program - Backfill
Wrap Meetings - Progress of development

Training and Development

There will be a modernizing process at MFO. A solid base will be the existing and extensive skills our employees already possess.

The changes in our equipment technologies and processes will be challenging and rewarding for our people. This is one of the critical linkages of the process triangle, identified earlier.

New skill sets will develop to complement ongoing changes. We recognize that there exists great opportunity in this area.

The exchange of best practices within our Company will help to drive our evolution.

Examples: MITAC (Mining Industry Training and Adjustment Council)

Reward and Recognition

We must celebrate our successes! We have compensation structures that include salary and wages; pension plans and benefit programs. These will be continually reviewed and changed as required. However we will search for ways to find "people doing things right" and build recognition around these successes. This will be on an individual or group basis as appropriate.

Examples: Bonus System
Safety Recognition

Employee Involvement

Employees individually or in teams, will recommend improvements in the way we do things. We will foster an environment where this is encouraged.

In addition we will develop structure through which ideas can be brought forward and evaluated:

Examples: Monthly Focus Meetings

A formal Suggestion Program ie. "The Idea Network"

Change and Getting Help From Wherever We Can Get It!

Change over the life of our operations is inevitable and to be encouraged. It is how we manage it and make it as people friendly as possible that is important. This will be done through a variety of communication mechanisms and training programs:

Examples: Bolting Patterns

Changing Management Styles

New Mining Methods

We can learn from the experiences (successes and failures) of others as we deal with hurdles, challenges and opportunities. There are many resources to draw upon.

Examples: Boliden Technical Group

Rock Mechanic's Modeling Group

Facilitator Trainers - (CAW / Canscott / Grid)

Problem Solving Processes

Historically, problem solving was hindered by rigid structures where individuals or smaller groups dealt with issues in isolation.

Today we approach issues, problems or projects with the formation of teams, which are broadly based. These teams "air out" options and reach better conclusions which have good buy-in by all stakeholders. This process will continue to evolve.

Examples: 1998 Focus Teams

Rehab Program

Strategic Plan Development

ORE BASE DEVELOPMENT

We have an extensive selection of mineralized zones at Myra Falls that are not included in the Mining Reserve. These include all categories of Geological Reserve and Resource. Definition drilling and/or determination of mineability is required to bring these zones into the long-term production plan. These zones are:

- areas in the HW, Battle, Gap, Extension and 43 Block zones that are currently not planned for mining. Detailed engineering study, coupled with the opportunity for changes in mining methodology, is required to recover some of this tonnage for the long-term production plan. This total potential tonnage is calculated at 4.2 million tonnes, grading 1.5%Cu, 7.1%Zn (undiluted), portions of which could be mineable.

- geological resource tonnes in areas that have not been planned for mining as yet. These areas include Price, Lynx and Marshall zones. Generally, some additional definition drilling is needed, followed by an engineered mining plan. The potential tonnage available here is 1.1 million tonnes, grading 1.3%Cu, 8.9%Zn (undiluted).

- the 'inferred' category geological resource includes areas that require significant additional definition drilling to improve our confidence levels for tonnes and grade. These areas include portions of the Battle, Gap, Extension, Marshall and Price zones plus new areas such as Ridge Zone East, Ridge Zone West and Trumpeter Zone. The potential tonnage available in this category is 2.4 million tonnes, grading 1.3%Cu, 6.2%Zn (undiluted).

- there is additional geological potential, determined by projecting known mineralization along geological trends. We will generally require both additional exploratory and ore definition drilling here to advance this potential. Areas included are Battle, Gap, Extension, Marshall, Price, Ridge Zone East and Ridge Zone West; with a combined potential of 4.9 million tonnes of comparable grade.

- finally, within the HW mine we have defined a block of low-grade material, some of which may be determined to be mineable. This block totals 2.9 million tonnes grading 0.8%Cu, 1.0%Zn overall.

These areas of opportunity to develop additional mining reserves can be summarized as follows:

Category	Tonnes	g/t Au	g/t Ag	%Cu	%Zn
Defined areas not in mining reserves	4,186,203	1.7	49.2	1.5	7.1
Defined areas with no mining plan	1,147,201	2.2	83.7	1.3	8.9
Inferred category Geological Resource	2,411,160	2.1	75.5	1.3	6.2
Potential category Geological Resource	4,897,656	not reported, but of similar grade			
Geological Resource of low-grade mineralization	2,949,811	2.2	13.5	0.8	1.0
Total Potential Ore not in the Mining Reserve	**15,592,031**	**requires varying degrees of exploratory and definition drilling, coupled with engineering and feasibility study.**			
Total Ore in the Mining Reserve	5,300,482	1.9	47.1	1.9	10.1
Total undiluted potential ore	**20,892,513**	**grades cannot be combined, but will be of a high grade nature overall.**			

The calculation of tonnes and grade, and their placement in distinct categories, is facilitated by the use of computerized block models. The methodology has been in place for over 10 years with constant scrutiny by on-site and off-site personnel. This, plus the ongoing tonnes/grade reconciliation with production numbers, has given us a high degree of confidence in our orebody modeling. A close working relationship between Boliden and Mintec, the vendor for our orebody modeling software Medsystem/MineSight, will allow us to continue to gain the maximum from their developments and our reserve base.

In summary, the calculations shown above outline the opportunity we have at Myra Falls to bring additional ore tonnages into the production plan, and also highlight the generally high-grade nature of such ore zones. Exploratory development and drilling, ore definition drilling and engineering feasibility study are required to bring these potential, additional ore tonnages into the existing mine plan. These required investments are calculated into the Strategic Plan, as is the potential new ore so defined.

EXPLORATION

Myra Falls Operations has a tradition of exploration success, within a property whose exploration potential still holds tremendous expectation for future discoveries. See Figure 1. The mandate of the exploration department is to replenish mined out reserves and build a ten-year mining reserve through the combined discovery of new orebodies and the upgrading of known mineralized zones to the measured/indicated categories.

It is of the utmost importance to carry out this exploration and resource development in a timely and cost-effective manner in order to provide this solid mining reserve, the basis of a strong mine plan.

Background

Exploration has been carried out periodically over the 33-year mine life of Myra Falls Operations. The most successful campaigns generally involved sustained annual expenditures of $2-4 M CAD over 3-4 year periods. Such programs resulted in the discovery of the Lynx West G, Myra, H-W, Battle and Gap deposits as well as the peripheral, and as yet undeveloped Price, Extension, Ridge and Marshall zones.

The major challenge to MFO exploration continues to be the lack of strategically located drill platforms. The rugged nature of the topography in the area greatly hinders the placement of drills on surface. Thus, underground access is often the most feasible option, but does not necessarily provide immediate access to the areas of interest. As such, underground development becomes an important, albeit costly, component of long-term exploration at Myra Falls. Since exploration is so closely tied to development and platform availability, an aggressive and long-term plan is essential.

Exploration Strategy

Due to the greater length of time involved to test and develop those distant targets towards the fringes of the property, the MFO exploration strategy must involve the simultaneous testing of a variety of target types:

1. Short-term targets - areas close to existing infrastructure; could provide ore in 1-3 years

2. Medium-term targets - require moderate amounts of development to provide ore in 3-5 years

3. Long-term targets - areas with little or no existing development; considerable development and drilling would be required to provide ore beyond 5 years

Exploration Potential

Canadian Mining Operations
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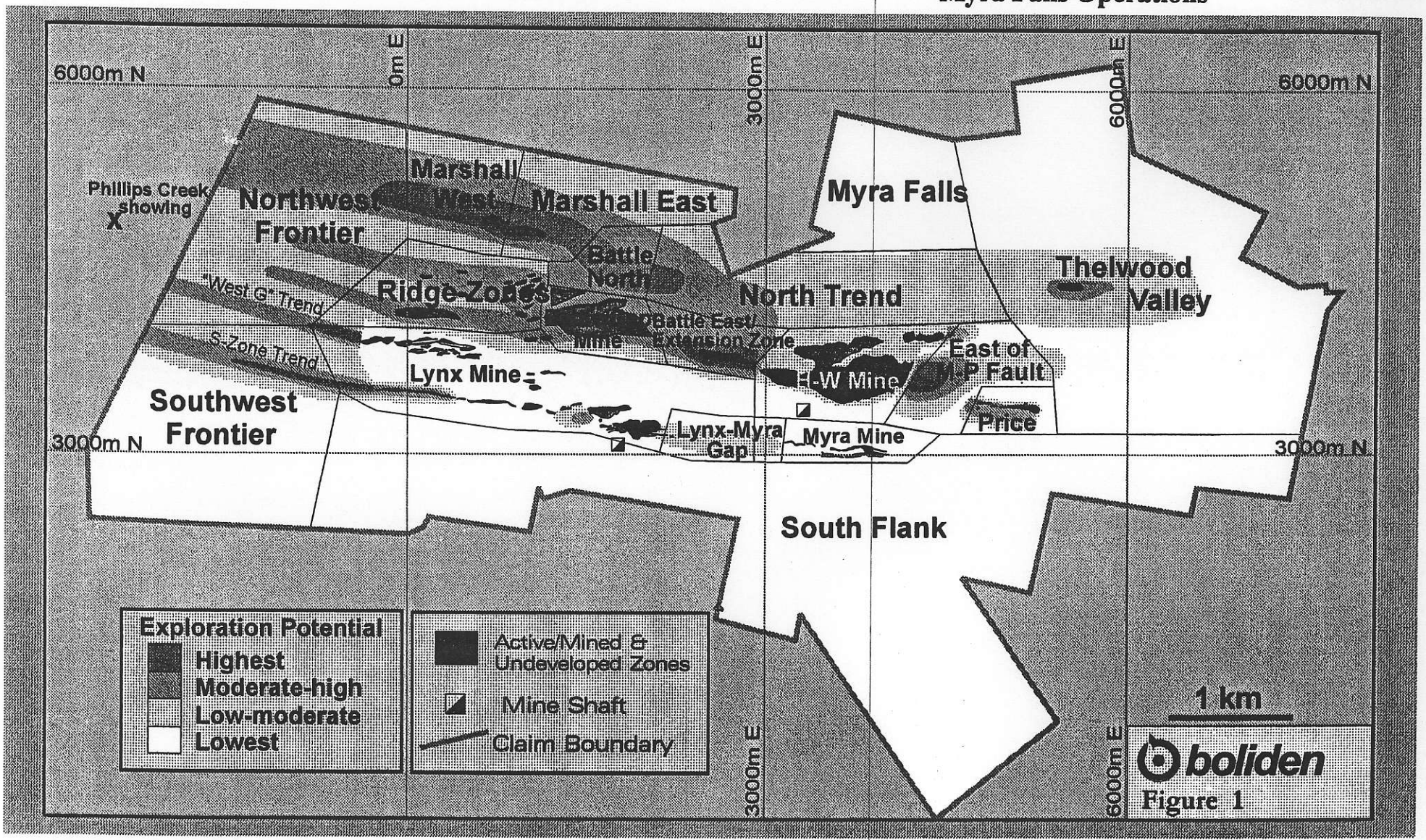

Figure 1

These target types have been subdivided into a number of zones, see Figure 2, based on a combination of geographical location and geological character:

1. Short-term targets - Lynx Mine (S-Zone, West G Zone), Price Deposit, Battle North

2. Medium-term targets - Marshall East, Ridge Zones, North Trend, Lynx Mine West

3. Long-term targets - Marshall West, Northwest Frontier, Southwest Frontier, South Flank, Deep Footwall Test.

The Myra Falls exploration strategy involves a mix of these short, medium and long-term targets: success in the short-term target areas provides the necessary time to properly develop and explore the longer-term target areas. Since the longer-term targets are quite "development-dependent", there is a need to commit to a significant amount of exploration drifting (up to 1200 metres/year) over the first 3-5 years of the plan. A well balanced portfolio of projects at various stages of exploration - grass roots to resource drilling - is required to reduce the discovery risk in exploration and establish a smooth flow of new discoveries as the current reserve is mined out. Long-term planning is critical to the viability of the operation, as it takes approximately six years to develop an orebody after initial discovery.

"Frontier style" drilling from surface as a first scan is often necessary to optimize follow-up development and drilling. The integration of all available modern exploration techniques, such as geochemistry and geophysics, should optimize drilling patterns and help vector our efforts more efficiently to new discoveries. We have good in-house knowledge in these fields. Expertise within the Boliden Group, consultants, and recognized academic experts will be used when necessary. Our historical strengths, stratigraphic drilling and a solid geologic model will remain the focus of our exploration efforts. To get the most out of up-coming exploration work all new and old geological data will be stored in a central data base compatible throughout Boliden.

The exploration philosophy at a mature mine site must follow a pragmatic and logical format while being skeptical of all engrained interpretations that have been considered valid in the past. Since many qualified explorationists have struggled with the same problems, it is unlikely they have missed the obvious. A paradigm shift is often needed to open up new exploration possibilities. Pooling the combined experiences of previous workers for continuity, with the unbiased vision of new personnel should provide the necessary chemistry to advance the exploration effort to new successes.

Exploration Target Areas

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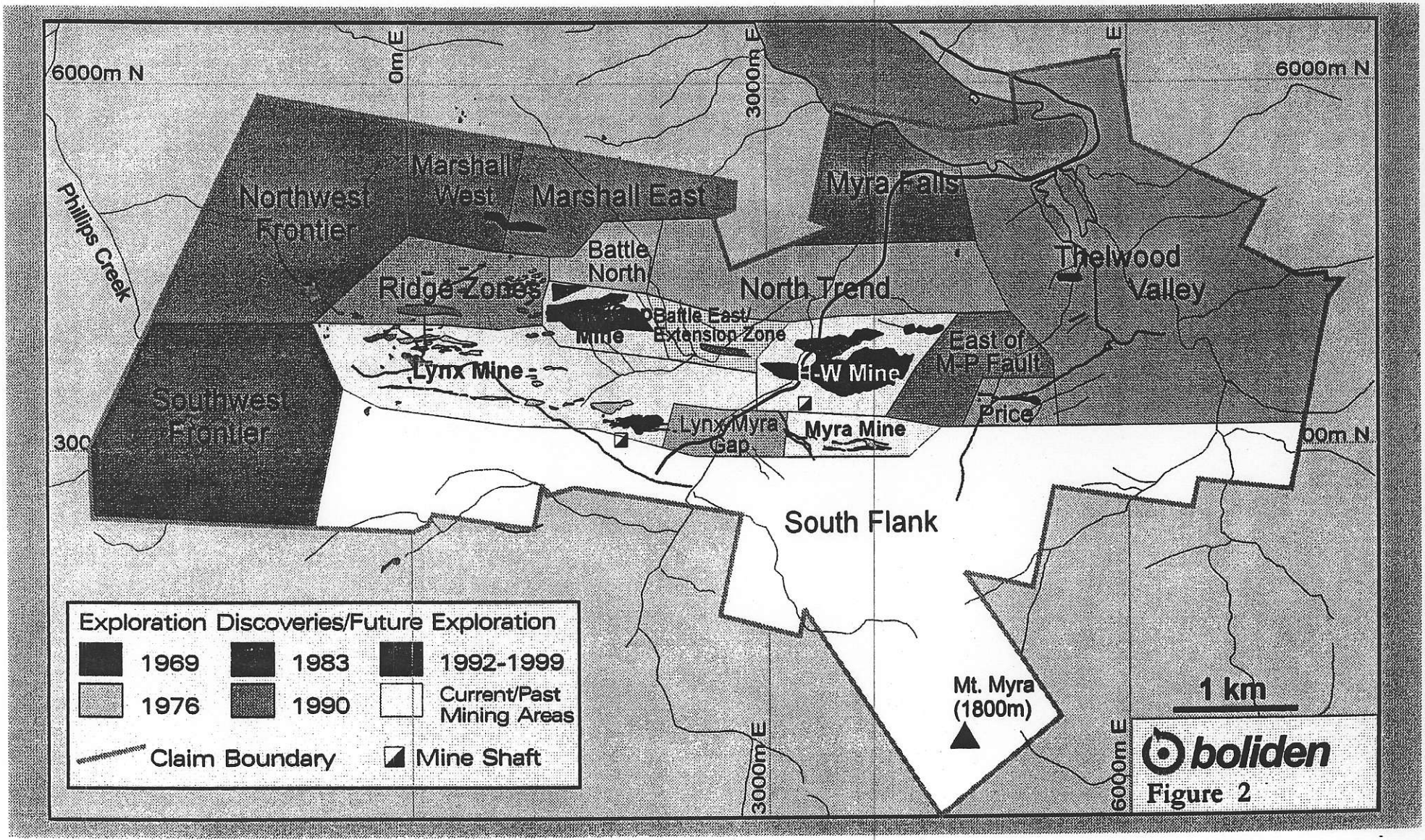


Figure 2

PRODUCTION

Flexibility is a requirement for any successful mining operation. The nature of MFO orebodies certainly requires this flexible approach. Our commitment to develop appropriate infrastructure allows for continued flexibility in production and development.

The development of a **surface decline** is one of the key elements in realizing this operating philosophy. Another key project is the creation of a long-term ventilation system, of which the decline is a major component. This will mitigate the risks of continual deterioration of old Lynx underground workings, which threaten disruption to the current fresh air supply to the Battle mine.

The new focus on how we mine is the production of quality tonnes. To accomplish this, the correct **mining method** will be developed. These mining methods will ensure a flexible, steady state production rate free of major interruptions, minimal dilution and maximum ore recovery.

A major factor in achieving this is **high quality backfill**. The backfill system will allow quick cycle time, tight filling of all mining voids and maximize placement of material underground.

Ground control will be emphasized, to provide first pass support of all headings. This will keep drift rehabilitation to a minimum. Continual monitoring of ground deformation will allow support system design to meet mining cycle requirements.

Ultimately, the flexibility that **good infrastructure** provides will minimize the overall development metres required to get the job done and minimize disruption to our operation. Work will then be on budget and on schedule.

Orebody Description

We expect that undiscovered ore zones to the west are more similar in shape and host rock to the Battle orebody than to the HW orebody. Unlike the HW, where the rock mass quality of the ore and hangingwall rocks is relatively good, Battle mine has more complicated conditions. The Battle style of mineralization occurs within altered andesites and rhyolites and lies within a large shear zone. Typically this orebody type is flat lying and relatively thin with thicknesses of 20 metres.

Mining of flat lying orebodies creates large back expanses as extraction progresses. The Battle mine is situated beneath 900+ m of cover due to surface topography, whereas the bulk of the HW has substantially less overburden. An incremental mining method will be more practical in dealing with new ore bodies that have high in situ stresses and poor rock mass quality. The low rock mass strength will preclude bursting activity but large deformations due to mining are expected and will be controlled.

Mining Methods

Longhole mining will be increasingly augmented by cut and fill tonnes as HW mine production decreases.

Cut and fill mining has many advantages, these are::

- Reduced risk of back failures through incremental opening of the span and the ability to fully support that span.
- Reduced risk of major production interruption by mining in an incremental and controlled fashion.
- Minimal impact on mine workings located adjacent and above the cut and fill stopes.
- Dilution is minimized due to more control of overbreak.
- Production flexibility is increased allowing greater ore recovery even in areas of complex ore geometry.
- Ability to access un-mined ore through previously back filled areas.
- Provide greater consistency in production and grade scheduling.

Ground Control

We have made great progress in understanding the ground conditions, the stress field and the failure mechanisms that exist in our mining areas. This has lead to a change in ground support methods.

A monitoring program is in place for the Battle mine. This program will monitor rock movement due to mining and general deterioration, and will enable advance information to be collected on the state of mine workings. Decisions will then be made regarding the quantity of support to be installed in long and short-term drifts.

The rock mechanics group is focusing efforts in a number of key areas – listed below - to achieve quality drift mining.

- A **pattern bolting** system is now in place for all development drifting in the Battle mine, and for all long-term headings in the HW. The result is a safe and cost effective long-term drift, as drift rehabilitation will be minimized.

- Increased bolting requirements have led to the purchase of mechanized bolting rigs to accelerate this critical part of the mining cycle.

- Control blasting project results will reduce the long-term cost of development drifting. Results will lead to reduced blast damage, decreased waste volumes, reduced ground support costs, and a reduction in rehabilitation quantities.

- A mobile shotcrete system will enable several development rounds to be shotcreted in one shift. Shotcrete with fibres will eliminate the need for installing welded wire screen and minimize scaling requirements. After shotcreting, the heading will be pattern bolted to complete the support program.

- Long-term headings will be monitored for rock movement to determine the effectiveness of the ground support strategy.

- Drift and fill mining will require monitoring of rock movement so that heading size will be maximized while support requirements will be minimized. This will result in a support strategy in the ore that maximizes efficiencies.

- Field tests of various support configurations for longhole stope backs will be ongoing to reduce dilution from stope back failures.

The rock mechanics group will be proactive in the planning of new areas with input into the choice of mining method, extraction sequence, acceptable limits for spans, support requirements and the location of infrastructure.

Backfill

Recent improvements to backfill handling methods have resulted in higher utilization of fill with more continuous pours, reduced operating downtime and controlled drainage. Increased tailings cyclone recoveries now produce sufficient backfill quantities to meet underground fill requirements. Optimization of cement and coagulant consumption is leading to direct cost savings.

The changeover to drift and fill mining will demand a higher strength of backfill, a faster mining cycle and reduced decant water quantities. In order to meet these objectives the use of additives to effect a more fluid flow of high-density slurry are under investigation. These types of additives have the potential of being able to pump higher density slurry.

Ventilation

The ventilation project will address short-term and long-term requirements that permit the expansion of mining operations to the Marshall and the Ridge zones. A cost efficient "ventilation by need" system will provide the capacity for a 1.25 M tonnes production rate. This will be verified by computer modeling.

In the short-term, the ventilation system will be upgraded by installing additional ventilation and exhaust raises between 18 -- 24 levels and 18 – 20 levels. New ventilation control doors will also be added on 20 level. This upgrade will allow continued mining of the Battle mine.

Long Term Ventilation

The ventilation system as it exits cannot be expanded. The reasons are production development is used for ventilation and these drifts are too small in cross sectional area. The resulting high velocities and high fan horsepower requirements leave no room for expansion.

The solution to long-term ventilation will be completed in two phases.

Phase 1

- A combination of drifting, slashing and installation of raise bore holes between surface and 18 level.
- New main fan installation for a 400,000 cubic meter per hour flow.

At this point the new infrastructure provides Battle mine and adjacent areas, with a reliable source of ventilation.

Phase 2

- slashing on 15 level Lynx, from the proposed surface ramp, to provide a new fresh air source.
- Raisebore connections between 15 level Lynx and the Marshall mining areas.
- Fan installation to increase ventilation to 1,000,000 cubic meters per hour flow.

At this point the new infrastructure provides the Marshall and other ore bodies, to the NorthWest, with a reliable source of ventilation.

The success of Phase 2 is dependent on the connection to a surface ramp. Other alternatives can be considered but involve significant amounts of additional drifting and raiseboreing.

Simplified Equipment Fleet

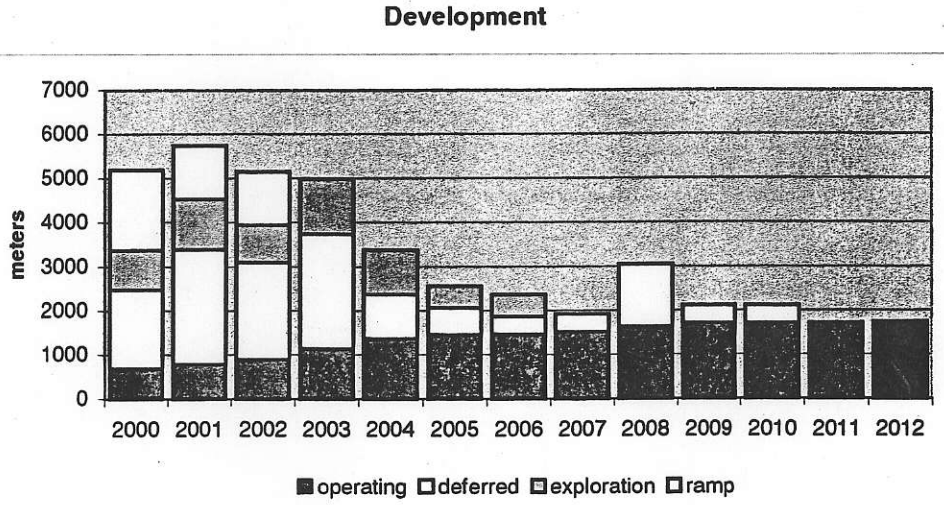
A simplified equipment fleet is envisioned. A ramp connection between the HW mine and the Battle mine will allow mobile resources to be shared. This will reduce the equipment list, as well as lower maintenance costs and increase equipment utilization. Also the increase in production from cut and fill mining will begin to standardize equipment, in that the equipment used for cut and fill is similar to that required for development. This will reduce the numbers of specialized longhole units such as longhole production drills.

Development

Within the strategic plan, development requirements are summarized under three headings.

1. Exploration
   - discovery exploration
   - ore definition – post infrastructure drilling
2. Capital: long-term access requirements
3. Operating: short-term access in waste. All development in ore under this classification is ore production.

The following figure summarizes the development for the Strategic Plan:



Surface Ramp Connection

The ramp from surface will open up the western frontier of the claim. With this ramp, Lynx and Ridge West ore zones can be brought into the production stream sooner. The ramp brings with it other substantial benefits; long-term ventilation improvements, more efficient transport of personnel and materials, reduced maintenance costs, enhanced ore/waste haulage, alternative routing for mine services, and mine exploration.

Maintenance

Establishing best practices for standard procedures will reduce the visible maintenance costs of labour and material. With continual review, practices and procedures are improved and kept current. With improved maintenance practices, the hidden costs of lost production, additional equipment inventory, increased crew sizes and reduced equipment life will be minimized. Efforts towards planned and preventative maintenance will reduce the high cost of unplanned and emergency work.

A paradigm shift for Operations will be the realization that maintenance supervisors and crew do not carry the sole responsibility for successful maintenance. Maintenance, like safety, is everyone's responsibility. For example, if operators do not report problems and perform daily checks, and if production equipment runs until it fails, then nothing the maintenance crew does will prevent emergency breakdowns and lost production.

The training of our maintenance crews will be mandatory, to keep them updated with new technologies, equipment and practices.

Mine Waste Handling

A mine waste-handling plan is being developed to optimize the placement of waste throughout the property. Waste generation and handling plans are integral parts of the mine production plan. The waste plan minimizes hoisting of waste rock, to maximize the use of surface deposition areas. Wherever possible clean waste will be identified and hoisted to surface as valuable clean fill material.

TECHNOLOGICAL ADVANCES

Mine

Both the Battle and HW mines will maintain a focus on process improvement and the implementation of new technologies that apply to our needs.

We currently maintain, and continue to install, three main services throughout our mining areas; compressed air, water and electric power. This is primarily the result of our non-standardized equipment fleet. This operation will now move towards standardized, electric hydraulic equipment. Cost savings will flow from this process, as we will no longer require compressed air lines in new development headings and as costly compressed air leaks are reduced through pruning back our network of air lines.

The mine holds the vision of completely replacing traditional handheld mining equipment, i.e. stopers, jacklegs and scaling bars. Mechanized scalers and mechanized semi-automated bolting rigs satisfy this vision, enhance the health and safety of the workforce and provide the tools to achieve productivity improvements.

The value of shotcreting within the development cycle has been recognized. With this ability, development productivities will improve. Headings have been temporarily lost due to local ground problems while the shotcrete crew mobilized with traditional manual equipment. The vision is mobile gear with the ability to drive to a problem heading for immediate material application or to shotcrete a development round within two hours.

Dilution Control

Noranda Technology Centre states, "Waste rock dilution occurs when uneconomic rock is mined and processed with economic mineralized ore. Waste rock dilution and ore losses can be shown to exist in all phases of exploitation of an orebody, including geological modeling and evaluation, decisions regarding cut-off grade, design of the mining method, and mining and ore concentrating. Dilution can be classified as geological, planned and unplanned." At MFO we report external (unplanned), planned, backfill (both planned and unplanned), and internal (geological). Geological dilution, due to uncertainty in the actual location of the orebody, is not reported.

The effects of dilution are significant. **Every 1% decrease in dilution adds $1 per tonne profit.** We plan on reducing our current 28% overall dilution to 17% through improved quality control.

This will be accomplished by:

1. A reduction in geological dilution through better interpretation of the ore body during delineation phases. This will be accomplished by better use of geophysics, geostatistics, databases (leading to information flow) and geological models. At the production stage, control and interpretation of definition drilling is vital and will be supplemented with detailed mapping. In addition we plan a training program centered on dilution control.

2. Changing mining methods, where applicable, will reduce planned dilution. Unplanned dilution (essentially over break) will be reduced by changing drill patterns, the move from bulk mining methods to more selective cut and fill, proactive ground control and tight filling.

Extraction and Recovery Losses

Extraction and recovery factors are applied to in situ ore to calculate the amount of ore that will be available for mining. They take into account ore that will be isolated or lost due to mining constraints.

Our current mining practice leaves approximately 33% of the ore behind. Increasing ore recoveries is ultimately cheaper than discovering new reserves.

We anticipate that recoveries will increase by changing mining methods, improved ground support and tight filling. This will have a significant impact on our ability to produce tonnage in an orderly and timely fashion.

Mill

The Mill continues with investigations into new technologies and operating strategies to improve metal recoveries and reduce operating costs. Projects such as a gold gravity circuit, microcell sparger, increased Zinc flotation capacity, additional de-watering capacities and single circuit grinding will be investigated.

Over the next three to five years focus will be placed on Zinc and Lead depression in the Copper concentrate. Concurrently a Lead circuit design will be addressed.

The potential impact of high barite levels from the Marshall ore on the flotation and de-watering circuits will be investigated. The impact of all "new" ore types on concentrate production will be assessed.

The impact of potential backfill additives on flotation will be investigated.

An investigation with the Boliden Technical group into semi-autogenous grinding will be proposed in 1999.

The Discovery Terminal Concentrate storage and loading facility lease agreement ends in 2012. The Gold River dock facility is considered an alternative, should something happen with our existing lease or facility.

Our focus will be on continuous improvement of human resources, process design and process control.

Surface

Paste Tailings deposition is a technical and environmental improvement over conventional tailing deposition but is not regarded as the most efficient long-term surface tailing disposal method. Mining operations today are now designing subaqueous tailing deposition facilities to handle mill tailings.

This alternative to paste is somewhat controversial, but we know from contacts in Government agencies that a subaqueous facility to handle tailings is highly regarded as a technically and environmentally sound long-term method of deposition. Practical experience of subaqueous deposition, at Island Copper and our own previous tailings disposal in Buttle Lake, shows that long term stability is achieved and that biological productivity returns once deposition is halted.

The controversy of the issues surrounding subaqueous deposition forces us to be sensitive when speaking in public forums but every company in Canada should be out asking the right questions so the best feasible solution for the environment can be found. We know that approval is not easily assumed, as such deposition is currently not permitted in Canada. The issue of operating in an environmentally safe and responsible manner is too important to just accept current legislation and the political safe ground. We believe that with knowledge and increased experience, focus on these questions could change to favour the environment and our company.

Power Generation & Distribution

MFO's existing Power Generation & Distribution System has proven adequate for historic levels of production. Strategic planning has been moving in the direction of maintaining production in the 1M to 1.2M tpy range that is consistent with historic levels. We can assume therefore, that maintaining the existing capacity of our Power Generating System will see us through to the year 2012.

Maintaining the existing capacity at the Diesel Powerhouse will require six to eight major rebuilds through the course of the Strategic Plan. These rebuilds will be costly and in several cases warrant replacement of inefficient units. The existing dams will require maintenance involving an expensive dam capping project at Jim Mitchel Lake.

The key to the future will be to monitor efficiencies closely and be strict with equipment utilization and applications. We must be 'Power Smart'! Increased efficiencies mean lower power costs and therefore lower costs per tonne of metal produced.

Power savings can be achieved by scheduling peak loads, this is accomplished through automation and communication between departments. We must promote the participation of everyone.

BC Hydro has shown interest in connecting our generating capacity to the island power grid. During operating years we would be a purchaser of power and after mine closure a supplier of power to the grid.

(see Appendix "D" for information on Power Generation.)

Data Management

The last decade has seen a dramatic move from a paper based database to an electronic one. The move has not always been as smooth as would have been liked but we are slowly beginning to reap the benefits. The flow of information has been streamlined in some areas and the integration of data from different sources is improving. It is important that this process continues if we are to make use of the ever-increasing amount of information available. Medsystem/MineSight has been an invaluable aid to Engineering and Geology and can be of use in other areas, but has its limitations. Our vision is to incorporate a user-friendly data management-collecting format that will give a greater degree of flexibility and control to the users in all areas of MFO.

ENVIRONMENT AND REGULATIONS

Further expansion of the surface disturbed area within the claim boundary is being severely scrutinized and this is unlikely to change with the present political environment. Environmental regulations that affect the mining are becoming more onerous, often choking viable operations into closure or preventing prospective mines from opening. The Mining Industry has an uphill ahead to sell its merits to society. This is where initiatives such as **Keep Mining in Canada** are imperative.

Environmental Permits

A number of permits will require renewal over the next twelve years.

Reclamation and Closure

The ultimate goal at closure is to return the mining impacted lands to full Park Use. The BC Parks Master Plan for Strathcona-Westmin Provincial Park (which covers our mining claims area) has the park being amalgamated into the larger Strathcona Park after site decommissioning. Our mine site disturbance covers an area of about 170 hectares and parks is reluctant to allow us to disturb any more land.

A Conceptual Decommissioning Plan for the Myra Falls Operations was prepared in December 1995. The plan was approved by the government agencies in the spring of 1998 as part of a renewal of Mines Branch-Reclamation Permit, M-26.

All government environmental securities are grouped under one bond, which is presently at $5.6 M CAD and will be brought to 100% of the anticipated closure costs (capital works only) by mid 2002 in compliance with BC Mines regulations.

The plan includes the application of an engineered soil cover over impacted areas such as the waste rock dumps and tailings areas. Other areas are to be de-commissioned using conventional methods.

Site closure planning anticipates several years of post-closure work, which would include such things as operating treatment facilities until regulatory closure criteria, have been met. These include effluent water quality, restoration of all lands, etc. Once all the criteria have been met, the BC Government will permit us to return the lands to the Crown. A financial bond will be required to cover perpetual monitoring and maintenance needs.

Annual update reports are required to document our on-going progressive reclamation as well as revised final closure cost estimates. Our reclamation permit requires us to continue to work on detailing the final closure plan.

Decommissioning of the Discovery Terminal Site will require remediation to meet BC Contaminated Sites Regulations. An accrual of $1.5M CAD was made in 1996 in recognition of this future task.. The site will be under greater scrutiny in the coming years as the lands around it continue to be developed and the area becomes more utilized by non-industrial land uses.

OTHER OPPORTUNITY AREAS

Off-Site (Vancouver Island)

There is a significant opportunity for successful exploration activities on Vancouver Island. A number of factors have, in the past, restricted exploration on the Island. These include: heavy vegetation cover, mountainous terrain, meager governmental databases (geophysical and geochemical), land tenure uncertainties and a general lack of focus. Progress is being made in alleviating a number of these factors, the Geological Survey is very supportive and prospectors are now coming to Boliden-Westmin with interesting properties for review. Our strategic plan in this area is to build on these changes and develop a long term exploration focus.

Excellent potential exists in the immediate vicinity of the existing claim block. This is particularly the case to the west and north of the our most recent discovery, the Marshall Zone. We believe that a land exchange may be possible, which would give us underground access to potential orebody extensions beyond the claim boundaries. There are portions of the existing claims that have low mineral potential, while possessing great scenic and recreational value. These locations could be offered in exchange for the high potential areas.

Offsite disposal of tailings must be considered as part of any long term strategy for Myra Falls. The options favoured here include underwater deposition, ocean or lake. A number of possibilities have been identified and others undoubtedly exist.

On-Site

Custom milling of ores from off-site mining operations is a distinct opportunity. We have the only milling facility on Vancouver Island and we have spare capacity over the term of this strategic plan. The recent repair and commissioning of the old Lynx crusher system now allows us to add ores from other areas to the mill feed stream. Interest has already been indicated from a number of owners of offsite Copper and Zinc deposits.

Geological and metallurgical research efforts are well advanced and must continue, to ensure that we make the best use of our mineral reserves onsite and opportunities offsite. These efforts will include both in house (Boliden R & D) and outside (CODES, GSC) agencies.

FINANCES & PRODUCTION

PRODUCTION

		fc1	stp											
		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Milled production, ktonne		**838.5**	**1,050.0**	**1,065.0**	**1,080.0**	**1,128.0**	**1,170.0**	**1,156.0**	**1,131.8**	**1,098.5**	**1,080.0**	**1,087.0**	**1,057.0**	**1,045.0**	**1,050.0**
Head grades:															
Zinc	%	6.51	6.61	7.06	7.82	8.16	8.38	8.51	8.01	7.70	7.70	7.70	7.70	7.70	7.70
Copper	%	1.54	1.54	1.50	1.50	1.50	1.49	1.44	1.32	1.50	1.50	1.50	1.50	1.50	1.50
Gold	g/tonne	1.32	1.52	1.52	1.54	1.50	1.52	1.50	1.56	1.40	1.40	1.40	1.40	1.40	1.40
Silver	g/tonne	25.02	31.54	37.84	42.07	45.02	46.56	48.82	51.51	34.90	34.90	34.90	34.90	34.90	34.90
Mill recovery:	%														
Zinc		90.3	90.8	91.7	92.5	93.0	93.3	93.6	93.6	92.6	92.6	92.6	92.6	92.6	92.6
Copper		86.2	86.1	86.0	86.1	86.0	86.0	85.5	84.3	86.0	86.0	86.0	86.0	86.0	86.0
Gold		41.8	45.0	48.9	53.7	53.9	54.0	54.1	52.4	52.7	52.9	52.8	53.2	53.3	53.2
Silver		71.4	72.9	74.8	77.1	78.1	78.6	78.8	76.9	76.5	76.5	76.5	76.5	76.5	76.5
Concentrate															
Zinc	tonnes	91,469	116,736	126,483	142,167	155,722	166,280	164,473	151,612	139,884	137,528	138,420	134,599	133,071	133,708
Copper	tonnes	42,810	53,539	52,834	53,767	56,000	57,823	54,685	48,588	54,524	53,605	53,953	52,464	51,868	52,116
Gold	kg	6,144	8,400	14,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400
Metal content:															
Zinc	tonnes	49,416	63,038	68,933	78,192	85,647	91,454	92,104	84,902	78,335	77,016	77,515	75,376	74,520	74,876
Copper	tonnes	11,134	13,920	13,737	13,979	14,560	15,034	14,218	12,633	14,176	13,937	14,028	13,641	13,486	13,550
Gold	oz	14,708	13,810	15,569	17,584	17,568	18,293	17,697	17,746	15,865	15,689	15,756	15,471	15,357	15,405
Silver	oz	328,732	536,695	670,877	765,751	861,461	926,662	961,652	990,541	632,515	621,888	625,909	608,674	601,781	604,653
Payable metal content:															
Zinc	tonnes	42,004	53,582	58,593	66,463	72,800	77,736	78,289	72,167	66,585	65,463	65,888	64,069	63,342	63,645
Copper	tonnes	10,705	13,385	13,208	13,442	14,000	14,456	13,671	12,147	13,631	13,401	13,488	13,116	12,967	13,029
Gold	oz	10,204	13,197	14,933	17,096	16,861	17,565	17,007	17,233	15,263	15,097	15,160	14,890	14,782	14,827
Silver	oz	299,380	493,758	617,254	704,524	792,607	852,574	884,764	911,352	581,938	572,162	575,861	560,006	553,664	556,306
E-metal	tonnes	74,956	94,044	100,702	111,397	120,253	127,383	126,549	116,682	110,817	108,980	109,675	106,695	105,503	106,000
E-metal grade	Zn %	8.9	9.0	9.5	10.3	10.7	10.9	10.9	10.3	10.1	10.1	10.1	10.1	10.1	10.1

FINANCES

CAN $000		fc1 1999F	stp 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Concentrate revenues		58,547	91,848	98,168	108,802	116,813	123,441	123,302	114,050	108,799	107,004	107,683	104,772	103,607	104,092
Costs															
Mine		38,845	50,879	50,836	49,802	48,787	51,411	51,693	50,028	47,443	43,601	42,867	36,163	31,779	26,760
Mill		16,651	20,607	21,202	24,852	25,626	25,852	26,292	26,029	25,611	25,587	25,721	25,336	25,032	24,979
General		9,800	12,151	12,247	12,336	12,426	12,438	12,506	12,450	12,417	12,428	10,192	10,161	10,127	10,116
Costs before Exploration and Recl.		65,297	83,637	84,285	86,990	86,840	89,701	90,491	88,506	85,471	81,616	78,780	71,660	66,938	61,854
Exploration		2,129	4,440	4,940	3,370	3,930	2,980	2,280	1,490						
Provision - reclamation		1,000	1,000	1,000	1,000	1,000	300								
Total costs		68,426	89,077	90,225	91,360	91,770	92,981	92,771	89,996	85,471	81,616	78,780	71,660	66,938	61,854
EBIT		**-9,879**	**2,771**	**7,943**	**17,442**	**25,044**	**30,460**	**30,531**	**24,054**	**23,628**	**25,388**	**28,903**	**33,112**	**36,669**	**42,238**
Dep´n & depletion (where as)		14,817	19,340	20,796	21,720	22,731	22,327	23,936	23,787	23,426	23,820	24,027	23,677	23,110	22,833
Investments		-10,889	-20,427	-23,044	-17,625	-18,390	-10,394	-9,400	-4,820	-4,770	-7,150	-5,120	-3,970	-280	
Operating Cash Flow		-5,951	1,684	5,695	21,537	29,385	42,393	45,066	43,021	41,984	42,057	47,810	52,820	59,499	65,071
extraordinary capital items		-13,569	-17,120	-8,350	-3,339										
change in working capital			500	500	500	500	150								-3,293
Cash flow		-19,520	-14,936	-2,156	18,699	29,885	42,543	45,066	43,021	41,984	42,057	47,810	52,820	59,499	61,778
present value	12%		-14,936	-1,925	14,906	21,271	27,037	25,572	21,796	18,992	16,986	17,241	17,007	17,104	15,857
accumulated present value			-15,436	-17,361	-2,455	18,817	45,854	71,426	93,222	112,213	129,199	146,440	163,447	180,551	196,408
NPV			196,408												
Key Ratios															
Ore value	CAD/tonne ore	69.8	87.5	92.2	100.7	103.6	105.5	106.7	100.8	99.0	99.1	99.1	99.1	99.1	99.1
Mine cost	CAD/tonne ore	46.3	48.5	47.7	46.1	43.3	43.9	44.7	44.2	43.2	40.4	39.4	34.2	30.4	25.5
Mill cost	CAD/tonne ore	19.9	19.6	19.9	23.0	22.7	22.1	22.7	23.0	23.3	23.7	23.7	24.0	24.0	23.8
Costs before Exploration and Reclamation	CAD/tonne ore	77.9	79.7	79.1	80.5	77.0	76.7	78.3	78.2	77.8	75.6	72.5	67.8	64.1	58.9
Total costs	CAD/tonne ore	81.6	84.8	84.7	84.6	81.4	79.5	80.3	79.5	77.8	75.6	72.5	67.8	64.1	58.9
Total costs before Dep'n & depletion	CAD/tonne ore	63.9	66.4	65.2	64.5	61.2	60.4	59.5	58.5	56.5	53.5	50.4	45.4	41.9	37.2
Total costs	CAD/tonne e-metal	913	947	896	820	763	730	733	771	771	749	718	672	634	584
Cash cost	**USc/lb**	**41.0**	**40.3**	**37.8**	**35.8**	**33.5**	**33.6**	**33.5**	**34.9**	**34.2**	**32.6**	**31.0**	**28.3**	**26.4**	**23.9**

CAPITAL EMPLOYED

	9812	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Accounts receivable	6,207	4,528	4,528	4,528	4,528	4,528	4,528	4,528	4,528	4,528	4,528	4,528	4,528	4,528	
Stock of concentrate	214	3,488	3,488	3,488	3,488	3,488	3,488	3,488	3,488	3,488	3,488	3,488	3,488	3,488	
Other stock	4,464	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	
Stock	4,678	7,688	7,688	7,688	7,688	7,688	7,688	7,688	7,688	7,688	7,688	7,688	7,688	7,688	
Other assets, non-interest bearing	886	643	643	643	643	643	643	643	643	643	643	643	643	643	
Accounts payable	-6,101	-6,616	-6,616	-6,616	-6,616	-6,616	-6,616	-6,616	-6,616	-6,616	-6,616	-6,616	-6,616	-6,616	
Other liabilities, non-interest bearing	-9,287	-9,910	-10,410	-10,910	-11,410	-11,910	-12,060	-12,060	-12,060	-12,060	-12,060	-12,060	-12,060	-12,060	
Total working capital	-3,616	-3,667	-4,167	-4,667	-5,167	-5,667	-5,817	-5,817	-5,817	-5,817	-5,817	-5,817	-5,817	-5,817	
Fixed assets, opening balance	139,931	134,214	143,855	162,062	172,661	171,904	167,563	155,630	141,094	122,127	103,471	86,801	67,894	48,186	25,357
Sold/scrapped NBV, acc calander year	-226														-2,524
Translation diff															
Investments, acc calender year	11,225	24,458	37,547	31,394	20,964	18,390	10,394	9,400	4,829	4,770	7,150	5,120	3,970	280	
Depreciation, acc calender year	-16,715	-14,817	-19,340	-20,796	-21,720	-22,731	-22,327	-23,936	-23,787	-23,426	-23,820	-24,027	-23,677	-23,110	-22,833
Fixed assets, closing balance	134,214	143,855	162,062	172,661	171,904	167,563	155,630	141,094	122,127	103,471	86,801	67,894	48,186	25,357	
Total capital employed	130,598	140,188	157,895	167,994	166,737	161,896	149,813	135,277	116,310	97,654	80,984	62,077	42,369	19,540	
Average capital employed	131,268	135,393	149,041	162,944	167,366	164,317	155,854	142,545	125,794	106,982	89,319	71,530	52,223	30,954	9,770
EBIT, acc calendar year	-14,511	-9,879	2,771	7,943	17,442	25,044	30,460	30,531	24,054	23,328	25,388	28,903	33,112	36,669	42,238
Return on capital %	-11%	-7%	2%	5%	10%	15%	20%	21%	19%	22%	28%	40%	63%	118%	432%
Cash flow, acc calendar year	-13,171	-19,469	-14,936	-2,156	18,699	29,885	42,543	45,066	43,021	41,984	42,057	47,810	52,820	59,499	61,778

CAPEX

$ Kcad	1999F	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	TOTAL
mine															-
u/g mobile equipment	3,199	3,330	3,720	2,100	4,510	3,590	3,970	1,670	1,480	1,450	3,090	2,490	180	-	34,779
infrastructure		3,390	3,210	935	1,360	70	410	270	410	70	200	-	-	-	10,325
projects		100	2,144	500	500	534	-	-	-	-	-	-	-	-	3,778
mill mobile equipment															-
haulage	-	200	200	200	200	200	200	200	200	100	100	-	-	-	1,800
surface	162	200	200	200	200	200	200	200	200	100	100	-	-	-	1,962
mine stationary and electrical															-
substations etc.	154	500	500	500	500	500	500	500	500	250	250	100	100	-	4,854
misc	160														160
mill															-
mill stationary	164	500	500	500	500	500	200	200	200	200	100	100	-	-	3,664
zinc cleaner bank		500													500
knelson		200	200										-	-	400
gravity circuit			500												500
gap test work		100	100												200
marshall test work	80			100	100	100									380
zinc circuit modifications					2,000										2,000
terminal													-	-	-
surface water collection		50	50												100
dock repairs	99	100	50	150	50										449
stationary / electrical													-	-	-
trolley automation		400													400
waste heat				100											100
genset replacement			450		450										900
waste heat					200										200
tennent hydro				200											200
jim mitchell			300												300
microwave upgrade		200													200
unidentified capital spending		500	500	500	500	500	500	500	500	500					4,500
Adjustments / Timing		(1,000)	(1,500)	1,000	(1,000)	1,000	1,500								-
total equipment capital	4,018	9,270	11,124	6,985	10,070	7,194	7,480	3,540	3,490	2,670	3,840	2,690	280	-	72,651
property and development															
deferred development	6,871	5,712	8,320	7,040	8,320	3,200	1,920	1,280	1,280	4,480	1,280	1,280	-	-	
ramp	-	5,445	3,600	3,600	-	-	-	-	-	-	-	-	-	-	12,645
Total property and development	6,871	11,157	11,920	10,640	8,320	3,200	1,920	1,280	1,280	4,480	1,280	1,280	-	-	12,645
extraordinary capital items															
tailings dam facility	2,325	11,120	4,350	3,339											21,135
paste backfill plant	97	6,000	4,000												10,097
ground stability project	11,147														11,147
total extraordinary	13,569	17,120	8,350	3,339	-	-	-	-	-	-	-	-	-	-	42,378
Total	24,458	37,547	31,394	20,964	18,390	10,394	9,400	4,820	4,770	7,150	5,120	3,970	280	-	154,200

SENSITIVITY ANALYSIS

factor	units	1999 strategic plan	assumed change	% change	total effect on npv (kCAD)	average non-discounted effect per year	change required to effect cash flow by $1 MCAD
copper price	$USD/lb	$1.00	+ $0.01	1.00%	$2,363	$327	$0.03
zinc price	$USD/lb	$0.57	+ $0.01	1.75%	$9,319	$1,387	$0.01
gold price	$USD/oz	$290.00	+ $10	3.45%	$2,011	$308	$32.49
USD / CAD exchange	ratio	1.40	+0.01	0.71%	$5,365	$790	0.01
dilution (average)	%	18%	-1%	-5.56%	$7,032	$1,048	-0.95%
zn head grade (average)	%	7%	+0.1%	1.38%	$6,702	$1,021	0.10%
cu head grade (average)	%	1%	+0.1%	7.94%	$17,744	$2,765	0.04%
au head grade (average)	g/tonne	1.62	+.1	6.19%	$4,692	$649	0.15
ag head grade (average)	g/tonne	51.63	+ 1	1.94%	$819	$122	8.22
annual production	tonnes / yr	1,152,790	1,000	0.09%	$458	$68	14,814

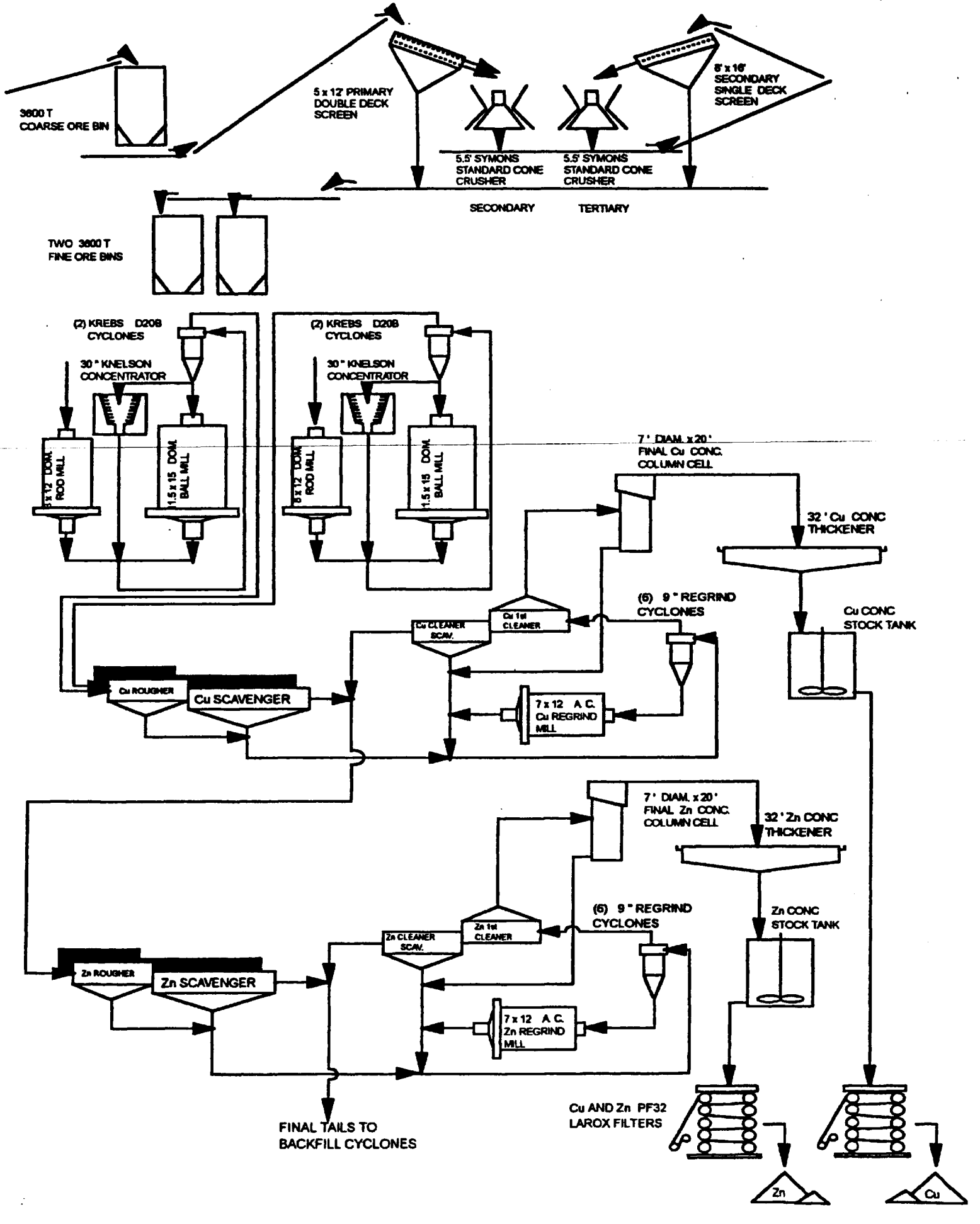
APPENDIX "B" - SITE PLAN

SITE PLAN

APPENDIX "C" - MILL FLOW SHEET

MILL FLOW SHEET

BOLIDEN WESTMIN LTD
MYRA FALLS OPERATION



APPENDIX "D" - RAMP FROM SURFACE

RAMP FROM SURFACE

ORE RESERVES

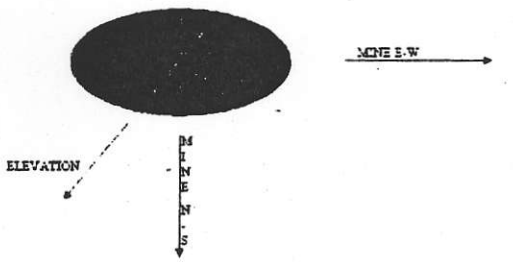
January 1999 Ore Reserves

Methodology

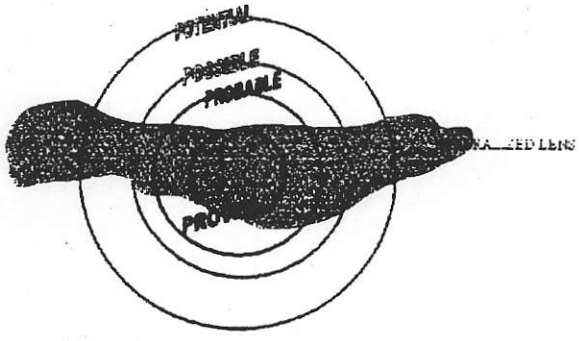
Medsystem was used to calculate the mineral resource wherever possible. As in previous years the Battle, Gap, Extension, 43-Block and HW were calculated using Medsystem. New for 1999 was the recalculation of the Ridge Zones, Marshall and Price using Medsystem. The Lynx, 6 Level and Trumpeter were unchanged from previous years and employed traditional manual methods.

Medsystem

Medsystem employs a search ellipse of 25 meters N-S, 50 meters E-W and 15 meters vertical. This search ellipse was not varied to accommodate different structural controls of the various ore bodies. Inverse cubed was used as the weighting factor for drill holes. Kriging was not used. Medsystem honors the geological lens code and does not expand the model beyond those determined by the geologist. It also will not use material from another lens code to calculate grades for another, unless specifically requested to do so.



Medsystem calculates reserves based on proximity to the nearest diamond drill hole. Measured (Proven) is material within 15 meters, Probable (Indicated) is material between 15 and 30 meters, Possible (Inferred) is material between 30 and 50 meters and Potential is material greater than 50 meters from the nearest drill hole. These results are then tabulated by lens, zone or area. These categories are then often downgraded to more closely reflect the various resource categories as outlined in MFO standards which are based on National Policy 2A. These standards are attached. As a rule, areas that do not have access or are not currently being mined are downgraded to Probable. Depending on the degree of confidence in the area, Probable may then also be downgraded to Possible and so on.



Medsystem does not take in account the contained metal content of the lens and all material that is delineated according to the lens outline as determined by the geologist is reported. Areas are then looked at, as a whole and if the entire area (zone, stope etc.) has a contained metal value of less than $45 NSR, this material is removed from reserve calculations and placed in the old "Resource" category. Traditionally this generally applied only to areas in the HW Mine. More recently however as mining and drilling has expanded in the Battle, Gap and Extension, some of these areas have also been removed from the Geological Inventory. Some of these changes are apparent in this years' calculation.

The Block Model is based on a 5x5x4 (vertical) block size. Each block contains the calculated metal value for that block, density, percentage of the block that is ore, percentage that has been mined out and the percentage that has been "removed" from reserves. It also contains the "r-type" i.e. proven probable etc. classification of the ore. In cases where two lenses overlap, it carries the values of the material, which is in majority.

Changes in Reserve Terminology

1998 saw the introduction of new ore reserve standards and/or methodology. These standards were implemented to more closely conform to those used by Boliden – Sweden and used the Australian Terminology. MFO up to this point had used the Canadian Standards as listed in National Policy 2A. Because of the importance of continuity in calculations, both methods were employed. As such, an equivalency code is listed which will help minimize confusion.

"Old" Classification	"New" Classification
Geological Inventory =	**Geological Resource**
Proven =	Measured
Probable =	Indicated
Possible =	Inferred
Potential =	no equivalent
Resource =	no equivalent

NOTE: Under the old classification Geological Inventory **includes** the Mining Reserve Tonnage as a subset. Geological Resource **excludes** the Mining Reserve Tonnages. While Potential Tonnage was never reported except possibly internally, there is no direct comparison under the new codes. It could in all likelihood be assigned the classification of inferred. Resource @ MFO was used to denote sub-economic ore. There is no direct comparison. The Geological Resource includes material, which will be lost to mining. This includes the old "NIMR" as well as future losses due to mining methods.

Mining Reserve =	**Mining Reserve**
Proven =	Proven
Probable =	Probable
Possible =	Possible
NIMR=	n/a –reported as part of geological resource

Also attached is the old reserve terminology as used by MFO in previous years

Summary of Ore Reserve Terminology Previously used at MFO (until January 1999)

With the ongoing dynamic nature of "ore reserves" and with our current computerization of reserves, it has become obvious that a standardization of terminology is necessary. This is important for both in-house use and for numbers that are quoted to the public in general. The terms that are currently used at MFO and their definitions are listed below.

DEFINITIONS

ORE

From National Policy no. 2-A this means " a natural aggregate of one or more minerals which, at a specified time and place, may be mined and sold at a profit, or from which some part may be profitably separated". For this purpose we use a Net Smelter Return (NSR) cutoff of $45 on the Geological Inventory. The NSR reported uses metal prices that are forecast at least one year ahead and thus may not precisely reflect current prices. Generally three ore categories are quoted, reflecting a decreasing level of confidence associated with the reserve estimate. These are the Proven Ore, the Probable Ore and the Possible Ore categories. At MFO we carry a fourth category, Potential Ore. A description of each ore class is listed below:

PROVEN ORE

From National Policy no. 2-A, proven ore "or "measured ore" means that material for which the tonnage is computed from dimensions revealed in outcrops or trenches or underground workings or drill holes and for which the grade is computed from the results of adequate sampling, and for which the sites of inspection, sampling and measurement are so spaced and the geological character so well defined that the size, shape and mineral content are established, and for which the computed tonnage and grade are judged to be accurate within limits which shall be stated and for which it shall be stated whether the tonnage and grade of proven ore or measured ore are "in situ" or extractable, with dilution factors shown, and reasons for the use of these dilution factors clearly explained." At MFO this is interpreted as ore that has been drilled on 15-meter centers, although 30-meter centers may also be acceptable if the ore shows good continuity. Almost all of the ore at the HW mine is of this category. In areas of poor continuity, this 15-meter guideline may be waived and the tonnage placed in the category of "probable ore".

PROBABLE ORE

From National Policy no. 2-A, probable ore "or "indicated ore" means that material for which tonnage and grade are computed partly from specific measurements, samples, or production data and partly from projection for a reasonable distance on geological evidence, and for which the sites available for inspection measurement and sampling are too widely or otherwise inappropriately spaced to outline the material completely or to establish its grade throughout". At MFO this generally refers to material that is greater than 15 m from the nearest drill hole but less than 30 meters. Again in areas of poor geological continuity, ore may be downgraded to the "possible ore" category.

POSSIBLE ORE

From National Policy no. 2-A, possible ore "or "inferred ore" means that material for which quantitative estimates are based largely on broad knowledge of the geological character of the deposit and for which there are few, if any samples or measurements, and for which the

estimates are based on an assumed continuity or repetition for which there are reasonable geological indications, which indications may include comparison with deposits of similar type, and bodies that are completely concealed may be included if there is specific evidence of their presence, and

i) Estimates of "possible" or "inferred ore" shall include a statement of conditions within which the inferred material occurs, and

ii) Since the arithmetical average of any amount of sampling is not necessarily representative unless the distribution of values and number of samples are properly taken into account, a statement of how samples taken shall be given, and where mineralization is erratic, the method of treating the erratic values shall be given in the narrative of the report and

iii) Possible or inferred reserves must not be added to other categories of reserves and their inclusion is not acceptable in any economic analyses or feasibility study of a project.

At MFO this generally refers to material that is greater than 30 meters from the nearest drill hole but less than 100 meters. For in-house reporting, possible tonnes may show a grade and a NSR calculation but these numbers are not released.

POTENTIAL ORE

This is a MFO term and is used to denote material that technically might be defined by other industry groups as "possible ore". However taking a conservative approach, material that is more than 100m from the nearest drill hole is placed in this category. "Potential ore" usually fills in the gaps between blocks of "possible ore".

GEOLOGICAL INVENTORY

Geological Reserves are defined by Head Office as follows - "Geological reserves are those that are deemed by extensive sampling to define grade and tonnage and can be classified as to various confidenee categories. The classifieation excludes consideration of how they will be extracted and infers no economic viability." However for MFO this definition should only be applied to the term "Geological Inventory". It is my opinion that the term "reserves" implies a certain degree of economic certainty. The term is often used in conjunction with the word "ore" and in fact geological reserves are often referred to as geological ore reserves. Hence a "geological inventory" should include all material in the Geological Reserve, the Geological Resource Category, the Not In Mining Reserve (NIMR) Category and can even include "Potential ore". It of course, does not include "Mined or Non-recoverable" ore. This total must not be reported as an official number.

MINED FROM RESERVES

This is ore that was calculated as having been extracted. It is assumed that this material was sent to the mill for processing. This number is calculated from "mined openings" supplied by the Engineers and Surveyors.

NON-RECOVERABLE ORE

This is ore that is not recoverable with present mining methods and design. This includes ore that is buried under fill, post pillars, sill pillars and possibly ore on the fringes of mined stopes. It does not include marginal widths/heights of ore (e.g. upper zones) and it does not include ore that may become inaccessible (e.g. proximity to ramps).

REMOVED FROM RESERVES

This number includes both "mined ore" and "non-recoverable ore". It is ore that existed prior to mining and has either been irrevocably isolated or mined.

NOT IN MINING RESERVE (NIMR)

This is material that meets the current economic definition of ore in that it satisfies a NSR cutoff value. However, because of its location - primarily proximity to mine openings - there are currently no long term plans to extract this material. This is material that could be included in the "Extraction Factor" calculation and hence care must be taken not to double account these tonnes when calculating ore left for mining (i.e. mining reserve).

GEOLOGICAL RESOURCE

This is material that may occur in a mine or other geological environment that is not included in "geological reserves" or "mineable reserves", but might be reclassified into these categories through upgrading; perhaps by additional sampling or changes in factors such as metal price increases, mining cost reduction etc.

GEOLOGICAL RESERVES

The definition of "geological reserves" implies a certain understanding of the "geological inventory" that will allow mining parameters to be applied. It also implies an economic consideration, and at MFO a $45 NSR cutoff has been used. At this stage material in the "Resource" class will be excluded because of poor economics and material in the "Potential" class will be excluded because of a low level of geological confidence. Furthermore, the "Possible" ore class must be reported separately so as not to include it in the "mining reserve". This is also required under National Policy No. 2A.

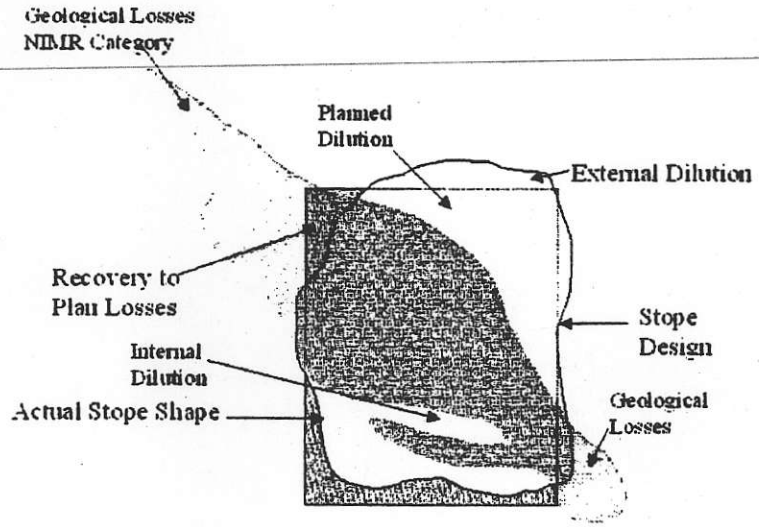
NET SMELTER RETURN (NSR)

This is the net value of the ore after smelting charges etc. have been removed from its gross value. Several NSR cutoff values are used at MFO. These include an "ore reserve" NSR which is used for long term mine planning, and reflects changes in metal prices over a period of time. Engineering often uses a second NSR that reflects current metal prices. Care must be taken when reporting these numbers to ensure that they are

used in the correct context. Geology is currently incorporating both numbers in their Medsystem model to allow either NSR cutoff to be used as applicable.

MINEABLE RESERVES

As stated in the Westmin annual report "Mineable reserves are those geological reserves that have been defined for mining purposes and includes a provision for mining dilution that generally occurs during extraction. Included is ore of sufficient grade, thickness and tonnage to be mineable under normal circumstances providing reserves are sufficient to justify development costs." Essentially the "Mineable Reserves" are the "Geological Reserves" with a dilution and recovery factor applied.



DILUTION

Dilution is any included material that is mined, as per an original stope layout, but the NSR value of which does not meet the definition of ore. Dilution can carry grade and where possible this should be included in calculations. Dilution could also be ore grade material where such material has caved from adjacent stopes/pillars etc. Typically we do not calculate or carry this type of dilution. The various types of dilution we carry are listed below. It is important to note that dilution is applied *after* recovery and extraction factors have been applied. Currently dilution is

calculated as a percentage of the tonnage and not the volume. There could be significant differences here.

EXTERNAL DILUTION

External dilution is dilution that comes from outside the planned stope limits. Typically this is from the hanging wall. It is usually the result of ground failure. If this material falls but is not recovered as part of the mining plan (at the end of the stope life) it should not be included in calculations.

PLANNED DILUTION

Planned dilution is material that is ineorporated in the design of the stope such as footwall access.

FILL DILUTION

This is backfill dilution, typically from the footwall in the case of C+F, R+P stopes and from the walls in longhole stopes. Care must be taken in calculating this number because of the different density of fill and ore.

INTERNAL DILUTION

Internal dilution is in the form of dikes or uneconomic mineralization within the stope layout and within the ore boundaries. This dilution is usually included within the parameters of the Medsystem block model. Care must be taken when building Medsystem models to incorporate these areas of "waste" within the 3D-block model.

RECOVERY FACTOR

This factor is applied only to a designed stoping block. In other words it is the percentage of ore that is estimated to be mined from a specific area. It usually will not include ore that will be isolated beyond the stope limits or ore that is not actually planned on being mined. This term is not used in the calculation of the reported mining reserve.

EXTRACTION FACTOR

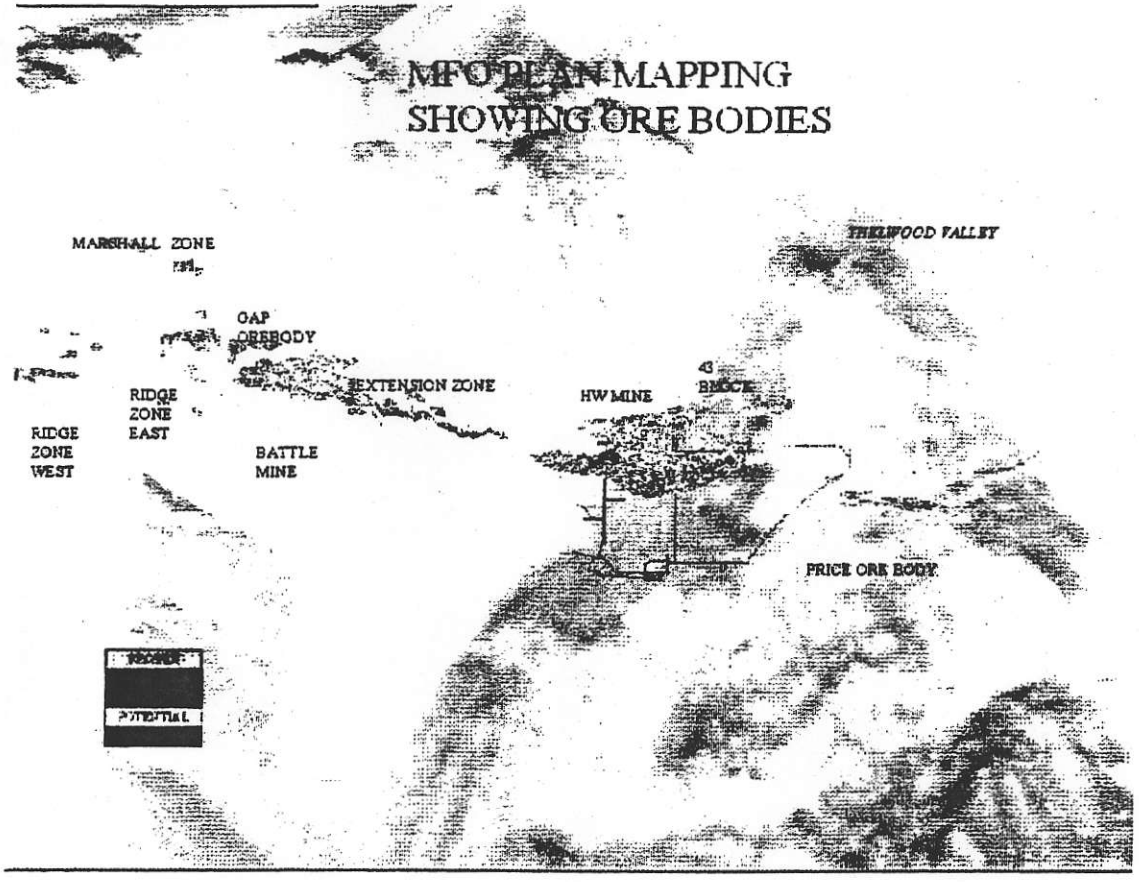
This factor is applied to in situ ore to calculate the amount of ore that will be available for mining. It should take in account ore that will be isolated or lost due to mine design. An example would be ore that is isolated due to ramp design. Extraction factor by its nature includes the "Recovery Factor".

In spite of the fact that some of the terminology is no longer used, the methodology remains the same.

Degrees of Confidence

Depending on the reserve category different degrees of confidence can be applied. These were as follows:
All NIMR was assumed to be probable in-spite of much of it being reportable as proven.

Degree of confidence – used averages from SEG SP-3 ORE RESERVE ESTIMATION
Proven (Measured) = 10%
Probable (Indicated) = 40%



MFO PLAN MAPPING SHOWING ORE BODIES

Changes in Reserves by Area

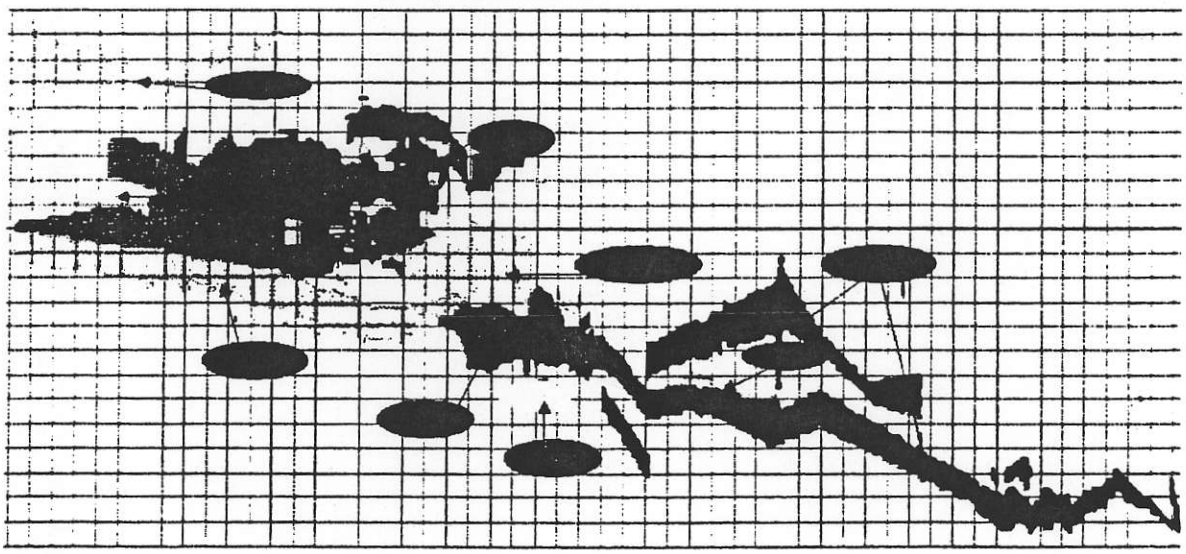
Battle/Gap/Extension

The Reserves no longer calculate the BGE Ore by lens. Instead as previously mentioned, they are reported by area. None the less, in order to compare to last year's reserves, they were summarized by lens and the results are tabulated below.

Geological Inventory

ZONE	1999 Tonnes	1998 Tonnes	Change	Reason
Bornite	69608	69667	-59	Minor Adjustment
Extension	314082	406012	-91930	See Notes
Gap	837696	783314	54382	New Drilling
Gnu	393771	394553	-782	Minor Adjustment
Gopher	398124	550642	-152518	Mining
Lower	31759	32967	-1208	Minor Adjustment
Main	1798823	1931059	-132236	Mining
South Trough	757100	765380	-8280	Re-interpretation
U3020	230314	213593	16721	Re-interpretation
U3030	301907	295813	6094	Minor Adjustment
Upper South Trough	8705	7598	1107	Minor Adjustment
Total	5141889	5450598	-308709	

BATTLE-GAP
BY LENS



Extension Zone

All Extension Zone Reserves were downgraded one category (proven to probable. etc.) due to a lack of definition drilling, concrete mine planning and the overall lower than average grade. There was a decrease in tonnage from the previous year. This resulted from breaking the Extension Zone into 100-meter east-west blocks. As a result entire sections or blocks of Extension zone were removed from reserves due to their low grade. This resulted in net tonnage drop in all PPP categories. There was a significant increase in grade however due to this conservative approach. This was meant to mimic/duplicate HW reserve methodology as used in previous years. It is apparent that more drilling is needed to allow categories to be shifted upwards.

The new for 1999 "Geological Resource" category which is not to be confused with the "Resource" reported in previous years, will contain material removed from the mining reserve due to extraction factors but as such is not yet mined. This will therefore mean that that the 50% material not included in the Extension zone Mining Reserve will now be reported in Geological Resource.

Gap Lens

A limited amount of Definition Drilling in the Gap added approximately 50,000 tonnes to the Geological Inventory. Moving the southern portion of the Gap or the "Tail" portion of the Gap into the Ozone Lens offset this. This meant that approximately 200,000 tonnes were re-assigned to Ozone-West. This had a net effect of increasing the grade of the Gap Lens by approximately 0.5% Cu and 2.0% Zn. Of importance is the fact that the Definition Drilling was done at 90 degrees to previous drilling and confirmed the initial Geological Interpretation.

3000 Lens

All 3000 Lenses were downgraded to Possible or Potential Ore due to grade considerations.

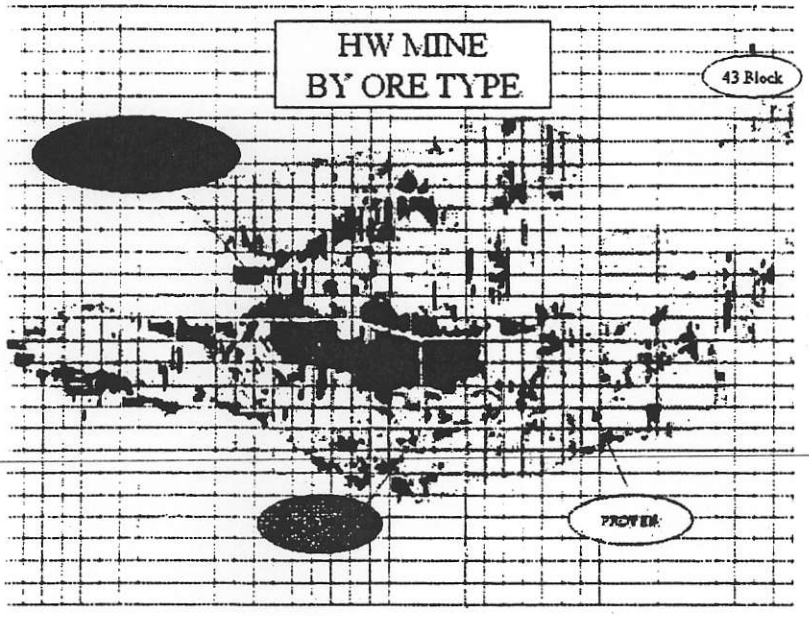
Battle Main and Gopher

The major tonnage changes are due to mining. There were some tonnages added due to definition drilling.

HW Mine

New for 1999, 43 Block was separated from the HW Reserve. This was done in order to highlight this area as we approach to mining it this coming year.

ZONE	1999 Tonnes	1998 Tonnes	Change	Reason
HW	3695319	5075488	-1380169	Mining and below
43-Block	649477	0	649477	Moved from HW
Total	4344796	5075488	-730692	



Comparison of Net Loss of Tonnes in BGE and HW to those reported Mined

A total of 1,039,401 undiluted Tonnes @ 2.2% Cu and 5.8% Zn was removed from Geological Inventory from the HW and BGE. This compares to 1,046,835 diluted Tonnes @ 1.7% Cu and 5.6% Zn. that were reported mined from these areas during the same time period

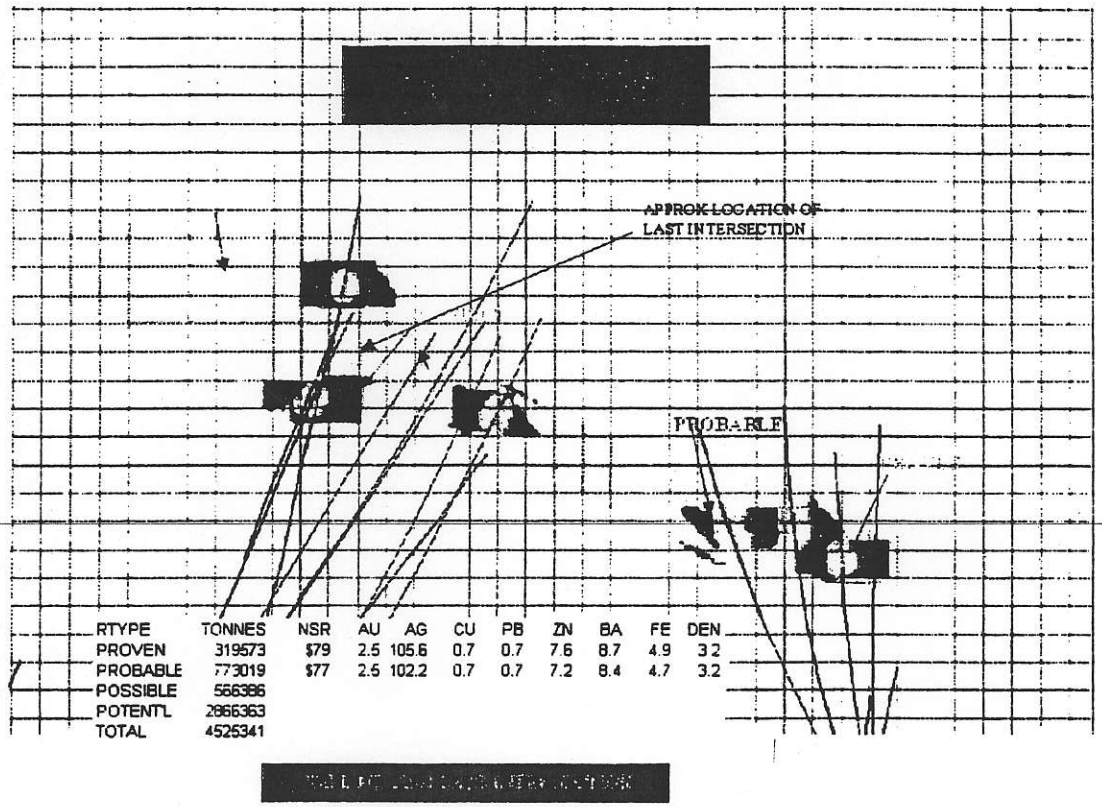
If the impact of changing tonnage in the Extension zone is removed, then 897,382 tonnes @2.3% Cu and 6.2% Zn were removed from Geological Inventory. If 25% dilution is added to these numbers, then 1,121,728 Tonnes @ 1.8% Cu and 5.0% Zn was removed.

It is obvious that new tonnages were also found in these areas and hence the comparison is not a direct one. This is particularly true for the Battle Gap. It does however tend to validate our calculations.

Marshall Zone

New drilling in this area added both tonnage and confidence to this area. As a result material reported as proven by Medsystem is now reported as indicated (up from inferred last year). The inferred (possible) tonnes also saw a dramatic increase as resources were upgraded from last year. Since Medsystem reports on a "sphere" of

influence, a 30 meter of influence will give almost 4 times the tonnage that a 15 meter of influence will.



RTYPE	TONNES	NSR	AU	AG	CU	PB	ZN	BA	FE	DEN
PROVEN	319573	$79	2.5	105.6	0.7	0.7	7.6	8.7	4.9	3.2
PROBABLE	773019	$77	2.5	102.2	0.7	0.7	7.2	8.4	4.7	3.2
POSSIBLE	566386									
POTENTL	2866363									
TOTAL	4525341									

6 Level

This zone was not recalculated. The manual reserve results are still reported.

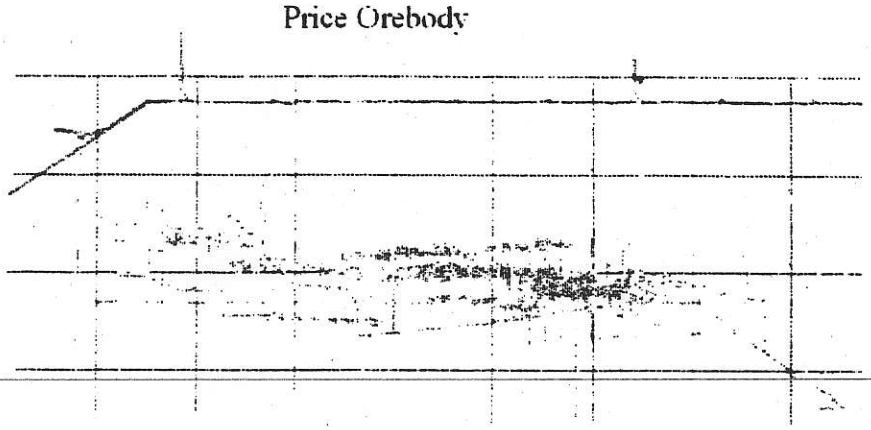
Lynx

The Lynx was looking at in a somewhat cursory manner in February 1998. This indicated a possible drop in the Geological Resource due to caving and access. Further work indicates that this may not be true and that a higher tonnage may in fact be reportable. This is currently being investigated as well as whether the Lynx should go back into the mining reserve with an actual plan to reopen the Mine. As such it was felt most prudent to leave the resource calculation alone for the January 1999 Reserve.

Price

The Price Mine drilling was entered into Medsystem and a new reserve was calculated. The previous reserve was a manual one undertaken in 1981??? . As was prevalent during the day, a number of cutting factors were employed. As well little attempt was made to model the deposit. As such the reserve calculated was essentially a mining reserve and only centered on the thicker and definitely minable sections. The Medsystem reserve attempted to model the lenses according to lenses rather than grade.

This dramatically increased the geological resource. Because cutting factors were not employed and only internal dilution was included in the calculations, the overall grade remains essentially the same. The task for the coming year is to remove this material from resource and to include at least a portion of it in the Mining Reserve.

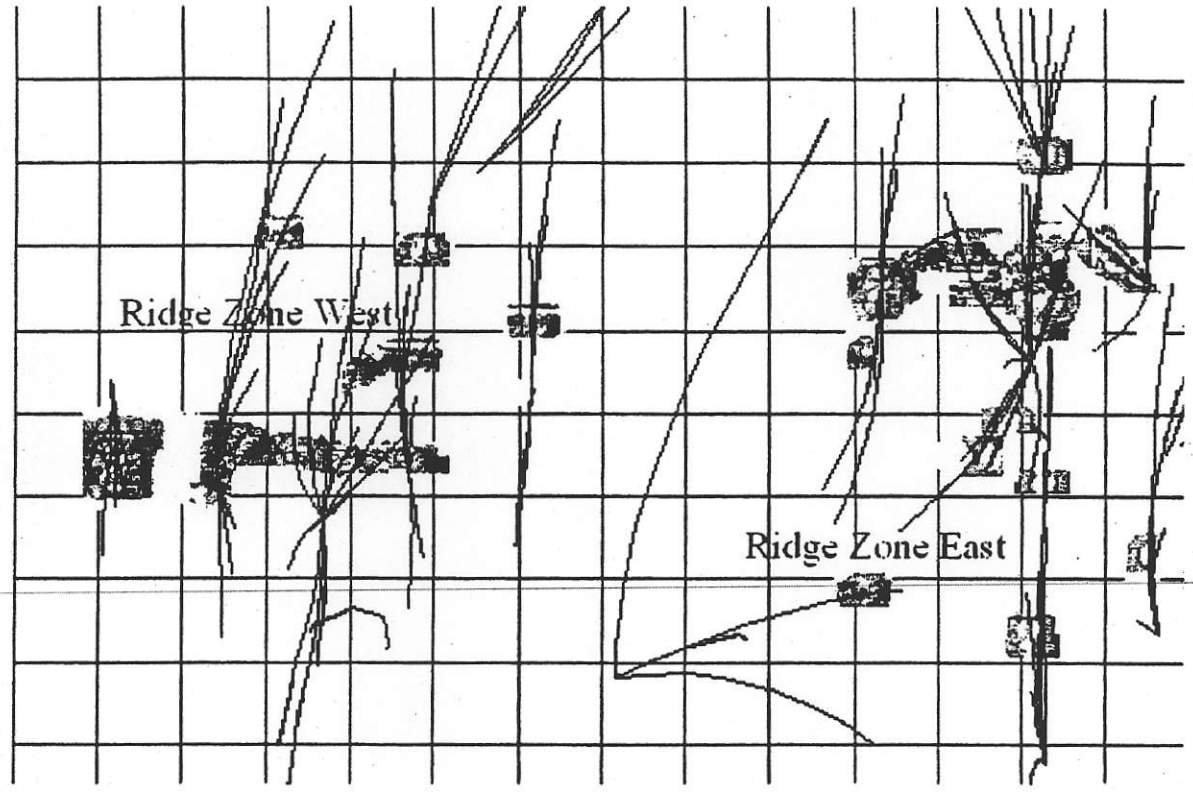


Trumpeter

This zone was not recalculated. The manual reserve results are still reported.

Ridge Zones (East and West)

Both ridge Zone areas were recalculated using Medsystem this year. The original intersections and interpretations were honored as much as possible. Never the less, there was a significant drop in inferred tonnage. This is easily explained. As previously mentioned Medsystem reports on a spherical search (i.e. Pi X Radius squared). The manual method used a square (i.e. 2 X radius squared). For a 15-meter area of influence, the manual method gives 900 square meters, Medsystem gives 707 square meters. This is approximately 80% of the former. This is almost precisely the amount that the tonnage dropped.



Discussion on Reported Reserves

Listed below are the various categories of reserves as calculated and an explanation of what they are used for:

Geological Inventory

This calculation was previously listed in our Annual Reports. Currently this is not the case. As indicted it includes the undiluted portion of the Mining Reserve. Because it is felt that the tonnage indicated has a good probability of being mined at some time, this is the number used in our Depletion and Depreciation calculation used by accounting. This number only includes Proven and Probable Tonnes or what would be considered a "mix" of Proven, Probable and Measured, Indicated.

GEOLOGICAL INVENTORY - PROVEN+PROBABLE - INCLUDES MINING RESERVE										
	TONNES	AU	AG	CU	PB	ZN	BA	FE	DEN	NSR
HW	3695319	2.2	36.5	1.8	0.5	4.4	1.9	25.7	3.8	$73
43-BLOCK	649477	2.9	55.2	1.9	0.6	6.3	3.4	14.1	3.4	$91
BATTLE	4181116	1.2	40.0	1.8	0.6	12.3	1.6	13.6	3.4	$109
GAP	631059	3.7	137.5	2.1	1.3	14.9	13.5	13.5	3.9	$153
EXTENSION	329714	1.0	43.2	1.5	0.5	5.1	1.6	18.4	3.5	$64
LYNX	285600	3.1	95.8	1.8	1.1	10.3	0.0	12.0	3.3	$116
PRICE	421528	1.6	56.8	1.6	1.1	9.9	2.7	11.7	3.4	$97
MARSHALL	319573	2.5	105.6	0.7	0.7	7.6	8.7	4.9	3.2	$79
6 LEVEL	120500	1.3	91.4	0.4	0.9	6.0	0.0	12.0	3.2	$56
TOTAL	10633886	1.9	50.3	1.7	0.6	8.8	2.7	17.5	3.6	$95

Mining Reserve

This calculation was and continues to be reported in our Annual Report. Only Proven and Probable tonnes are included in this calculation.

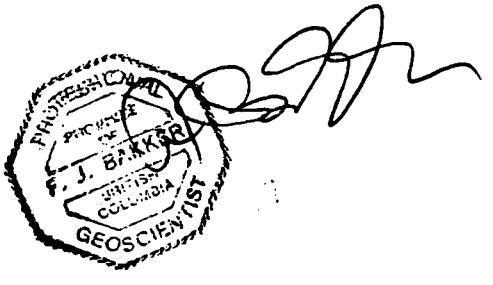
MINING RESERVE- SUBSET OF GEOLOGICAL INVENTORY - PROVEN+PROBABLE										
	TONNES	AU	AG	CU	PB	ZN	BA	FE	DEN	NSR
HW	1904829	1.7	25.4	1.5	0.3	3.3	1.4	21.3	3.6	$58
43-BLOCK	574974	2.3	43.4	1.5	0.4	4.9	2.7	11.2	3.2	$72
BATTLE	3541921	0.9	27.2	1.5	0.4	10.1	1.0	10.9	3.3	$88
GAP	553085	2.9	107.8	1.7	1.0	11.7	10.6	10.6	3.6	$120
EXTENSION	211017	0.8	33.8	1.1	0.4	4.0	1.2	14.4	3.3	$50
	6785826	1.4	34.9	1.5	0.4	7.7	2.0	13.9	3.4	$80

The undiluted Mining Reserve is only included here to allow a direct comparison to Geological Inventory to Geological Resource. If the undiluted Mining Reserve is added to the Geological Resource, then the resulting number will equal the Geological Inventory.

Geological Resource

The Geological Resource is made up of two components. It includes what we call Future Losses and also material that does not have a mining plan, but has sufficient drilling etc. to still be included in measured and indicated. Compared to previous year's calculations, this would be the portion of the Geological Inventory that does not have a mining plan associated with it.

FUTURE LOSSES -PROVEN AND PROBABLE-NIMR AND EXTRACTION LOSSES -MINE PLAN LOSS										
B	TONNES	AU	AG	CU	PB	ZN	BA	FE	DEN	NSR
HW	2208115	2.2	39.1	1.7	0.5	4.5	2.1	24.6	3.8	$71
43-BLOCK	200279	2.8	54.6	1.8	0.6	6.3	3.3	13.8	3.4	$89
BATTLE	1413990	1.3	50.2	1.6	0.7	11.2	2.4	12.7	3.4	$101
GAP	198962	3.6	136.4	2.1	1.3	14.8	13.4	13.3	3.9	$152
EXTENSION	164857	1.0	43.2	1.5	0.5	5.1	1.6	18.4	3.5	$64
TOTAL	4186203	1.9	48.4	1.7	0.6	7.4	2.7	19.3	3.6	$86



FUTURE LOSSES -PROVEN AND PROBABLE-NIMR AND EXTRACTION LOSSES -MINE PLAN LOSS										
B	TONNES	AU	AG	CU	PB	ZN	BA	FE	DEN	NSR
HW	2208115	1.7	39.8	1.4	0.5	3.9	1.7	18.3	3.5	$61
43-BLOCK	200279	3.0	64.6	1.8	0.7	7.5	3.4	13.8	3.4	$98
BATTLE	1413990	1.3	50.2	1.6	0.7	11.2	2.4	12.7	3.4	$101
GAP	198962	3.6	136.4	2.1	1.3	14.8	13.4	13.3	3.9	$152
EXTENSION	164857	1.0	43.2	1.5	0.5	5.1	1.6	18.4	3.5	$64
TOTAL	4186203	1.7	49.2	1.5	0.6	7.1.	2.6	16.0	3.5	$81

Future losses were a rather simple calculation. The Extraction factor was applied to the Geological Inventory. This gave the UNDILUTED Mining Reserve. Therefore any material removed was considered as Future Losses. This was added to the material below to give a Geological Resource. This number is not reported separately.

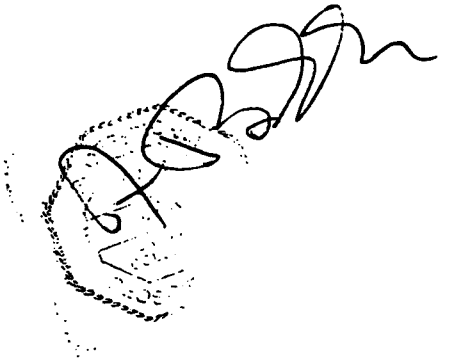
TONNES WHICH ARE NOT INCLUDED IN MINING RESERVE BY ZONE - NO MINE PLAN										
C	TONNES	AU	AG	CU	PB	ZN	BA	FE	DEN	NSR
PRICE	421528	1.6	56.8	1.6	1.1	9.9	2.7	11.7	3.4	$97
MARSHALL	319573	2.5	105.6	0.7	0.7	7.6	8.7	4.9	3.2	$79
LYNX	285600	3.1	95.8	1.8	1.1	10.3	0.0	12.0	3.3	$116
6 LEVEL	120500	1.3	91.4	0.4	0.9	6.0	0.0	12.0	3.2	$56
TOTAL	1147201	2.2	83.7	1.3	1.0	8.9	3.4	9.9	3.3	$93

The tonnes listed above are those that do not have a concrete mining design and as yet are not included in any long-term plans. These tonnages are added with future losses to give our Geological Resource. Once again these tonnages are not reported separately.

TONNES WHICH ARE NOT INCLUDED IN MINING RESERVE BY ZONE = GEOLOGICAL RESOURCE										
B+C=D	TONNES	AU	AG	CU	PB	ZN	BA	FE	DEN	NSR
HW	2208115	2.2	39.1	1.7	0.5	4.5	2.1	24.6	3.8	$71
43-BLOCK	200279	2.8	54.6	1.8	0.6	6.3	3.3	13.8	3.4	$89
BATTLE	1413990	1.3	50.2	1.6	0.7	11.2	2.4	12.7	3.4	$101
GAP	198962	3.6	136.4	2.1	1.3	14.8	13.4	13.3	3.9	$152
EXTENSION	164857	1.0	43.2	1.5	0.5	5.1	1.6	18.4	3.5	$64
PRICE	421528	1.6	56.8	1.6	1.1	9.9	2.7	11.7	3.4	$97
MARSHALL	319573	2.5	105.6	0.7	0.7	7.6	8.7	4.9	3.2	$79
LYNX	285600	3.1	95.8	1.8	1.1	10.3	0.0	12.0	3.3	$116
6 LEVEL	120500	1.3	91.4	0.4	0.9	.6.0	0.0	12.0	3.2	$56
TOTAL	5333404	2.0	56.0	1.6	0.7	7.7	2.9	17.3	3.5	$87

The Geological Resource Category is new for MFO. It includes future losses and materials not included in the Mining Reserve but are included in the Geological Inventory. Again only Measured and Indicated Tonnes are reported.

Possible – Indicated Tonnes



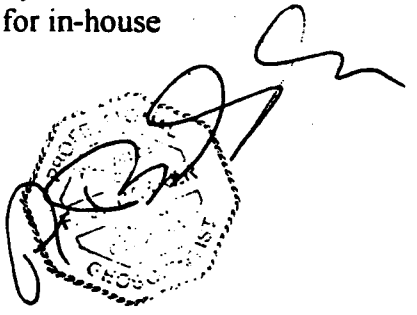
POSSIBLE GEOLOGICAL INVENTORY - INFERRED RESOURCE - GRADES NOT TO BE REPORTED										
A	TONNES	AU	AG	CU	PB	ZN	BA	FE	DEN	NSR
BATTLE	300964	1.2	46.3	0.9	0.7	6.4	2.1	7.8	3.1	$61
GAP	18232	3.0	106.1	1.7	2.4	17.3	22.5	5.2	3.9	$151
EXTENSION	381066	0.8	38.8	1.3	0.4	4.0	1.3	16.0	3.3	$54
TRUMPETER	290843	3.2	67.4	4.2	0.3	4.5	2.8	22.3	3.7	$127
RIDGE WEST	217874	3.2	95.5	1.0	1.0	7.4	0.5	6.6	3.0	$88
RIDGE EAST	318507	1.0	52.4	1.0	0.9	6.5	1.6	12.2	3.3	$64
PRICE	110655	3.3	137.3	0.7	1.1	5.7	2.0	10.5	3.2	$78
MARSHALL	773019	2.5	102.2	0.7	0.7	7.2	8.4	4.7	3.2	$77
TOTAL	2411160	2.1	75.5	1.3	0.7	6.2	4.0	10.4	3.2	$77

These tonnes have in some years been included in our Annual Report. In others they have not. The grades have never been reported and are for in-house use only.

Potential Tonnes

These tonnes have never been reported elsewhere. There is no direct comparison to any Reserve Nomenclature currently in use. It could be argued that it meets the criteria of possible or indicated ore, but we feel this is too aggressive. The only reason it is ever calculated is essentially for future exploration targets/drilling and for in-house discussions on mine life etc.

ADDITIONAL GEOLOGICAL POTENTIAL	
OF MINE-SITE	TONNES
BATTLE Total	54,759
GAP Total	31,783
EXTENSION Total	588,990
PRICE Total	4,490
MARSHALL Total	3,432,749
RIDGE-EAST Total	773,081
RIDGE-WEST Total	11,804
Grand Total	4,897,656



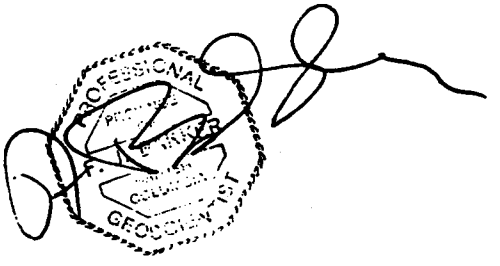
Proven –Probable Measured-Indicated Breakdown

As a final step in the reserve calculations the Mining Reserve, Geological Inventory and the Geological Resource were further broken down into categories. Reserves are not normally reported in this fashion but auditors might require the numbers.

GEOLOGICAL INVENTORY - PROVEN+PROBABLE - INCLUDES MINING RESERVE										
		TONNES	AU	AG	CU	PB	ZN	BA	FE	DEN	NSR
hw-43	measured	3118123	2.3	37.4	1.9	0.5	4.6	2.2	24.8	3.8	$76
bge	measured	4057532	1.5	51.9	1.9	0.7	13.0	3.1	14.0	3.5	$117
hw-43	indicated	1226673	2.2	43.9	1.6	0.6	4.9	2.0	21.7	3.7	$73
bge	indicated	1084357	1.3	53.4	1.5	0.7	9.3	2.9	13.5	3.4	$91
LYNX	indicated	285600	3.1	95.8	1.8	1.1	10.3	0.0	12.0	3.3	$116
PRICE	indicated	421528	1.6	56.8	1.6	1.1	9.9	2.7	11.7	3.4	$97
MARSHALL	indicated	319573	2.5	105.6	0.7	0.7	7.6	8.7	4.9	3.2	$79
6 LEVEL	indicated	120500	1.3	91.4	0.4	0.9	6.0	0.0	12.0	3.2	$56
TOTAL		10633886	1.9	50.3	1.7	0.6	8.8	2.7	17.5	3.6	$95
TOTAL	measured	7175655	1.8	45.6	1.9	0.6	9.3	2.7	18.7	3.6	$99
TOTAL	indicated	3458231	1.9	60.1	1.5	0.8	7.6	2.8	15.2	3.4	$85

TONNES WHICH ARE NOT INCLUDED IN MINING RESERVE BY ZONE = GEOLOGICAL RESOURCE											
B+C=D		TONNES	AU	AG	CU	PB	ZN	BA	FE	DEN	NSR
hw-43	measured	1330525	2.3	38.4	1.8	0.5	4.4	2.2	25.1	3.8	$74
bge	measured	1220163	1.6	63.1	1.7	0.8	12.0	3.9	13.1	3.5	$110
PRICE	indicated	421528	1.6	56.8	1.6	1.1	9.9	2.7	11.7	3.4	$97
MARSHALL	indicated	319573	2.5	105.6	0.7	0.7	7.6	8.7	4.9	3.2	$79
LYNX	indicated	285600	3.1	95.8	1.8	1.1	10.3	0.0	12.0	3.3	$116
6 LEVEL	indicated	120500	1.3	91.4	0.4	0.9	6.0	0.0	12.0	3.2	$56
hw-43	indicated	1077869	2.2	42.8	1.6	0.6	4.9	2.1	21.9	3.7	$72
bge	indicated	557646	1.3	50.7	1.5	0.6	9.1	2.7	13.7	3.4	$89
TOTAL		5333404	2.0	56.0	1.6	0.7	7.7	2.9	17.3	3.5	$87
TOTAL	measured	2550687	1.9	50.2	1.7	0.6	8.0	3.0	19.4	3.6	$91
TOTAL	indicated	2782716	2.0	61.3	1.4	0.8	7.4	2.8	15.3	3.4	$84

MINING RESERVE- SUBSET OF GEOLOGICAL INVENTORY - PROVEN+PROBABLE											
		TONNES	AU	AG	CU	PB	ZN	BA	FE	DEN	NSR
hw-43	proven	2285045	1.8	28.7	1.5	0.3	3.7	1.7	19.2	3.5	$61
bge	proven	3631833	1.2	36.8	1.5	0.5	10.5	2.2	11.2	3.3	$94
hw-43	probable	194758	1.9	39.6	1.4	0.5	3.6	1.3	15.3	3.3	$60
bge	probable	674190	1.1	43.9	1.2	0.6	7.5	2.5	10.4	3.4	$72
		6785825	1.4	34.9	1.5	0.4	7.7	2.0	13.9	3.4	$80
TOTAL	proven	5916877	1.4	33.7	1.5	0.4	7.8	2.0	14.3	3.4	$81
TOTAL	probable	868948	1.2	43.0	1.2	0.6	6.6	2.2	11.5	3.2	$69



POWER GENERATION

POWER GENERATION - AS WE ARE TODAY

Myra Falls Operations Power Generation System consists of three generating facilities capable of producing a peak of 23.4 megawatts of electricity. In a typical year we produce 80,000,000 kWh to 86,000,000 kWh of electricity, 90% of which is generated by our hydro plants and the remaining 10% by our diesel powerhouse.

MFO's hydro power generation is highly dependant on water runoff conditions and is often reduced to minimum output by low water conditions for one month in early spring and two months in late summer. During these periods of low water we must generate most of our power with diesel gensets.

The diesel powerhouse is capable of producing a peak load of 13.5 megawatts, which is exactly equal to what our typical operating peak load is on the property. With little or no hydro generating contribution, 100% diesel powerhouse availability would be required with no stand-by capacity. This situation would not be maintainable and would likely require limiting production on the property until hydro generation could be restored at sufficient levels.

Changes for the future?

Mill throughput will remain the same or be somewhat reduced from historic levels. Power distribution will be expanded to various far-reaching areas on the claim. Manpower issues may arise and will have to be reviewed as we spread out to new areas and construct new ramps.

Additional loads may not be significant as long as new equipment achieves designed efficiencies and eliminates older equipment and required services (air, pumping, aux. ventilation, etc.)

Projects such as Pastefill will require additional capacity but will be somewhat offset by savings they generate in other areas (old plant decommissioning, mine dewatering etc.).

The movement towards electric/hydraulic equipment and away from compressed air equipment will generate overall savings in power. It takes four times more energy to produce compressed air and run compressed air equipment than it does to run electric/hydraulic equipment.

Power Generation 2000-2012 – Where Are We Going?

MFO's existing Power Generation System has proved adequate for historic levels of production. Strategic planning has been moving in the direction of maintaining production in the 1,000,000t / 3,000tpd range which is consistent with historic levels. We can assume therefore, that maintaining the existing capacity of our Power Generating System will see us through to the year 2012.

The fact that we do not need to expand does not mean that we do not need to spend money. Maintaining the existing capacity at the Diesel Powerhouse will mean performing a minimum of six and possibly eight major rebuilds to get us to the year 2012. These rebuilds will be costly and in several cases may warrant

replacement of the older worn out gensets with newer more efficient units. MFO's Hydro facilities will require maintenance of the existing dam's which will involve a costly dam capping project at Jim Mitchel Lake.

Should we discover a large ore body and wish to increase production to higher than historic levels we will have to look at ways of increasing our system's capacity.

Power Distribution – As We Are Today

MFO's existing power distribution network consists of a wide array of distribution methods and voltages. Existing distribution has proved adequate but a few main feeders are currently utilized to their maximum capacity and a few others are in need of permanent repairs (HW Vent / Backfill feeder) and/or replacement in the next five years (Tennent feeder cable). 18L BG feeder cables from the station to the back of 18L are utilized to capacity. Expansion will be required in the near future

Power Distribution 2000-2012 – Where Are We Going?

Barring the discovery of a large central ore body the future at MFO seems to be made up of several smaller wide spread operating areas. This will bring some change to the distribution network. As new "remote" areas are brought online the risk of system instability increases. We will have to use caution and keep power distribution as a key issue when designing new operating facilities.

Expansion to new areas (Surface)

- Pastefill Plant
- Price Mine (Surface)
- New Ramp Distribution (Surface Shop Facilities)
- Lynx Mine Activation (Surface)

Expansion to new areas (U/G)

- Price Mine (U/G)
- New Ramp Distribution
- Marshal Area
- Lynx Mine Activation (U/G)

Environmental Issues – Now & In The Future

Myra Falls Operations generation and distribution systems are operated and maintained with the highest regard for environmental concerns. Our systems are closely monitored for compliance and must always be operated accordingly.

Agencies involved include: BC Parks – Strathcona Division, BC Ministry of Environment Lands & Parks – Water Management & Environmental Protection Branch, BC Ministry of Employment & Investment – Mines Branch, Fisheries & Oceans Canada.

Existing diesel generation on the claim is permitted under the Waste Management Branch (Air Pollution) as back-up power generation. This means that we are allowed to generate up to 10% of our annual power using diesel generation. If we exceed 10% on a regular basis, we will have to renew this permit at a cost of approximately $40,000 additional dollars per year.

Water use permits expire 2012. These permits cost us $193,000 annually to "rent" the water we use for hydro generation.

Additional Power Generation Possibilities - Existing Facilities

Areas to improve our power system's capacity utilizing existing infrastructure and minimal capital cost:

1. Diesel Powerhouse Upgrades – Replace older type diesel gensets designed for stand-by service with new medium speed CAT 3512 or 3516 diesel gensets designed for prime power service. Newer more fuel-efficient engines working with higher tech engine controls/governors could see efficiency increases of up to 25%. Life Cycle costs for this type of diesel genset have also been evaluated and have shown to be the lowest of their class. With debt servicing added into the picture payback for the Diesel Powerhouse upgrades could be realized in 5+ years.

2. Look at new hydraulic governor and hydrodynamic engineered runners for Thelwood and Tennent Hydro plants? Improved turbine efficiencies could be as much as 3%-5% and could save supplemental diesel generation.

3. On-Site Water Storage – Increase the amount of water storage by creating additional dams, raising the height of existing dams or controlling spillway levels to prolong the productive period of the reservoirs.

4. On-Site Water Collection – Increase the water collection area by diverting additional run-off into the existing catchment systems (East Tennent Lakes).

Additional Power Generation Possibilities – New Areas

Areas to increase our power system's capacity should we find a large ore body and increase Mill throughput:

1. BC Hydro – Would supply MFO with power at a rate of approximately 3.5 – 5.0 cents/kWh. With debt servicing added into the picture payback for the BC Hydro connection could be realized in 5+ years. Since the original BC Hydro proposal (which disallowed a tap from BC Hydro's 138kV line to Gold River) supply and demand situations have changed which could provide MFO with a more cost-effective solution.

2. Expand On-Site Water Storage – Increase the amount of water storage by creating additional dams and building new intake structures and penstock to facilitate the use of the higher head that Thelwood valley's upper lakes provide. Thelwood Hydro's original designed intake site was at Thelwood Lake not at Jim Mitchell Lake as it was constructed. This design modification resulted in a static head loss to the generator, which accounts for as much as a 12% efficiency loss to the entire system.

3. New Water Storage – Add new water storage by creating new dams and generating facilities. One original site that was proposed in 1982 was the Myra Valley Watershed. This area would give approximately the same generating capacity as the Thelwood Valley Watershed does today.

Areas we must continue to focus on:

- We are committed to becoming a leader in energy conservation and will continually strive to promote 'Power Smart' practices throughout the entire operation.

- Our goal is to maximize utilization of our water resources. Clean hydropower (water) can be produced at a very low cost.

- Customer Service – We must continually strive to provide a low cost, stable power supply for the future of MFO and work together to encourage everyone to use electricity as efficiently as possible.

- The key to the future will be to monitor efficiencies closely and be strict with equipment utilization and applications. We must be 'Power Smart'! Increased efficiencies mean lower power costs and therefore lower costs per tonne of metal produced.

- Power savings can be achieved by scheduling of peak loads, automation and communication between departments to design the best production schedule at minimum power generation costs.

- Promote the participation of the Workforce, the Environmental Committee and Human Resources.

- As part of maintaining our existing system opportunities will arise to improve diesel-generating efficiencies.

- Continue to seek savings by carrying out compressed air leak audits, shutting down services to areas that are not being actively mined and other ongoing 'Power Smart' initiatives.

- Continue to seek savings by maximizing gravity fed rather than pumped water supplies.

MYRA FALLS POWER GENERATION SYSTEM

Myra Falls Operations Power Generation System consists of three generating facilities capable of producing a peak of 23.4 megawatts of electricity.

THELWOOD HYDRO

Thelwood Hydro is an eight-megawatt pelton water wheel generator that was installed in 1984. The generator is housed in a small building located adjacent to the intersection of Thelwood and Price Creeks in the Thelwood Valley. It receives water from Jim Mitchell Lake through a 750-meter long tunnel and a 4,000-meter buried 56" penstock that runs parallel to the Thelwood Creek bed. Two dams, giving a reservoir level of 42 feet, are located across the east side of Jim Mitchel Lake, giving a water storage capacity of approximately 13 meters for the penstock intake tower. Jim Mitchell Lake also receives water from Thelwood Lake that has three small dams to allow for approximately 5.0 meters of water storage. Thelwood Lake level is controlled by a manual valve which is opened to provide additional water when normal run off into Jim Mitchell Lake is low. The tailrace water from the Thelwood Powerhouse runs into Buttle Lake. The average load on the Thelwood generator is six megawatts and its average monthly power production is approximately 4,500 megawatthours due to limited water availability.

TENNENT HYDRO

Tennent Hydro is a three-megawatt pelton water wheel generator that was installed in 1964. The generator is housed in a small building located adjacent to the intersection of Tennent and Myra Creeks in the Myra Valley. It receives water from Tennent Lake through 2,866 meter 24" penstock that runs parallel to the Tennent Creek bed. The dam located on Tennent Lake gives a storage depth of 14 meters providing a maximum static head of 650 meters. The reservoir is approximately 1280 meters long and has an average width of 427 meters. The maximum area covered by the reservoir is 47.5 hectares. To supplement water levels in the reservoir, water is siphoned from McNish Lake via three 6" steel pipes. The tailrace water from the Tennent Powerhouse is used to supply fresh water to the Mill and the rest is discharged into Myra Creek. The average load on the Tennent generator is 2.4 megawatts and its average monthly power production is approximately 1,340 megawatthours due to the generator being operated as a swing machine (the generator which takes on large swinging loads on the power grid, i.e.: skipping, mill start-up etc.).

DIESEL POWERHOUSE

The Diesel Powerhouse is made up of a main powerhouse building and several joined 'containerized' diesel gensets located between the Mill and the Open Pit area. It consists of an assortment of seven Caterpillar and six Detroit Diesel engines capable of generating a peak of 13.5 megawatts of electricity. Operating costs have averaged 12 cents/kWh for the older gensets and 9 cents/kWh for the newer Cat's.

The Caterpillar units consist of four 1200rpm 399 engines each producing 800 kilowatts. The remaining three units are new 3516 engines, two at 1200rpm producing 1 megawatt each and the third at 1800rpm producing 1.5 megawatts.

The Detroit Diesel units consist of four 1800rpm 16V149 T.I.B. engines each producing 1.2 megawatts and two 1800rpm 16V149 engines producing 1 megawatt each.